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Our File No.: 05497-0226-0000

April 25, 2014

BY EMAIL

British Columbia Utilities Commission
6th Floor, 900 Howe Street
Vancouver, BC V6Z 2N3

**Attention: Erica M. Hamilton,
Commission Secretary**

Dear Sirs/Mesdames:

**Re: FortisBC Inc. – Application for Multi-Year Performance
Based Ratemaking Plan for 2014 through 2018**

Enclosed please find the Final Submission of FortisBC Inc. (**FBC**) dated April 25, 2014, with respect to the Non-PBR methodology portions of the above-noted matter. Sixteen hard copies will follow by courier. Please also find attached one legal authority, which is referenced in the Final Submission.

The enclosed Final Submission is one of three Submissions being filed contemporaneously by FBC and FortisBC Energy Inc. (**FEI**). In addition to this Final Submission, FBC and FEI will be filing a separate Joint Final Submission on PBR Rate Design and FEI is filing a separate Final Submission on Non-PBR methodology.

Yours truly,

FARRIS, VAUGHAN, WILLS & MURPHY LLP

Per:



Ludmila B. Herbst

LBH/ECM

Enclosure

c.c.: Registered Interveners
Boughton Law Corporation – Attention: Paul R. Miller
FortisBC Inc. – Attention: Dennis Swanson

BRITISH COLUMBIA UTILITIES COMMISSION

IN THE MATTER OF
the *Utilities Commission Act*, R.S.B.C. 1996, Chapter 473

and

FortisBC Inc. Application for
Performance Based Ratemaking Revenue Requirements 2014-2018

**SUBMISSIONS OF FORTISBC INC.
ON NON-PBR METHODOLOGY
APRIL 25, 2014**

FortisBC Inc.

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Attention: Ludmila B. Herbst
Erica C. Miller

INDEX

Part 1 - Introduction.....	1
Part 2 - 2014 Revenue Requirements	4
A. Introduction	4
B. Use of Forecasts.....	6
C. Controllable Expenditures under PBR.....	7
D. O&M Expenses	9
(1) The Determination of 2013 Base O&M	10
(a) 2013 Approved O&M.....	10
(b) Adjustments to Approved O&M	11
(i) Net Sustainable Savings Adjustment	11
(ii) Re-Basing Adjustments.....	12
(iii) Incremental O&M	14
(iv) Summary of 2013 Base O&M.....	16
(2) Specific O&M Issues	17
(a) Labour Costs & Benefits.....	17
(i) Changes over the PBR Period	18
(ii) Labour Disruptions	18
(b) Regulatory Efficiencies.....	20
(c) Impact of AML.....	21
(d) Exclusions from the O&M Formula	21
E. Capital Expenditures	23
(1) Introduction	23
(2) The Determination of 2013 Base Capital	24
(a) 2013 Approved Capital.....	24
(b) Adjustments to Approved Capital	25
(i) Adjustment for Non-Recurring Major Projects	25
(ii) Adjustments for Non-Controllable Items.....	26
(iii) Summary of 2013 Base Capital	27
(3) Specific Capital Issues	28
(a) Inclusion of Capital in PBR Formula.....	29
(b) Sustainment, Growth & Other Capital.....	30
(c) Labour Disruption.....	32
(d) CPCNs.....	33
F. Non-Controllable Expenditures	35
G. Load and Resulting Revenues	35
H. Power Purchase Expense	36
(1) 2014 PPE	37

(2) Mix of Power Purchase Resources.....	38
I. Other Income	41
J. Financing & Return on Equity.....	41
(1) Financing Costs.....	41
(2) Capital Structure and Return on Equity	43
K. Taxes.....	44
(1) Depreciation	44
Part 3 - Accounting Policies	46
A. Generally Accepted Accounting Principles	46
B. Net-of-Tax Treatment of Pension/OPEB Funding.....	49
C. Sharing of Services	49
D. Capitalized Overhead.....	51
(1) Continuation of 20 Percent Capitalization Rate.....	51
(2) Specific Capitalized Overhead Issues	53
E. Direct Overhead	58
(1) FBC's Direct Overhead Methodology	58
(2) Specific Direct Overhead Issues.....	60
Part 4 - Deferral Accounts.....	64
A. Deferral Account Financing	64
(3) The 2012-13 RRA Decision	65
(4) FBC's Concerns with the 2012-13 RRA Decision	65
(a) <i>Creates Inconsistency in FBC's Accounts</i>	66
(b) <i>Inconsistent with FBC's Past Experience</i>	66
(c) <i>WACC is the Appropriate Financing Method</i>	67
(d) <i>Inappropriate Distinction between Capital & Maintenance</i>	67
(e) <i>Inconsistent with Other Fortis Companies</i>	69
(f) <i>Inconsistent with Other Companies and Jurisdictions</i>	69
(g) <i>Specific Problems created by using WACD Treatment</i>	70
(h) <i>Concerns Raised by Interveners</i>	71
(5) FBC's Recommendation.....	72
F. Specific Deferral Accounts	73
(1) New Deferral Accounts.....	74
(a) <i>Rate Stabilization Deferral Mechanism Account</i>	75
(b) <i>GCOC Revenue Requirements Impact Account</i>	77
(c) <i>Insurance Expense Variance Account</i>	78
(d) <i>Interest Expense Variance Deferral Account</i>	79
(e) <i>Tax Variance Account and Property Tax Variance Account</i>	80
(2) Changes to Deferral Accounts.....	81

(a) <i>DSM Account and On-Bill Financing Pilot Program Account</i>	82
(b) <i>Pension and OPEB Expense Variance Deferral Account</i>	82
G. Accounts to be Discontinued	83
Part 5 - Demand Side Management Program	86
A. Introduction	86
B. FBC's History of DSM	87
C. The Proposed DSM Plan	88
(1) Proposed Expenditures	88
(2) Expenditures excluded from PBR Formula	90
(3) Term of the DSM Plan	91
(4) Program Funding Transfer Rules	91
(5) DSM Reporting Period.....	92
D. Legal Framework	93
(1) British Columbia's Energy Objectives	94
(2) Long-Term Resource Plan	95
(a) <i>Consistency</i>	95
(b) <i>Adequacy</i>	98
(3) Sections 6 and 19 of the CEA.....	100
(4) Cost-Effectiveness of Expenditures	102
(a) <i>Portfolio-Level Analysis</i>	102
(b) <i>TRC Test and mTRC Test</i>	103
(5) Interests of Persons in British Columbia	105
(6) Summary.....	106
E. Long-Run Marginal Cost	106
(1) LRMC as a Proxy for Avoided Costs	106
(2) Effect of LRMC on DSM Expenditures.....	108
(3) Specific LRMC Issues	109
(a) <i>The Mid-Columbia Trading Hub</i>	109
(b) <i>Firm vs. Non-Firm Resources</i>	110
(c) <i>Using Market Purchases as a Proxy</i>	111
(d) <i>Alleged Understatement of FBC's LRMC</i>	112
F. Collaboration with Other Utilities & Government.....	112
G. Interveners Proposed Changes to DSM Expenditures	113
(1) Increasing DSM Spending Level	113
(2) Other Tests to Assess Cost Effectiveness	116
(a) <i>RIM Test</i>	116
(b) <i>UCT</i>	118
(c) <i>PCT</i>	118
(d) <i>Savings as Percentage of Sales</i>	120

H.	The Treatment of DSM Expenditures	120
(1)	Amortization Period	120
I.	Monitoring & Evaluation	121
(1)	The Proposal	121
(a)	<i>M&E Plan</i>	122
(b)	<i>EM&V Plan</i>	123
(2)	Budgeted EM&V Spending	123
(3)	Avoidance of Conflicts of Interest	124
(4)	Attribution Rules	125
Part 6 -	Conclusion	126

PART 1 - INTRODUCTION

1. On July 5, 2013, FortisBC Inc. (**FBC** or the **Company**) filed an application with the Commission (the **Application**) seeking approval of a Multi-year Performance Based Ratemaking (**PBR**) Plan (**PBR Plan**) for 2014 through 2018 (the **PBR Period**). In summary, the Company seeks the following approvals in its Application:
 - a. approval of the PBR mechanisms for setting rates for the PBR Period;
 - b. approval of a rate stabilization mechanism for setting rates for the PBR Period;
 - c. approval of the then-existing interim rates as permanent rates effective January 1, 2013;
 - d. approval of permanent rates for 2014 for customers effective January 1, 2014, reflecting an increase of 3.3 percent compared to 2013 rates;
 - e. approval to flow through during 2014 the revenue requirements impact of the decrease in return on equity (**ROE**) (from 9.9 percent to 9.15 percent) used to calculate FBC's rates effective January 1, 2013;
 - f. approval for the rate base treatment and financing of certain deferral accounts;
 - g. approval of financing costs for 2013 at FBC's Weighted Average Cost of Capital (**WACC**) for the six deferral accounts approved by Order G-23-13;
 - h. approval of the discontinuance, modification, and creation of deferral accounts, as applicable, and the amortization and disposition of balances of deferral accounts;

- i. approvals of changes to the following accounting policies to be used in the determination of rates for FBC effective January 1, 2014:
 - i. approval to discontinue the reconciliation of US Generally Accepted Accounting Principles (**GAAP**) to Canadian GAAP in future annual reports;
 - ii. approval to discontinue the net-of-tax treatment for the pension and other post-employment benefits (**OPEB**) funding differences effective 2014, and instead add back the pension and OPEB expense and deduct the contributions in the calculation of income tax expense;
 - iii. approval to allocate Executive costs between FortisBC Energy Inc. (**FEI**) and FBC effective January 1, 2014 by way of applying the Massachusetts Formula;
 - iv. continued approval of FBC's capitalized overhead rate of 20 percent; and
 - v. continued approval of FBC's direct overhead charging methodology,
- j. acceptance of the following Demand Side Management (**DSM**) expenditure schedules: up to \$3.0 million for 2014, \$3.2 million for 2015, \$3.2 million for 2016, \$3.2 million for 2017, and \$3.3 million for 2018;
- k. approval to change the amortization period of existing and future DSM expenditures from 10 years to 15 years, effective January 1, 2014; and
- l. approval to discontinue semi-annual reporting on its DSM program and to submit annual reports as of December 31 in each year, effective January 1, 2014.¹

¹ Ex. B-1 - FBC Application, p. 11.

- m. approval for the following funding transfer rules:
 - i. funding transfers under 25 percent between approved areas be permitted without prior approval of the Commission;
 - ii. funding transfers of more than 25 percent into or out of approved areas would require prior approval of the Commission; and
 - iii. funding transfers from an existing program to a new program would be permitted, provided the new program meets the Demand-Side Measures Regulation, B.C. Reg. 326/2008 (the **DSM Regulation**) and the benefits/cost test requirements and has not previously been rejected by the Commission.²
- 2. This submission (the **FBC Non-PBR Submission**) will address the aspects of the Application that fall outside of the methodology of the PBR Plan. The methodology of the PBR Plan is addressed in a separate submission (the **PBR Submission**) that is being filed as a joint submission by FBC and FEI. The FBC Non-PBR Submission should be read in conjunction with the PBR Submission, as well as with the FEI submission on Non-PBR methodology.

² Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 11.

PART 2 - 2014 REVENUE REQUIREMENTS

A. Introduction

3. This portion of the FBC Non-PBR Submission deals with certain topics specific to the Company's revenue requirements. Other topics, such as accounting policies (see Part 3), deferral accounts (see Part 4) and DSM measures (see Part 5), are addressed separately later in the FBC Non-PBR Submission.
4. With respect to revenue requirements, FBC is seeking Commission approval of its rates pursuant to sections 59 to 61 of the *Utilities Commission Act*³ (the **UCA**), as follows:
 - a. approval of the then-existing interim rates as permanent rates effective January 1, 2013; and
 - b. approval of permanent rates for 2014 effective January 1, 2014, reflecting an increase of 3.3 percent compared to 2013 rates. The general rate increase will be applied to the Residential Conservation Rate (**RCR**) (Rate Schedule 1) in accordance with the pricing principles⁴ set out in Order G-3-12.⁵
5. Following a Procedural Conference in this Application, the Commission issued Order G-151-13 on September 12, 2013, addressing FBC's request with respect to approval of existing interim rates as permanent rates, effective January 1, 2013.⁶ The Commission determined that pursuant to Commission

³ R.S.B.C. 1996, c. 473.

⁴ For the years 2012-2015:

- (a) The Customer Charge is exempt from general rate increases;
- (b) The Block 1 rate is subject to the general rate increase; and
- (c) The Block 2 rate is increased by an amount sufficient to recover the remaining required revenue.

⁵ Ex. B-1-6 - Evidentiary Update, p. 7.

⁶ Ex. B-1 - FBC Application, p. 7. FBC's interim rates as of January 1, 2013 reflect its cost of capital prior to the Generic Cost of Capital (**GCOC**) proceeding. FBC has recorded the reduction to revenue arising from the lower cost of capital due to the GCOC Stage 1 decision (Order G-75-13) in a deferral account for disposition in 2014.

Letter L-31-13A issued on June 6, 2013 in Stage 2 of the Generic Cost of Capital (**GCOC**) proceeding (the **Stage 2 GCOC Proceeding**), that FBC's interim rates remain interim until a decision is rendered in the Stage 2 GCOC Proceeding.⁷ Also in Order G-151-13, the Commission approved interim rates for 2014 for FBC, representing a 3.3 percent increase over the 2013 rate, to take effect on January 1, 2014.⁸

6. As is discussed below in Part 2(J)(2), subsequent to Order G-151-13, the decision in the Stage 2 GCOC Proceeding was released on March 25, 2014, confirmed FBC's existing equity component and equity risk premium, and is consistent with the proposals made by FBC in this Application.
7. Accordingly, FBC seeks Commission approval of its 2013 interim rates as permanent rates, effective January 1, 2013, as well as approval of its existing interim rates as permanent rates effective January 1, 2014.⁹
8. FBC is not seeking approval of rates for the remainder of the PBR Period at this time as, following 2014, customers' rates would be determined in accordance with the PBR Plan.
9. For non-controllable expenditures, the PBR Plan requires that expenditures be re-forecast annually as part of the Annual Review process.¹⁰ For controllable expenditures, the PBR formula is used to determine the level of expenditure each year over the PBR Period. It is these annually-determined numbers (for both controllable and non-controllable expenditures) that will form the basis for FBC's requests for Commission approval of rates for the years 2015-2018. FBC will make these requests at the Annual Reviews under PBR, starting with 2015 rates being addressed at the 2014 Annual Review.¹¹

⁷ Appendix A to Order G-151-13, p. 6.

⁸ Appendix A to Order G-151-13, p. 6.

⁹ Ex. B-1-6 - Evidentiary Update, p. 7.

¹⁰ Ex. B-1 - FBC Application, p. 50.

¹¹ Ex. B-1 - FBC Application, p. 50.

10. Pursuant to sections 59 and 60 of the UCA, the Commission “is required ... to allow the utility to recover its reasonable and prudent cost of service”.¹² Respectfully, FBC submits that the reasonable and prudent cost of service is embodied in the Company’s Application and that the rate increase that the Company is requesting is just and reasonable and should be approved.

B. Use of Forecasts

11. As part of its Application, FBC has included numerous forecasts (including of load and sales revenue, power purchase expense (**PPE**), other income, operating and maintenance (**O&M**) expense and capital expenditures) for each year during the PBR Period. As is reflected in FBC’s responses to Information Requests (**IRs**) respecting these forecasts, the Company placed significant effort into establishing reliable and accurate forecasts. These forecasts provide insight into the future trends and challenges that FBC expects to face during the PBR Period.¹³
12. However, while the forecasts assist in understanding what FBC’s coming years look like under the PBR Plan, it is important to note that apart from the 2014 forecasts for non-controllable expenses, the forecasts were included in the Application for informational and reference purposes only.¹⁴ The forecasts are used in Section B7 of the Application to compare the forecast rates under the PBR Plan with the likely rates under the cost of service forecasts.¹⁵ This comparison provides a reasonableness check on the PBR Plan, as discussed in the PBR Submission. As described in Section B6 of the Application, the formula-based approach generates O&M expenses that closely align with the forecast O&M expenses throughout the PBR Period and capital expenditures that are 3.1 percent lower than forecast costs. The proposed PBR Plan

¹² Appendix A to Order 6-99-06, p. 24.

¹³ Ex. B-1 - FBC Application, pp. 3, 5.

¹⁴ Ex. B-1 - FBC Application, pp. 3, 5.

¹⁵ Ex. B-1 - FBC Application, p. 75.

provides FBC with a strong incentive to find productivity improvements during the upcoming PBR Period in order to offset the costs it is forecasting.¹⁶

13. While the forecasts for the years 2015-2018 assist by providing this reasonableness check, the 2014 forecasts for non-controllable expenses provide part of the basis for the Company's 2014 revenue requirements.
14. As was noted previously, FBC is presently seeking approval of only its 2014 rates, and not rates for subsequent years. Accordingly, this portion of the FBC Non-PBR Submission focuses predominantly on the factors that influenced the calculation of those proposed 2014 rates, rather than on future forecasts or future rates for 2015-18. With respect to the Company's controllable expenditures, the calculation of the proposed 2014 rates is influenced by the factors that went into determining the base-year costs for 2013. These base year costs will, in turn, serve as an input in the PBR formula to determine the approved level of controllable expenditures in future years.¹⁷ With respect to non-controllable expenditures, it is the 2014 forecasts that determine the total 2014 revenue requirement.¹⁸
15. In future years, FBC will be re-forecasting non-controllable expenditures annually and determining its rates as part of the Annual Review process.¹⁹

C. Controllable Expenditures under PBR

16. To determine revenue requirements over the PBR Period, controllable expenditures will be adjusted annually by the PBR formula.²⁰ The Company's two main types of controllable expenses, O&M expenses and capital expenditures, are discussed in this part. While the PBR Submission describes the details of the PBR mechanism used to calculate O&M and capital

¹⁶ Ex. B-1 - FBC Application, pp. 54, 59.

¹⁷ Ex. B-1 - FBC Application, p. 52.

¹⁸ Ex. B-1 - FBC Application, p. 277.

¹⁹ Ex. B-1 - FBC Application, p. 50.

²⁰ Ex. B-1 - FBC Application, p. 50.

expenditures in future years, this part of the FBC Non-PBR Submission focuses on the initial figure that is inputted into the PBR formula: base-year O&M and capital costs.

17. The base-year cost inputs into the PBR formula represent the starting point from which future productivity is measured. Accordingly, they should, and do, reflect the current level of resources required by FBC for the PBR Plan.²¹
18. It is this base-year cost amount for controllable expenditures that the Commission must determine with respect to a PBR application. While many of the questions asked by interveners during the IR process invite a detailed examination into FBC's historical cost trends, this is not appropriate in the present context.
19. As is discussed further below, for both base-year O&M and capital expenditures, the Company has selected a recent and thoroughly reviewed and tested starting figures: the amounts approved, following an oral public hearing, by the Commission in the Order G-110-12 (the **2012-13 RRA Decision**), as part of FBC's Application for Approval of 2012-2013 Revenue Requirements and Review of 2012 Integrated System Plan (the **2012-13 RRA**) for 2013 O&M and capital expenditures.²² In the course of the 2012-13 RRA proceeding, the Commission considered the appropriate levels for O&M and capital expenditures and determined that they were reasonable and appropriate. Accordingly, in a cost of service environment the Commission has already thoroughly considered the historical trends for these expenditures, and a further review of these approved figures is neither necessary nor appropriate.
20. To these 2013 "approved" figures, FBC has made certain adjustments (discussed in Parts 2(D)(1)(b) and 2(E)(2)(b) below) to arrive at appropriate base-year costs. It is these adjusted figures that are inputted into the PBR

²¹ Ex. B-27 - FBC Response to BCUC IR 2a.15.5.1.

²² Ex. B-1 - FBC Application, p. 51.

formula and escalated to determine the formula amounts for 2014 and each subsequent year in the PBR Period.²³

21. The determination of appropriate base-year cost amounts is discussed below, as are other issues raised during the course of this proceeding with respect to O&M expenses and capital expenditures.

D. O&M Expenses

22. O&M expenses comprise one of FBC's largest areas of controllable expenditures.²⁴ They are required both to operate the system and to provide administrative support to the business.²⁵ These expenses are necessary for FBC to meet its requirements of operating and maintaining its generation, transmission and distribution system in a manner that reflects its focus on customers, productivity and system reliability and safety.²⁶
23. In its Application, FBC has provided a 2013 base-year amount for O&M expense (**2013 Base O&M**), to be used to determine future costs under the PBR formula.²⁷ The exceptions to O&M expenses being tracked under the PBR formula relate to pension and OPEB, insurance expense and the O&M related to the implementation of the Advanced Metering Infrastructure (**AMI**) Project, all of which would continue to be tracked outside the formula based on annual forecasts.²⁸
24. As discussed earlier, while O&M forecasts for the PBR Period are also provided in FBC's Application for items other than the O&M expenses related to pension/OPEB, insurance and AMI, they are included for reference purposes

²³ Ex. B-1 - FBC Application, p. 52.

²⁴ Ex. B-1 - FBC Application, p. 114.

²⁵ Ex. B-1 - FBC Application, p. 111.

²⁶ Ex. B-1 - FBC Application, p. 176.

²⁷ Ex. B-1 - FBC Application, p. 111.

²⁸ Ex. B-1 - FBC Application, p. 52.

only.²⁹ The forecast O&M costs included in the Application will not be used in the operation of the PBR Plan or the PBR formula.

(1) The Determination of 2013 Base O&M

(a) 2013 Approved O&M

25. To determine the appropriate figure for 2013 Base O&M, FBC started with the amount of O&M expenditures approved by the Commission in the 2012-13 RRA Decision (**2013 Approved O&M**). The 2013 Approved O&M was then adjusted to reach an appropriate starting point for 2013 Base O&M for the PBR Plan.³⁰
26. This approach of making adjustments to a figure that has been previously approved by the Commission was endorsed by FBC's expert, Black and Veatch (**B&V**). The qualifications of B&V are set out in Appendix D3 to the Application.³¹ B&V indicated that making adjustments to the 2013 Approved O&M represented a reasonable approach to determining 2013 Base O&M, particularly since 2013 Approved O&M had been determined in a substantial recent proceeding, which included an oral hearing and active intervener participation.³²
27. Additionally, this methodology follows an approach that FBC has successfully utilized in the past. As part of FBC's 2007 PBR plan (the **2007 PBR Plan**), O&M base costs were determined using the previous year's approved O&M, with certain incremental adjustments being made. As in the present Application, the approved O&M used in the 2007 PBR Plan had been approved by the Commission following a full cost of service rate application with an oral hearing.³³

²⁹ Ex. B-1 - FBC Application, p. 111.

³⁰ Ex. B-1 - FBC Application, p. 50.

³¹ Ex. B-1-1 - FBC Application Appendices, Attachment D3 – Curriculum Vitae for B&V.

³² Ex. B-1 - FBC Application, p. 51.

³³ Ex. B-1 - FBC Application, p. 51.

(b) Adjustments to Approved O&M

28. While the 2013 Approved O&M represents a figure that was thoroughly reviewed and tested through a comprehensive IR process and an oral hearing of the 2012-13 RRA, certain adjustments must be made to update key information to account for FBC's required Base O&M for 2013, following that approval.³⁴
29. Three types of adjustments were made to the 2013 Approved O&M to arrive at 2013 Base O&M: an adjustment to represent net sustainable savings, a re-basing adjustment and an adjustment to represent incremental O&M.
30. The resulting 2013 Base O&M represents the level of expenditures required by FBC to manage its operations during the PBR Period.

(i) Net Sustainable Savings Adjustment

31. The first adjustment made to the 2013 Approved O&M represents the embedding of net sustainable savings of \$0.45 million into the 2013 Base O&M.³⁵ This figure accounts for both incremental savings and costs that FBC incurred over the 2013 Approved O&M amount that are expected to be sustainable into future years.³⁶ This net amount represents a 0.8 percent savings from the 2013 Approved O&M, and including this adjustment into 2013 Base O&M embeds these savings into future years.³⁷
32. The net sustainable savings recognized by FBC are attributable to the Company's internal efforts to finding sustainable savings, and include changes related to integration efforts between FBC and FEI and other reductions in costs resulting from the finding of efficiencies.³⁸

³⁴ Ex. B-11 - FBC Response to BCPSO IR 1.36.1.

³⁵ Ex. B-1 - FBC Application, p. 51.

³⁶ Ex. B-7 - FBC Response to BCUC IR 1.96.1.

³⁷ Ex. B-1 - FBC Application, p. 51.

³⁸ Ex. B-24 - FBC Response to BCUC IR 2.10.1.

33. By reducing 2013 Base O&M to account for these savings, FBC has committed to continuing to recognize this level of savings over the PBR Period. No matter how these savings are achieved in future years, they will serve to reduce O&M expense, for the future benefit of customers.³⁹

(ii) Re-Basing Adjustments

34. Additionally, three adjustments were made to the 2013 Approved O&M figure to reflect a partial re-basing of 2013 Approved O&M to determine the appropriate starting point for O&M expenses in the PBR Period. These adjustments are to take into account amounts that are considered non-controllable by FBC, and for which the variance was captured in a deferral account.⁴⁰
35. First, 2013 Approved O&M was increased by \$900,000 to account for O&M expenses incurred in 2013 related to complying with the British Columbia Mandatory Reliability Standards (**MRS**) program.⁴¹ This adjustment results from the fact that the 2013 projected O&M associated with complying with the MRS program was higher than the amount approved by the Commission in the 2012-13 RRA Decision.
36. The MRS program has been continually evolving, with new and amended standards, processes directed by external parties such as the Western Electricity Coordinating Council (**WECC**), and the increasing complexity of reporting requirements necessitating constant oversight and evaluation by FBC. Since the Commission's Order G-67-09 (which adopted 103 standards and the February 12, 2008 North American Electric Reliability Corporation (**NERC**) Glossary of Terms), the Commission has adopted 11 new standards, 7 replacement standards, 62 revised standards (11 of which included 2 revisions), the August 4, 2011 NERC Glossary of Terms and a modification of the Rules of

³⁹ Ex. B-24 - FBC Response to BCUC IR 2.10.1.

⁴⁰ Ex. B-1 - FBC Application, p. 51.

⁴¹ Ex. B-1 - FBC Application, p. 52.

Procedure. There continue to be 9 further revised standards and the December 5, 2012 NERC Glossary of Terms pending approval.⁴²

37. In this changing environment, FBC's initial evaluations did not adequately contemplate the magnitude of what was required to establish and maintain auditable compliance, as required by the MRS.⁴³ Since the time of the 2012-13 RRA, FBC's understanding of the effort necessary to meet the requirements of MRS has improved. This improved understanding is the result of a formal audit, the Company's participation in user group meetings, and consultation with other utilities and consultants.⁴⁴
38. The resources that FBC uses to achieve and maintain MRS compliance are drawn from a variety of business groups, including engineering, operations, information systems, generation, human resources and facilities.⁴⁵ 2013 was the first year in which the majority of the MRS requirements were out of mitigation and required full and ongoing compliance by the Company. As a result, FBC has forecast that approximately 20,000 hours of internal labour will be required annually to ensure that compliance is maintained going forward.⁴⁶ FBC anticipates that the MRS costs will remain as submitted through the PBR Period, based on the currently approved MRS standards.⁴⁷
39. The second re-basing adjustment made was to increase 2013 Approved O&M by \$135,000 to account for expenses that were incurred when the provincial sales tax (**PST**) was re-introduced by the provincial government on April 1, 2013.⁴⁸

⁴² Ex. B-7 - FBC Response to BCUC IR 1.128.2.

⁴³ Ex. B-22 - FBC Response to ICG IR 2.15.2.

⁴⁴ Ex. B-7 - FBC Response to BCUC IR 1.129.1.

⁴⁵ Ex. B-24 - FBC Response to BCUC IR 2.17.1.

⁴⁶ Ex. B-7 - FBC Response to BCUC IR 1.129.1; Ex. B-22 - FBC Response to ICG IR 2.15.2.

⁴⁷ Ex. B-24 - FBC Response to BCUC IR 2.18.1.

⁴⁸ Ex. B-1 - FBC Application, p. 52.

40. The third re-basing adjustment made to 2013 Approved O&M is with respect to expenses related to pension and OPEB, to account for an additional \$2.2 million in expenses.⁴⁹ This adjustment relates to the fact that FBC's actuarial estimate that was completed in 2013 was approximately 70 percent higher than the estimate that was completed in 2011 and used for the purpose of determining 2013 Approved O&M in the 2012-13 RRA. This large variance is primarily due to the current low interest rates and the lower than expected returns on pension plan assets.⁵⁰ This adjustment accounts for the fact that, as noted previously, the pension and OPEB will be tracked outside the PBR formula going forward.⁵¹
41. These adjustments are not one-time adjustments, but rather are incremental O&M expenses that will occur each year during the PBR Period.⁵² Accordingly, it is appropriate to incorporate them into the 2013 Base O&M.⁵³

(iii) Incremental O&M

42. Finally, two adjustments have been made to 2013 Approved O&M to account for changes in incremental O&M expenses that occurred in 2013.⁵⁴
43. First, the 2013 Approved O&M was reduced by \$909,000 to account for a reduction in lease payments that were being made for the Trail office. This office had previously been leased by FBC, but was purchased in 2013 pursuant to Order G-110-12. This purchase will result in the elimination of future lease payments for this property.⁵⁵

⁴⁹ Ex. B-1 - FBC Application, p. 52.

⁵⁰ Ex. B-1 - FBC Application, p. 117.

⁵¹ Ex. B-1 - FBC Application, p. 52.

⁵² Ex. B-10 - FBC Response to CEC IR 1.57.1.

⁵³ Ex. B-7 - FBC Response to BCUC IR 1.98.4.

⁵⁴ Ex. B-1 - FBC Application, p. 52.

⁵⁵ Ex. B-1 - FBC Application, p. 52.

44. The second incremental adjustment to 2013 Approved O&M is an increase of \$350,000, which accounts for new recurring maintenance of FBC's generating units.⁵⁶
45. From 1998 to 2011, FBC completed a major Upgrade and Life Extension (**ULE**) program.⁵⁷ Prior to the commencement of the ULE program, FBC performed major electrical inspections and maintenance every 10 years and major mechanical inspections and maintenance every 20 years.⁵⁸ During the ULE program, while completing upgrades on 11 of its 15 generating units, the Company maintained a regimen of performing annual inspections.
46. With the recent completion of the upgrades under the ULE program, FBC has shifted its Generation department's focus away from refurbishment and back to operation and maintenance of the generation units.⁵⁹ Its full maintenance program includes both routine tasks (completed in 1 or 2 year intervals) and non-routine tasks (completed in 3, 5, 10 or 15 year intervals).⁶⁰
47. In accordance with industry maintenance practices, FBC has re-introduced a Major Unit Inspections cycle for its generation equipment. This cycle is based on industry best practices which are based on surveys and benchmarking conducted by the Centre for Energy Advancement through Technological Innovation of utilities' maintenance practices. Industry practices, as well as manufacturers' guidelines and equipment operating conditions, are also used in determining an appropriate inspection schedule.⁶¹ FBC has historically adhered to industry practices in determining its maintenance schedule,⁶² and the Major

⁵⁶ Ex. B-1 - FBC Application, p. 52.

⁵⁷ Ex. B-7 – FBC Response to BCUC IR 1.108.1.

⁵⁸ Ex. B-22 – FBC Response to ICG IR 2.14.1.

⁵⁹ Ex. B-1 - FBC Application, p. 121.

⁶⁰ Ex. B-22 - FBC Response to ICG IR 2.14.2.

⁶¹ Ex. B-24 - FBC Response to BCUC IR 2.12.1.

⁶² Ex. B-24 - FBC Response to BCUC IR 2.12.2.

Unit Inspections cycle will continue to comply with these maintenance practices.⁶³

48. Under the Major Unit Inspections cycle, each of FBC's 15 generation units will now require major maintenance on a 15-year cycle. This is determined by considering the annual operating hours of each of the units and the fact that a major overhaul is required approximately every 80,000 operational hours.⁶⁴ While a 15-year cycle is anticipated, the maintenance schedule is guided by a condition-based interval philosophy, rather than strictly a time-based interval philosophy;⁶⁵ the actual schedule will be guided by condition, risk and operational priority.⁶⁶ The estimated annual cost of the Major Unit Inspections is \$350,000, which has been included in 2013 Base O&M.⁶⁷

(iv) Summary of 2013 Base O&M

49. 2013 Base O&M is summarized through the following calculation, which demonstrates how the adjustments move 2013 Approved O&M to 2013 Base O&M:⁶⁸

⁶³ Ex. B-11 - FBC Response to BCPSO IR 1.75.2.

⁶⁴ Ex. B-1 - FBC Application, p. 125.

⁶⁵ Ex. B-22 - FBC Response to ICG IR 2.14.2.

⁶⁶ Ex. B-1 - FBC Application, p. 125.

⁶⁷ Ex. B-1 - FBC Application, p. 125.

⁶⁸ Ex. B-1 - FBC Application, p. 51.

Table B6-4: 2013 Base O&M

	(\$ thousands)	
1 2013 Decision		57,621
2		
3 Net Sustainable Savings		(452)
4		
5 <u>2013 Adjustments</u>		
6 Mandatory Reliability Standards	900	
7 Provincial Sales Tax	180	
8 Pension/OPEB (O&M Portion)	2,158	3,238
9		
10 <u>Incremental O&M</u>		
11 Trail Office Lease	(909)	
12 Generation Maintenance	350	(559)
13		
14 2013 Base O&M		<u>59,848</u>

50. FBC believes that the 2013 Base O&M reflects the appropriate starting point for establishing the PBR formula.⁶⁹

(2) Specific O&M Issues

51. During the course of this proceeding, additional matters have been raised by the Interveners with respect to FBC's O&M expense. While FBC has endeavoured to determine what appears to be in issue and to address these issues in this part of the Non-PBR Submission, if Interveners raise other issues in final submissions, those will need to be addressed in FBC's Reply Submission.

(a) Labour Costs & Benefits

52. The Company has three employee groups, consisting of executive, exempt and unionized employees.⁷⁰ While the details of the compensation and benefits programs vary between these three groups, the Company applies the same philosophy and approach to compensation and benefits for all of its employees.

⁶⁹ Ex. B-24 - FBC Response to BCUC IR 2.21.1.

⁷⁰ Ex. B-1 - FBC Application, p. 114.

This approach includes a total compensation package that rewards employees with competitive base salaries and wages, incentive compensation, benefits, and paid time off.⁷¹

53. For all employees, FBC's compensation philosophy is designed to attract and retain qualified and experienced employees. The Company does this by ensuring that its compensation packages reflect the median level of a peer group of companies. Further, employees are encouraged to perform at their best through the linking of pay increases and incentive opportunities to individual and company performance.⁷²

(i) Changes over the PBR Period

54. Overall, FBC adjusts its compensation packages to be competitive with its peer companies in the labour market. It uses this same, consistent approach to adjustments whether it is operating under PBR or cost of service.⁷³
55. Over the PBR Period, FBC's only planned change in employee compensation packages is to transition its executive employees to a new health and welfare benefits plan that includes post-retirement health and welfare benefits, as of January 1, 2014. The plan is generally representative of benefit plans at this level.⁷⁴

(ii) Labour Disruptions

56. FBC was involved in a labour dispute with its employees represented by the International Brotherhood of Electrical Workers (**IBEW**), Local 2013. FBC has assessed the effects of this labour dispute and, on a net basis, it has not

⁷¹ Ex. B-1 - FBC Application, p. 114.

⁷² Ex. B-1 - FBC Application, p. 114-116.

⁷³ Ex. B-9 - FBC Response to BCMEU IR 1.13.3.

⁷⁴ Ex. B-9 - FBC Response to BCMEU IR 1.13.2.

forecast any impact to overall O&M expenses resulting from the labour disruption.⁷⁵

57. While the labour disruption resulted in a decrease in certain IBEW labour costs included O&M expense during 2013, this reduction is offset by cost increases in other areas caused by the disruption.⁷⁶ These additional costs include the following:

- a. costs of employee benefits have remained substantially the same, and a greater portion of these benefits have been included in O&M expenses, rather than being loaded into capital, as a result of certain capital expenditures not being completed in 2013;⁷⁷
- b. higher than normal overtime costs for qualified management and exempt employees performing IBEW work;⁷⁸
- c. as approximately 60 percent of the salaries paid to IBEW staff are traditionally allocated to capital or third party services, only 40 percent could be considered avoided O&M costs as a result of the salaries not being paid to IBEW staff. The remaining 60 percent is part of the capital expenditures and third party work that was not completed in 2013 and will be rescheduled to 2014/2015. The third party work that has been reduced, deferred or cancelled does not impact the labour expense of the Company;⁷⁹ and
- d. a greater proportion of labour and vehicle costs is being charged to 2013 O&M expense rather than capital, as a result of the capital expenditures being carried over from 2013 to future years.⁸⁰

⁷⁵ Ex. B-1-6 – Letter from FBC to BCUC, p. 3.

⁷⁶ Ex. B-1-6 - Letter from FBC to BCUC, p. 3.

⁷⁷ Ex. B-22 - FBC Response to ICG IR 2.25.1.

⁷⁸ Ex. B-1-6 – Letter from FBC to BCUC, p. 3.

⁷⁹ Ex. B-22 - FBC Response to ICG IR 2.25.1.

⁸⁰ Ex. B-1-6 – Letter from FBC to BCUC, p. 3.

58. The impact of the labour disruption on O&M expense does not impact 2013 Base O&M expense because it is not reflective of the Company's ongoing operations during the PBR Period, and does not necessitate any adjustments to the formula for determining O&M during the PBR Period.
59. The effect of the labour disruption is also considered below in Part 2(E)(3)(c) on Capital Expenditures.

(b) Regulatory Efficiencies

60. FBC responded to IRs related to the savings expected to result for its Regulatory department as a result of the reduction in regulatory burden from the change to PBR.⁸¹ This does not warrant a reduction to 2013 Base O&M.
61. The Regulatory department is responsible for the provision of regulatory services, including for preparing all revenue requirements, cost of capital and rate design applications, applications for Certificates of Public Convenience and Necessity (**CPCNs**), energy supply applications and for providing interpretation, education and communication of regulatory requirements and policies throughout the Company.⁸²
62. While FBC may be moving back to a PBR period, FBC's staffing levels are already commensurate with PBR staffing levels. FBC has been regulated under various PBR plans since 1996, with exceptions only in the years of 2005-2006 and 2012-2013; PBR has become its "steady state" with regard to regulatory activity, and the small staff contingent in the Regulatory department has remained relatively constant under both PBR and non-PBR. The Company did not seek to increase its O&M expense following the termination of its last PBR in 2011 in order to add additional staff members. In fact, staffing levels in its Regulatory department have remained constant since 2010, despite the fact that the complexity of regulatory processes has been increasing since that

⁸¹ Ex. B-25 - FBC Response to CEC IR 2.38.2.

⁸² Ex. B-1 - FBC Application, p. 158.

time.⁸³ Therefore, the 2013 Base O&M does not include any increased costs associated with moving from a PBR period to non-PBR period.⁸⁴

63. During the PBR Period, the Regulatory department will still be responsible for Annual Reviews, the ongoing regulatory work associated with CPCN applications, cost of capital matters, rate design and other regulatory work.⁸⁵ Further, in recent years the regulatory processes have continued to become more lengthy and costly.⁸⁶ While FBC does not expect to gain efficiencies in its Regulatory department from returning to PBR, there will be regulatory efficiencies compared to cost of service regulation.⁸⁷
64. In summary, it would not be appropriate for an adjustment to be made to reduce 2013 Base O&M.

(c) Impact of AMI

65. The Company's application for a CPCN to develop and deploy its AMI Project was approved on July 23, 2013 by Order C-7-13.⁸⁸ FBC prepared this Application based on the assumption that the AMI Project would be approved, with the caveat that it would be amended if the AMI Project was not approved as proposed.⁸⁹ Accordingly, the Application is consistent with the approval of the AMI Project, and does not need to be adjusted.

(d) Exclusions from the O&M Formula

66. As was noted previously, O&M expenses associated with pension and OPEB, insurance expense and the AMI Project, will be tracked outside the PBR

⁸³ Ex. B-1 - FBC Application, p. 158.

⁸⁴ Ex. B-25 - FBC Response to CEC IR 2.38.2.

⁸⁵ Ex. B-25 - FBC Response to CEC IR 2.38.2.

⁸⁶ Ex. B-1 – FBC Application, p. 159.

⁸⁷ Ex. B-25 - FBC Response to CEC IR 2.39.1.

⁸⁸ Ex. B-1-6 - Evidentiary Update, pp. 5, 6.

⁸⁹ Ex. B-1 - FBC Application, p. 176.

formula.⁹⁰ While the appropriateness of these exclusions was questioned during IRs,⁹¹ these exclusions from the PBR formula are appropriate, given the uncontrollable and/or variable nature of these expenses during the PBR Period.⁹²

67. For example, the AMI Project will be implemented during the PBR Period and the expenditures and savings are highly variable during this implementation phase.⁹³ By tracking these expenses and reductions outside the PBR formula, they are flowed-through to customers, meaning that the ratepayer is the sole beneficiary of the savings related to the project. The savings associated with the AMI Project are comprised primarily of the reduction in manual meter reading costs, disconnection and reconnection cost, and meter exchange costs, as well as any benefits from any reduction in theft, which will flow-through entirely to customers due to the proposed PPE deferral account. The savings are offset by the cost of installing the project.⁹⁴ Overall, the implementation of the AMI Project is expected to result in a net decrease in FBC's O&M requirements during the PBR Period, to the benefit of ratepayers.⁹⁵
68. With respect to insurance expense, the Application reflects the exclusion of the entire insurance expense (including premiums, asset valuation and first and third party liability costs) from 2013 Base O&M.⁹⁶ In its responses to IRs, FBC indicated that it would not object to only insurance *premiums* being excluded from 2013 Base O&M (and therefore the PBR formula). Adopting this approach would ensure consistent treatment of these expenses between FBC and FEI. However, if this adjustment is made, the 2013 Base O&M amount must be adjusted accordingly. This would involve increasing 2013 Base O&M to

⁹⁰ Ex. B-1 - FBC Application, p. 52.

⁹¹ See, for example Ex. B-24 - FBC Response to BCUC IR 2.43.4.

⁹² Ex. B-1 - FBC Application, p. 52.

⁹³ Ex. B-7 - FBC Response to BCUC IR 1.145.2.

⁹⁴ Ex. B-24 - FBC Response to BCUC IR 2.43.4.

⁹⁵ Ex. B-1 - FBC Application, p. 174.

⁹⁶ Ex. B-1 - FBC Application, p. 53.

account for the forecast \$274,000 First and Third Party Liability Expense (as Asset Valuations are forecast to be \$0 for 2014).⁹⁷

E. Capital Expenditures

(1) Introduction

69. FBC's second major type of controllable expenditures is comprised of certain types of capital expenditures.⁹⁸
70. Capital expenditures are comprised of both regular capital expenditures, as well as capital expenditures associated with major projects, which are generally approved by way of a CPCN application. There are three types of regular capital expenditures: Growth, Sustainment and Other Capital.⁹⁹
71. Under the PBR Plan, the expenditures traditionally included in Growth, Sustainment and Other Capital will be determined under the PBR formula during the PBR Period.¹⁰⁰ In contrast, CPCN expenditures are excluded from the PBR formula, and will continue to be addressed through separate applications that are reviewed and approved by the Commission through separate regulatory processes.¹⁰¹ The rationale for this distinction is to include all regular capital components in the PBR formula while excluding those components that do not directly relate to regular capital expenditures, such as CPCNs and deferral account balances.¹⁰² Additionally, the capital portion of pension/OPEB expenditures will also be tracked outside the PBR formula, given the variability and unpredictability of these items.¹⁰³

⁹⁷ Ex. B-24 - FBC Response to BCUC IR 2.59.1.

⁹⁸ Ex. B-1 - FBC Application, pp. 50, 54.

⁹⁹ Ex. B-1 - FBC Application, p. 177..

¹⁰⁰ Ex. B-1 - FBC Application, p. 55.

¹⁰¹ Ex. B-1 - FBC Application, p. 55 and p. 226.

¹⁰² Ex. B-1 - FBC Application, p. 177.

¹⁰³ Ex. B-1 - FBC Application, p. 56 Ex. B-25 - FBC Response to CEC IR 2.33.1.

72. In its Application, FBC has provided a 2013 base-year amount for capital expenditures (**2013 Base Capital**), which will be used to determine future expenditures under the PBR formula. As discussed earlier, the majority of the capital expenditure forecasts for the PBR Period that are provided in FBC's Application are included for reference purposes only and capital expenditures will be determined using the formula approach during the PBR Period.¹⁰⁴

(2) The Determination of 2013 Base Capital

(a) 2013 Approved Capital

73. FBC used a similar methodology to determine the appropriate figure for 2013 Base Capital as was used to determine 2013 Base O&M. More specifically, the Company started with the 2013 amount for capital expenditure approved by the Commission in the 2012-13 RRA Decision (**2013 Approved Capital**) and then made certain adjustments to reach an appropriate figure for 2013 Base Capital.¹⁰⁵
74. For the same reasons discussed above in Part 2(D)(1)(b) with respect to 2013 Base O&M, this represents an appropriate methodology for determining base-year costs for capital expenditures.¹⁰⁶
75. While some of the Interveners have suggested that the levels of capital expenditures from the 2007 PBR Plan could be utilized as a base-year capital input, this approach would not be appropriate. Unlike the present Application, FBC's capital expenditures under the 2007 PBR Plan were not determined in a formulaic manner. Instead, they were determined based on a detailed project-by-project analysis that was reviewed and approved through revenue requirements and capital expenditure plan applications.

¹⁰⁴ Ex. B-1 - FBC Application, p. 177.

¹⁰⁵ Ex. B-1 - FBC Application, p. 55-56.

¹⁰⁶ Ex. B-1 - FBC Application, p. 56.

(b) Adjustments to Approved Capital

76. While the 2013 Approved Capital represents a figure that was thoroughly reviewed and tested at the oral hearing of the 2012-13 RRA, two types of adjustments must be made to the 2013 Approved Capital to arrive at 2013 Base Capital: an adjustment for non-recurring major projects and a re-basing adjustment to account for certain non-controllable items.¹⁰⁷

(i) Adjustment for Non-Recurring Major Projects

77. The first adjustment made to 2013 Approved Capital is the deduction of non-recurring major projects, to account for the exclusion of major capital projects from the PBR formula.¹⁰⁸

78. Major capital projects can vary significantly from year to year depending on the scope and number of major projects underway.¹⁰⁹ Major projects are not recurring expenditures and are not representative of the type of ongoing requirements to which the proposed PBR mechanism is intended to apply.¹¹⁰ Accordingly, major capital projects are excluded from the formula driven portion of capital expenditures.¹¹¹ By deducting these projects from 2013 Approved Capital, FBC ensures that the 2013 Base Capital provides an adequate amount of funding, for the ongoing capital requirements over the PBR Period.¹¹²

79. While the Application refers to excluding major *or* non-recurring types of capital,¹¹³ these two types of projects are not exclusive, as both regular capital and major capital projects may be non-recurring in nature. For the purposes of the PBR Plan, it is the distinction between regular capital and major capital that

¹⁰⁷ Ex. B-1 - FBC Application, p. 56.

¹⁰⁸ Ex. B-1 - FBC Application, p. 56.

¹⁰⁹ Ex. B-7 - FBC Response to BCUC IR 1.147.3.

¹¹⁰ Ex. B-24 - FBC Response to BCUC IR 2.42.1.

¹¹¹ Ex. B-7 - FBC Response to BCUC IR 1.34.1.

¹¹² Ex. B-7 - FBC Response to BCUC IR 1.32.1.

¹¹³ Ex. B-1 - FBC Application, p. 179.

is important: major capital projects are excluded from the formula driven portion of capital expenditures.¹¹⁴

80. In determining 2013 Base Capital, the following projects were eliminated from 2013 Approved Capital:¹¹⁵
- a. Corra Linn Unit 3 completion;
 - b. Corra Linn Unit 2 Life Extension;
 - c. Okanagan Transmission Reinforcement Project;
 - d. Kelowna Bulk Transformer Capacity Addition;
 - e. PCB Environmental Compliance (substations component);
 - f. Trail Office Lease Purchase;
 - g. Kootenay Long Term Facilities Project;
 - h. Okanagan Long Term Solutions Project;
 - i. Central Warehousing Project; and
 - j. the AMI Project.

(ii) Adjustments for Non-Controllable Items

81. The second type of adjustment made to 2013 Approved Capital represents a re-basing of 2013 Approved Capital to an appropriate base year amount for non-controllable capital expenditures. This is similar to the approach used in adjusting 2013 Approved O&M, and it accounts for two of the same type of adjustments, related to PST and pension/OPEB.¹¹⁶

¹¹⁴ Ex. B-7 - FBC Response to BCUC IR 1.34.1.

¹¹⁵ Ex. B-1 - FBC Application, p. 179.

¹¹⁶ Ex. B-1 - FBC Application, pp. 56 and 179.

82. First, as with 2013 Base O&M, the 2013 Approved Capital was adjusted to account for the return of PST. This amounts to an additional \$359,000 in capital expenditures.¹¹⁷ As with 2013 Base O&M, this adjustment embeds the costs associated with PST being reintroduced in April 2013 into the base costs.¹¹⁸
83. The second adjustment relates to the capital portion of the increased 2013 pension and OPEB amounts. As was described above, this adjustment relates to the fact that the estimate completed by FBC's third-party external actuary in 2013 was approximately 70 percent higher than the estimate that was completed in 2011 and was used for the purpose of determining 2013 Approved Capital at the 2012-13 RRA. This large variance is primarily due to low interest rates and the lower than expected returns on pension plan assets.¹¹⁹
84. In addition to necessitating an increase in 2013 Base O&M, this change in the actuarial estimate has resulted in an increase in base capital in order to reflect the current cost of pensions and OPEB in 2013. The allocation between O&M and capital is based on the chargeable hours forecast against O&M and capital activities, resulting in an incremental expense of \$1,723,000 being attributable to 2013 Base Capital.¹²⁰

(iii) Summary of 2013 Base Capital

85. The following table demonstrates the above-described adjustments to 2013 Approved Capital to determine 2013 Base Capital:¹²¹

¹¹⁷ Ex. B-1 - FBC Application, p. 181.

¹¹⁸ Ex. B-7 - FBC Response to BCUC IR 1.32.1.

¹¹⁹ Ex. B-15 - FBC Response to ICG IR 1.37.2.

¹²⁰ Ex. B-15 - FBC Response to ICG IR 1.37.2.

¹²¹ Ex. B-1 - FBC Application, p. 56.

Table B6-6: 2013 Base Capital

	Approved	less Major Projects	Applicable to Formula	PST	Pension	2013 Base
1 Sustainment Capital	28,215	(9,021)	19,194	151	702	20,047
2 Growth Capital	22,625	(2,885)	19,760	155	723	20,638
3 Other Capital	51,130	(42,998)	8,134	64	298	8,495
4 Total Capital Expenditures	101,970	(54,882)	47,088	369	1,723	49,180

86. Unlike the adjustments made to determine 2013 Base O&M, there is not a net sustainable saving adjustment made to 2013 Base Capital. While there were capital investments made during the 2012-13 RRA that have resulted in capital savings in subsequent periods, quantifying this future capital saving is very difficult. Further, the methodology that the Company has used to determine capital expenditures has resulted in this type of savings being incorporated directly into the PBR Plan. FBC assumes that if appropriate levels of sustainment capital are invested, as proposed in the PBR Plan, the likelihood of sporadic high-cost or recurrent low-cost unforeseen failure is greatly mitigated and the need to increase future capital investments to catch up with deferred work is reduced. Any savings from increased unforeseen failures or significant future capital increases are therefore already incorporated into the PBR Plan.¹²²
87. FBC considers the proposed base level of capital expenditures necessary in order to provide ongoing safe and reliable service to customers. While it may be possible to reduce expenditures in the short term (at increased system risk), this is not a prudent long-term approach as investment levels will not be sufficient to maintain adequate levels of safety and reliability.¹²³

(3) Specific Capital Issues

88. During the course of this proceeding, additional matters have been raised by the Interveners with respect to FBC's capital expenditures. While FBC has endeavoured to determine what appears to be in issue and to address these

¹²² Ex. B-24 - FBC Response to BCUC IR 2.47.1.

¹²³ Ex. B-7 - FBC Response to BCUC IR 1.148.1.

issues in this part, if Interveners raise other issues in final submissions, those will need to be addressed in FBC's Reply Submission.

(a) *Inclusion of Capital in PBR Formula*

89. While FBC's 2007 PBR Plan excluded all capital expenditures from the PBR formula, the proposed PBR Plan determines regular capital expenditures using the PBR formula. Including regular capital under the PBR formula gives the Company an increased opportunity to find regulatory efficiencies, as well as providing flexibility for the Company to manage those regular capital expenditures and capture efficiencies for the long-term benefit of customers.¹²⁴ Further, it assists in the regulatory efficiencies associated with the current proposal, as FBC would not continue to submit annual capital expenditure plans for review and approval.¹²⁵
90. In the 2007 PBR Plan, FBC did not propose including regular capital under the formula, due to several concerns raised by Interveners. As is outlined below, since the 2007 PBR Plan, these concerns have been addressed. How those concerns have been addressed is as follows:¹²⁶
- a. Concern: Lack of transparency regarding the nature of capital expenditures during the PBR term.

Response: The Annual Reviews during the previous PBR period involved significant discussion and examination of capital expenditures made and were successful in providing visibility to stakeholders. The Annual Review process is proposed to continue under the current PBR Plan, and it will include a review of capital expenditures incurred under the PBR formula, as well as a review of major projects approved outside of PBR.

¹²⁴ Ex. B-24 - FBC Response to BCUC IR 2.39.6.

¹²⁵ Ex. B-25 - FBC Response to CEC IR 2.32.2.

¹²⁶ Ex. B-25 - FBC Response to CEC IR 2.32.1.

- b. Concern: Linking capital expenditures to PBR could incent the Company to minimize its expenditures, during a time when the Company should be increasing them.

Response: Circumstances that exist now are different than before the previous PBR period, which occurred at a time when system reliability was decreasing. Since that time, overall system reliability and customer satisfaction have improved. FBC believes that the level of capital sustainment provided for in the PBR Plan will ensure that the existing levels of system reliability will continue to be maintained, while also allowing the Company sufficient flexibility to prioritize sustainment expenditures and continue to look for efficiencies for the long-term benefit of customers.

- c. Concern: Formula-driven capital expenditures will not support the required levels of capital investment indicated by the 2005-2025 System Development Plan.

FBC has made significant investments in infrastructure to meet load and improve reliability since the previous PBR period. The expenditures determined by 2013 Base Capital, and the formula are sufficient to continue to maintain and improve these levels of reliability.

91. As the concerns associated with including capital have been addressed and there are benefits to including the expenditures, FBC submits that it is appropriate to determine regular capital expenditures through the PBR formula.

(b) Sustainment, Growth & Other Capital

92. As noted earlier, FBC's regular capital expenditure category may be broken down into three types of capital: Growth, Sustainment and Other Capital.

93. FBC's Growth capital expenditures involve projects that are necessary to meet customer growth and associated load growth.¹²⁷
94. Sustainment capital expenditures involve projects that are required in order to maintain the safety and reliability of the electrical system and to ensure that the plant in service is managed to provide service over its full life expectancy.¹²⁸
95. The Company's Other Capital category consists of planned capital expenditures for vehicles, metering, business technology and information systems, telecommunications, buildings, furniture and fixtures, tools and equipment and regulatory compliance initiatives.¹²⁹
96. As was described earlier in Part 2(E)(2) of this FBC Non-PBR Submission, these three types of capital expenditures are utilized in determining the 2013 Base Capital figure that will, in turn, be used in the PBR formula to determine the level of capital expenditures each year during the PBR Period. After accounting for the adjustments for major projects, PST and pension/OPEB, the 2013 Base Capital amount represents the expenditures approved by the Commission for Sustainment, Growth and Other Capital in the 2012-13 RRA Decision.¹³⁰
97. Additionally, the Sustainment, Growth and Other Capital expenditures embedded into 2013 Base Capital are also consistent with the principles of the 2012 Long Term Capital Plan, which was accepted by the Commission as part of the 2012-13 RRA (the **2012 LTCP**). The 2012 LTCP is a comprehensive plan in which the Company described its long-term strategic plan for the management of its capital.
98. While the specific amounts forecast in the 2012 LTCP for Sustainment, Growth and Other Capital vary slightly from the portions of 2013 Base Capital

¹²⁷ Ex. B-1 - FBC Application, p. 207.

¹²⁸ Ex. B-1 - FBC Application, p. 188.

¹²⁹ Ex. B-1 - FBC Application, p. 216.

¹³⁰ Ex. B-1 - FBC Application, p. 55-56, 179.

attributable to each type of capital, these differences are primarily the result of shifts in the timing of a number of projects and updates to forecast expenditures for the PBR Period. Further, with respect to Sustainment capital, the 2013 Base Capital incorporates certain additional Distribution Sustainment Projects that are related to FBC's acquisition of the City of Kelowna (**COK**) distribution assets.¹³¹ With respect to Growth capital, 2013 Base Capital incorporates certain Transmission, Stations and Distribution growth projects that are related to the acquisition of the COK distribution assets.¹³²

99. Overall, the 2013 Base Capital attributable to each of Sustainment, Growth and Other Capital is consistent with the long-term strategies set out in the 2012 LTCP.
100. FBC believes that the proposed Sustainment, Growth and Other Capital components of its 2013 Base Capital figure are necessary to provide safe and reliable service to customers over the PBR Period, based on an analysis of actual and forecast demand.¹³³

(c) Labour Disruption

101. As was described above in Part 2(D)(2)(a)(ii) on O&M, the Company faced ongoing labour disruptions with its IBEW unionized employees. In addition to having consequences on O&M expenses, this has impacted FBC's ability to proceed as planned with its planned capital projects. While the majority of planned capital projects were placed on hold in June 2013 as a result of the labour disruption,¹³⁴ this deferral of capital projects into 2014 and 2015 does not have any impact on the 2013 Base Capital amount put forward in the Application. This is because 2013 Base Capital is based on the approved

¹³¹ Ex. B-7 - FBC Response to BCUC IR 1.155.1.

¹³² Ex. B-7 - FBC Response to BCUC IR 1.170.1.

¹³³ Ex. B-7 - FBC Response to BCUC IR 1.162.2.

¹³⁴ Ex. B-23 - FBC Response to BCPSO IR 2.27.1.

capital expenditures from 2013, which were determined before the labour disruption.¹³⁵

(d) CPCNs

102. As was noted above in Part 2(E)(1) of the FBC Non-PBR Submission, while regular capital expenditures will be captured within the PBR formula, capital expenditures associated with major projects that require CPCNs will continue to be addressed through separate applications that are reviewed and approved by the Commission through separate regulatory processes.¹³⁶
103. FBC intends to continue to use the criteria it has used since 2005 for determining when a specific project requires an application for a CPCN. More specifically, FBC will file a CPCN application for a capital project that meets the following conditions:¹³⁷
- a. the total project cost is \$20 million or greater;
 - b. the project is likely to generate significant public concern;
 - c. the Company believes, for any reason, that it is appropriate for a CPCN application to be used;
 - d. a credible majority of stakeholders express a desire for a CPCN application, after a Capital Plan has been presented to them; or
 - e. the Commission determines that a CPCN application should proceed.
104. During the oral hearing on PBR issues, a potential concern was raised that FBC could classify certain projects as requiring a CPCN, under the third of the criteria listed above, in an effort to exclude the project from the PBR formula.

¹³⁵ Ex. B-23 - FBC Response to BCPSO IR 2.27.2.

¹³⁶ Ex. B-1 - FBC Application, p. 55 and p. 226.

¹³⁷ Ex. B-1 - FBC Application, p. 226.

As stated by Dennis Swanson, FBC's Director, Regulatory Affairs, this is not a concern:

First of all, I'd like to say, you know, that wouldn't be our intent, and our history hasn't shown that's the case. That's actually meant to be more of a catch-all where we see an issue with a project and it's, you know, maybe it's a project in some area that we wouldn't normally do capital works and we wanted to bring the situation in front of the Commission so that the Commission could opine on whether or not that was a project that was in the public interest. We wouldn't typically just put a project into that category for the sake of putting a project into that category. CPCN processes are expensive and labour intensive and it wouldn't make a lot of sense.

And even if we did. So even if we did put a project in there just to avoid the I minus X formula, and we put it in front of the Commission, the Commission would have the ability to not approve that project. Or not approve that project under that funding criteria. So there is a safety net so nothing would be automatic where the utility just has an embedded right just to do something.¹³⁸

105. While FBC intends to submit applications for CPCNs during the PBR Period, it is not seeking approval of any CPCNs as a part of this Application.¹³⁹ During the PBR Period, FBC expects to file CPCN applications for a number of projects, including the following:¹⁴⁰

- a. Kelowna Bulk Transformer Capacity Addition;
- b. Ruckles Substation Upgrade;
- c. Central Okanagan Substation; and
- d. Corra Linn Spillway Concrete and Spill Gate Rehabilitation.

¹³⁸ Transcript, Volume 4, pp. 653-654.

¹³⁹ Ex. B-24 - FBC Response to BCUC IR 2.39.7.

¹⁴⁰ Ex. B-1 - FBC Application, p. 226.

F. Non-Controllable Expenditures

106. In addition to the controllable expenditures described above, which are included in the PBR formula, FBC is also seeking approval of its 2014 non-controllable expenditures. The following sections of the FBC Non-PBR Submission deal with these non-controllable expenditures. It should be noted that under the PBR Plan, these non-controllable expenditures will be re-forecast annually as part of the Annual Review process.¹⁴¹

G. Load and Resulting Revenues

107. FBC's expected gross system energy load is the primary driver for both its revenues and its PPE.¹⁴² As a non-controllable item, under the PBR Plan, load will be re-forecast on an annual basis as part of the Annual Review process.
108. During the PBR Period, slight increases are forecast for gross load, mainly due to increases in demand in the commercial sector.¹⁴³ After accounting for DSM savings, which are discussed in detail below in Part 5, load in 2014 is 0.7 percent higher than in 2013.¹⁴⁴
109. As FBC's sales revenues are a function of both the load and the applicable rate, the Company's revenues are also expected to increase slightly over the PBR Period.¹⁴⁵ When the currently approved rates (as of January 1, 2013) are applied to total load forecast, sales revenues are projected to be as follows:¹⁴⁶

¹⁴¹ Ex. B-1 - FBC Application, p. 50.

¹⁴² Ex. B-1 – FBC Application, pp. 95, 100.

¹⁴³ Ex. B-1 - FBC Application, p. 79.

¹⁴⁴ Ex. B-1 - FBC Application, p. 80.

¹⁴⁵ Ex. B-1 - FBC Application, p. 95.

¹⁴⁶ Ex. B-1 - FBC Application, p. 95.

Table C1-4: Forecast Sales Revenue at Existing Rates (\$ millions)

	Projected 2013	Forecast 2014	Forecast 2015	Forecast 2016	Forecast 2017	Forecast 2018
Residential	160.2	165.4	165.9	166.4	167.5	168.3
Commercial	69.2	75.7	76.7	77.7	78.4	79.6
Industrial	25.0	29.9	29.9	29.8	29.6	29.6
Wholesale	50.5	41.9	42.2	42.4	42.7	42.9
Total	304.9	312.9	314.6	316.3	318.2	320.4

110. One change that has been made since the 2012-13 RRA is with respect to the residential customer count that is used in making the load forecast. Previously, the residential customer count was forecast indirectly, by completing a regression analysis of customer growth based on Provincial Housing Starts data, provided by the Conference Board of Canada. This method resulted in a significant over-forecast of residential customer count for the years 2011 and 2012, by 662 and 2092 customers, respectively. In 2013, a Population Series was made available by BC Statistics for FBC's direct service area (excluding COK). This new data has been used to forecast residential customer count.¹⁴⁷
111. When the Population Series data is compared with the Housing Starts data over the validation period of 2007-2012, the Population Series gives lower forecasting errors.¹⁴⁸ Variances from forecast revenue, including variances due to load, are captured in the existing Revenue Variance Deferral Account (approved by the 2012-13 RRA Decision) and these variances are flowed directly through to customers.
112. Increases in load are primarily due to increases in customer count.¹⁴⁹

H. Power Purchase Expense

113. This part describes FBC's expenses associated with purchased power (as previously defined, **PPE**).

¹⁴⁷ Ex. B-1-1 - FBC Application Appendices, Appendix E2 – Load Forecast, p. 11.

¹⁴⁸ Ex. B-7 - FBC Response to BCUC IR 1.76.2.

¹⁴⁹ Ex. B-25 - FBC Response to CEC IR 2.43.1.

114. FBC uses a combination of resources in order to meet its load requirements, including Company-owned generation entitlements, firm contracted supply and market purchases.¹⁵⁰ The nature of the contracted resources provides FBC with some flexibility, which allows the Company to offset contract purchases with market purchases, when market conditions are favourable.¹⁵¹ As is discussed below, in Part 2(G)(2), the mix of resources that the Company has used in recent years to purchase power has shifted in response to changing market conditions. This is consistent with FBC's goal of managing its power purchase portfolio to minimizing PPE, while maintaining security and reliability of supply.¹⁵²

(1) 2014 PPE

115. Overall, FBC's PPE is expected to rise marginally in 2014, when compared with its 2012 actual PPE and its 2013 projected PPE.¹⁵³ This increase is due primarily to the increased load forecast for 2014 by 58 GWh over 2013, but also to expected higher market prices, which will reduce the Company's opportunities to displace more costly contract purchases with inexpensive market purchases.¹⁵⁴
116. The 2014 forecast PPE is \$7 million lower than the PPE expense approved for 2013 (when no adjustment is made to account for FBC displacing firm resources through market purchases (the **PPE Adjustment**), or \$4.8 million lower than 2013 approved PPE when the \$2.25 million PPE Adjustment is considered).¹⁵⁵
117. While the Company has been prudent in its estimates of PPE, it has also been very successful in achieving further savings for the benefit of its customers. As

¹⁵⁰ Ex. B-1 - FBC Application, pp. 96-97.

¹⁵¹ Ex. B-1 - FBC Application, p. 97.

¹⁵² Ex. B-7 - FBC Response to BCUC IR 1.84.2.

¹⁵³ Ex. B-1-6 - FBC Evidentiary Update, p. 96.

¹⁵⁴ Ex. B-24 - FBC Response to BCUC IR 2.4.1.

¹⁵⁵ Ex. B-1-6 - FBC Evidentiary Update, pp. 99-100.

is discussed below, this is predominantly as a result of FBC's ability to take advantage of the depressed prices in the energy market, to reduce its expected PPE. Further, as any variance between PPE and forecast is captured in the existing PPE Variance Deferral Account (approved by the 2012-13 RRA Decision), as is described below in Part 4, these savings are flowed directly through to customers.¹⁵⁶

(2) Mix of Power Purchase Resources

118. As was noted above, FBC meets its load requirements through a combination of Company-owned generation entitlements, firm supply contracts and market purchases.
119. While FBC has a number of firm resources available to it, one of its firm supply contracts is its Power Purchase Agreement (**PPA**) with the British Columbia Hydro and Power Authority (**BC Hydro**). While FBC's existing PPA with BC Hydro (the **1993 PPA**) expired on September 30, 2013, BC Hydro filed an Application for approval of a new PPA between FBC and BC Hydro (the **New PPA**) on May 24, 2013.¹⁵⁷ A determination of that Application is pending and the 1993 PPA remains in effect until a decision is issued.
120. Previously, the Company would forecast its PPE by first relying on its owned and long-term contracted resources, before factoring in the possibility of market purchases.¹⁵⁸ This approach assumed that FBC would first maximize its use of energy under the 1993 PPA.¹⁵⁹ When FBC was able to mitigate its PPE by displacing PPA purchases through lower-priced market purchases, a PPE Adjustment was then made to the forecast to account for this displacement.

¹⁵⁶ Ex. B-22 - FBC Response to ICG IR 2.10.1.

¹⁵⁷ Ex. B-1 - FBC Application, p. 101.

¹⁵⁸ Ex. B-1 - FBC Application, p. 97.

¹⁵⁹ Ex. B-9 - FBC Response to BCMEU IR 1.12.

This approach was used to determine PPE for 2012 and 2013 in the 2012-13 RRA.¹⁶⁰

121. For 2014, this forecast methodology has been modified. Now, the forecast is based on a more detailed assessment of the purchases expected from BC Hydro under the PPA, taking into account FBC's expected load profile, its ability to lock in market savings in advance through contracted term purchases, and the forecast of any additional market savings that may be achieved in real time through the year through active management of power supply portfolio.¹⁶¹ This approach results in a forecast that more closely reflects the combination of resources that FBC will use.¹⁶²
122. This methodology adjustment results in a lower forecast of PPA purchases that is offset by a higher forecast of market purchases, when the 2014 forecast is compared with approved amounts from 2012 and 2013.¹⁶³
123. When compared with the projection for 2013, the Company is forecasting a higher level of purchases from BC Hydro in 2014. This is a result of market prices being forecast to be higher in 2014 versus 2013, resulting in FBC being able to displace fewer of its PPA purchases with market purchases. Further, the 2013 Projection for BC Hydro purchases incorporates a lower BC Hydro rate for the first few months of 2013, before there was a BC Hydro rate increase in April 2013. In contrast, all purchases in 2014 will be at this higher rate.¹⁶⁴
124. A comparison of the 2013 Projection PPE versus the 2014 Forecast is provided in the following table:¹⁶⁵

¹⁶⁰ Ex. B-1 - FBC Application, p. 97.

¹⁶¹ Ex. B-1 - FBC Application, p. 99.

¹⁶² Ex. B-1 - FBC Application, p. 97.

¹⁶³ Ex. B-1 - FBC Application, pp. 99-100.

¹⁶⁴ Ex. B-7 - FBC Response to BCUC IR 1.88.1.

¹⁶⁵ Ex. B-1-6 - FBC Evidentiary Update, p. 101.

Table C2-5: 2014 Forecast vs. 2013 Year End Forecast (\$ thousands)

		2013 Projection	2014 forecast	Difference
1	Brilliant	36,781	35,764	(1,017)
2	BC Hydro	28,701	37,201	8,500
3	Independent Power Producers	269	162	(107)
4	Market Purchases	18,026	14,543	(3,483)
5	Surplus Revenues	(259)	(508)	(249)
6	Special and Accounting Adjustments	(1,344)	-	1,344
7	Balancing Pool	1,305	-	(1,305)
8	TOTAL	83,479	87,163	3,684
11	Gross Load (GWh)	3,461	3,519	58

125. As was stated previously, any variances between the 2014 forecast and actual expense will be captured in the existing PPE Variance Account and will flow back to customers.¹⁶⁶
126. Further, given the change in forecasting, there is no longer a need to include a PPE adjustment, as the forecast already recognizes potential market savings through displacing PPA purchases.¹⁶⁷
127. Given the new forecasting methodology, FBC expects the difference between 2014 forecast PPE and its actual PPE costs to be minimal. Further, the Company believes it will be able to deliver the same level of overall benefits to customers under this forecast.¹⁶⁸

¹⁶⁶ Ex. B-1 – FBC Application, p. 99.

¹⁶⁷ Ex. B-1 - FBC Application, pp. 99-100.

¹⁶⁸ Ex. B-9 - FBC Response to BCMEU IR 1.12.

I. Other Income

128. “Other Income” is used to offset the Company’s operating expenses.¹⁶⁹ This amount includes revenue received by FBC, other than from the sale of electricity, from the following sources:¹⁷⁰
- a. apparatus and facilities rental;
 - b. contract revenues;
 - c. miscellaneous revenue (connection fees, non-sufficient funds charges and sundry revenues);
 - d. transmission access revenue; and
 - e. investment income.
129. While Other Income is forecast to be higher in 2014 than the amount approved for 2013, it is forecast to be \$365,000 lower than the 2013 projected amount. This is due to a reduction in contract revenues,¹⁷¹ resulting in part from FBC’s acquisition of the COK utility assets. Prior to the acquisition, FBC performed work for FortisBC Pacific Holdings Inc. (**FPHI**), which in turn contracted with COK. FBC’s revenue from FPHI, recorded as Other Income, decreased following the acquisition of the COK utility assets and the expiration of COK’s contract with FPHI.¹⁷²

J. Financing & Return on Equity

(1) Financing Costs

130. The Company’s financing cost of service consists of:

¹⁶⁹ Ex. B-1-6 - Evidentiary Update, p. 277.

¹⁷⁰ Ex. B-1 - FBC Application, pp. 108-109.

¹⁷¹ Ex. B-1 - FBC Application, p. 109.

¹⁷² Ex. B-1 - FBC Application, p. 109.

- a. the cost of debt;
 - b. the cost of equity; and
 - c. depreciation and amortization, which are addressed under Part 2(K)(1) below.
131. FBC finances its approximately \$1.2 billion investment in rate base assets with a mix of debt and equity.¹⁷³ Its financing costs for cost of debt and cost of equity are based on a deemed capital structure of 60 percent debt and 40 percent equity,¹⁷⁴ as is discussed in Part 2(J)(2) below on Capital Structure and ROE.
132. The Company's debt financing costs include the interest expense on issued debt, interest expense on forecast new issuances and financing fees. FBC's debt consists of both long-term debt and short-term debt.¹⁷⁵ The Company uses interest rate forecasts to estimate its future interest expense, based on available projections made by Canadian chartered banks.¹⁷⁶
133. For 2014, FBC's interest expense is forecast to be \$42.5 million. This is approximately \$0.1 million higher than the 2013 approved interest expense, and \$3.3 million higher than the 2013 projected interest expense. This increase is primarily driven by the 2014 forecast approved mid-year rate base, of which 60 percent is to be financed with debt.¹⁷⁷
134. As forecast interest rates are subject to volatility based on global economic factors and market conditions which are beyond the Company's control, the Company is seeking approval of an Interest Expense Variance Deferral Account.¹⁷⁸ This request is discussed in Part 4 below on Deferral Accounts.

¹⁷³ Ex. B-1 – FBC Application, p. 232.

¹⁷⁴ Ex. B-1 – FBC Application, p. 232.

¹⁷⁵ Ex. B-1 – FBC Application, p. 232.

¹⁷⁶ Ex. B-1 – FBC Application, p. 232.

¹⁷⁷ Ex. B-1-6 – Evidentiary Update, p. 236.

¹⁷⁸ Ex. B-1-6 – Evidentiary Update, p. 236.

(2) Capital Structure and Return on Equity

135. At the time FBC filed its Application in July 2013, the Company's allowed capital structure and ROE were in the process of being reviewed by the Commission as part of the Stage 2 GCOC proceeding.¹⁷⁹ Accordingly, for the purposes of forecasting its 2014 revenue requirements, FBC assumed a capital structure of 60 percent debt and 40 percent equity, as well as a ROE of 9.15 percent, effective January 1, 2013.¹⁸⁰
136. These assumptions were consistent with the Commission Order G-52-05, which established that FBC should utilize a capital structure breakdown of 60/40 debt/equity structure and a 40 basis points premium over the benchmark BC utility when determining ROE.¹⁸¹
137. On May 10, 2013, by Order G-75-13 in Stage 1 of the GCOC proceeding, FEI was established by the Commission as the benchmark BC utility, with an allowed ROE at 8.75 percent. Previously, FBC had used an ROE of 9.90 percent, based on the prior benchmark BC utility's allowed ROE of 9.5 percent. Following Order G-75-13, FBC's ROE was reduced to 9.15 percent (8.75 percent + 0.40 percent).¹⁸² This lower ROE was utilized by FBC in preparing the Application.¹⁸³
138. On March 25, 2014, the Commission issued Order G-47-14 in the Stage 2 GCOC proceeding. In this decision, the Commission held that:
- a. an equity ratio of 40 percent is appropriate for FBC; and
 - b. an equity risk premium of 40 basis points premium over the BC benchmark utility is appropriate for FBC, effective January 1, 2013.

¹⁷⁹ Ex. B-1 – FBC Application, p. 232.

¹⁸⁰ Ex. B-1 – FBC Application, p. 232.

¹⁸¹ Ex. B-1 – FBC Application, p. 232.

¹⁸² Ex. B-1 – FBC Application, p. 262.

¹⁸³ Ex. B-1 – FBC Application, p. 232.

139. Accordingly, the decision rendered by the Commission in Order G-47-14 is consistent with the assumptions made by FBC in preparing this Application, and no further adjustments are required to account for the Stage 2 GCOC decision.
140. As is discussed below in Part 4 on Deferral Accounts, FBC is proposing that a GCOC Revenue Requirements Impact Deferral Account be approved, to deal with the decrease in ROE (from 9.9 percent to 9.15 percent) used to calculate FBC's rates effective January 1, 2013.

K. Taxes

141. The Company incurs various forms of taxes as part of carrying out its mandate as an electricity service provider. The tax expenses reflect the currently enacted municipal, provincial and federal tax legislation.¹⁸⁴
142. Taxes represent an area of expenses over which the Company has no control. Accordingly, as is described in Part 4 below on Deferral Accounts, the Company is seeking approval of the following two deferral accounts to capture any tax variances:
- a. Tax Variance Deferral Account; and
 - b. Property Tax Variance Deferral Account.
143. Also discussed in Part 4 is the Company's request that the net-of-tax treatment currently being applied to the Prepaid Pension and OPEB Liability Deferral Account be discontinued.

(1) Depreciation

144. Depreciation rates were considered by the Commission in the 2012-13 RRA, and approved based on an updated 2011 Depreciation Study included with that Application. The approved depreciation rates are applied on a straight-line

¹⁸⁴ Ex. B-1 – FBC Application, p. 238.

basis to the opening utility plant in service balance. In preparing this Application, the Company utilized these approved depreciation rates.¹⁸⁵

145. At the time of the 2012-13 RRA Decision, the Commission recommended that FBC update depreciation rates every 3 to 5 years. In accordance with this recommendation, FBC proposes to provide an updated depreciation study during the PBR Period. If approved by the Commission, FBC anticipates that these updated depreciation rates will be implemented during the PBR Period.¹⁸⁶
146. FBC confirms that it will not make any changes to the current methods used to calculate depreciation expense without prior Commission approval.¹⁸⁷

¹⁸⁵ Ex. B-1 – FBC Application, p. 249.

¹⁸⁶ Ex. B-1 – FBC Application, p. 249.

¹⁸⁷ Ex. B-11 – FBC Response to BCPSO IR 1.89.1.

PART 3 - ACCOUNTING POLICIES

147. In its Application, FBC is seeking the following approvals, pursuant to sections 59 to 61 of the UCA, of changes in its accounting policies used to determine the Company's rates, effective January 1, 2014:¹⁸⁸
- a. approval to discontinue the reconciliation of US GAAP to Canadian GAAP in future BCUC Annual Reports as set out in Section D3.1 of its Application;
 - b. approval to discontinue the net-of-tax treatment for the pension and OPEB funding differences effective 2014, and instead add back the pension and OPEB expense and deduct the contributions in the calculation of income tax expense, as explained in Section D3.1 of its Application;
 - c. approval to allocate Executive costs between FEI and FBC effective January 1, 2014 by way of applying the Massachusetts Formula described in Section C4.17 of its Application;
 - d. continued approval of FBC's capitalized overhead rate of 20 percent as set out in Section D3.7 of its Application; and
 - e. continued approval of FBC's direct overhead charging methodology as set out in Section D3.8 of its Application.
148. This part of the FBC Non-PBR Submission considers these various accounting issues.

A. Generally Accepted Accounting Principles

149. In preparing its Application, FBC used accounting policies and estimates that have assumed the continued use of the Generally Accepted Accounting Principles (as defined earlier, **GAAP**) of the United States (**US GAAP**). This is

¹⁸⁸ Ex. B-1 - FBC Application, p. 10.

in accordance with Order G-117-11, in which the Commission approved FBC's request to adopt US GAAP for 2012-2014, as compared with an alternative accounting methodology, the International Financial Reporting Standards (IFRS).¹⁸⁹

150. While the International Accounting Standards Board has re-initiated a project on rate-regulated accounting under IFRS, there is continued uncertainty on if or when this change may occur. Accordingly, FBC plans to continue to use US GAAP as its basis for both regular and external financial reporting in 2014 and beyond.¹⁹⁰
151. In Order G-117-11, the Commission approved the use of US GAAP by FBC effective January 1, 2012, for its regulatory accounting and reporting purposes. However, as part of that Order the Commission requested that the Company provide it with an annual reconciliation from US GAAP back to the Canadian GAAP, an accounting methodology that was phased out in 2012.¹⁹¹
152. In the present Application, FBC requested approval to discontinue providing this reconciliation from US GAAP to Canadian GAAP in its future Annual Reports.¹⁹² FBC based this request on the following grounds:
 - a. previously, providing the reconciliation provided insight into the effects of US GAAP for regulatory accounting and reporting related to pension/OPEB. As this has now been directly embedded within the Application, FBC does not see any benefit to continuing to provide the reconciliation;¹⁹³

¹⁸⁹ Ex. B-1 - FBC Application, p. 244.

¹⁹⁰ Ex. B-1 - FBC Application, p. 245.

¹⁹¹ Ex. B-1 - FBC Application, p. 245.

¹⁹² Ex. B-1 - FBC Application, p. 10.

¹⁹³ Ex. B-1 - FBC Application, p. 245.

- b. pre-2012 Canadian GAAP no longer exists as a financial reporting option,¹⁹⁴ and FBC no longer maintains specific accounting records in compliance with Canadian GAAP. Accordingly, it will become increasingly complicated to prepare the reconciliation going forward;¹⁹⁵
 - c. FBC estimates that approximately one week was spent preparing and reviewing the reconciliation for 2012. As the Company moves further away from 2012, the effort required to complete the reconciliation will increase. The external actuarial costs associated with preparing the reconciliation will also increase;¹⁹⁶ and
 - d. the adoption of US GAAP for regulatory purposes has allowed for both transparency and comparability between FBC's regulatory and external financial reporting. FBC believes that the same set of accounting principles should be used for regulatory purposes as for external financial reporting purposes, so the underlying economic substance of the Company's operations is appropriately reflected.¹⁹⁷
153. Accordingly, FBC submits that its request to discontinue the reconciliation of US GAAP to Canadian GAAP should be approved by the Commission.
154. Consistent with the practices used in a previous PBR period, the Company has indicated that it would be willing to communicate to the Commission any future accounting policy changes that will have an impact on setting customer rates, if the reconciliation is discontinued.¹⁹⁸

¹⁹⁴ Ex. B-24 - FBC Response to BCUC IR 2.48.1.

¹⁹⁵ Ex. B-1 - FBC Application, p. 245.

¹⁹⁶ Ex. B-7 - FBC Response to BCUC IR 1.174.3.

¹⁹⁷ Ex. B-7 - FBC Response to BCUC IR 1.174.2.1.

¹⁹⁸ Ex. B-7 - FBC Response to BCUC IR 1.174.4.

B. Net-of-Tax Treatment of Pension/OPEB Funding

155. In its Application, the Company is seeking Commission approval to discontinue the net-of-tax treatment for the pension and OPEB funding differences effective in 2014. This is discussed below in Part 4 on Deferral Accounts.

C. Sharing of Services

156. FBC also seeks Commission approval to allocate Executive costs between FEI and FBC by way of applying the Massachusetts Formula, effective January 1, 2014, instead of continuing to use the management estimates of time allocation approach used in previous years.
157. Since 2010, FBC and FEI have been sharing certain common resources, including with respect to the Executive and the Board of Directors. In the 2012-13 RRA Decision, the Commission accepted the use of the “Massachusetts Formula” as the Board of Director pooled costs allocation method in the 2012-13 RRA Decision.¹⁹⁹ FBC now seeks to apply this same formula to the Executive, starting in 2014.
158. The Massachusetts Formula is a composition allocator that determines the amount of time and effort that each of the executives spend, on average, on each of the entities.²⁰⁰ The formula is composed of the arithmetic average of (1) operating revenue, (2) payroll, and (3) average net book value of capital assets plus inventories.²⁰¹
159. The Massachusetts Formula is extensively used in industry,²⁰² and well-established and generally accepted in British Columbia and other regulatory jurisdictions. It has been described by the Federal Energy Regulatory

¹⁹⁹ Ex. B-23 - FBC Response to BCPSO IR 2.8.1.

²⁰⁰ Ex. B-11 - FBC Response to BCPSO IR 1.90.1.

²⁰¹ Ex. B-1 - FBC Application, p. 250; Ex. B-11 - FBC Response to BCPSO IR 1.90.4.2.

²⁰² Ex. B-1 - FBC Application, p. 250.

Commission as the methodology that “seeks to maximize the direct assignment of costs to the various operating entities”.²⁰³

160. FBC believes that allocating the executive pooled costs (fully loaded labour with no overhead) based on the Massachusetts Formula will allow for a more streamlined and efficient approach of allocating the costs, while ensuring an appropriate and transparent allocation methodology.²⁰⁴
161. The objective of FBC in seeking to use the Massachusetts Formula is not to increase or decrease Executive Labour O&M, but rather to adopt a simplified method of allocation.²⁰⁵ FBC expects that the current proportion of total loaded Executive Labour eligible for sharing amongst FBC and FEI will remain consistent (at approximately 23 percent and 77 percent, respectively) during the PBR Period. As Executive Labour is determined pursuant to the O&M Formula during the PBR Period, any variances in the Massachusetts Formula percentages or in the fully-loaded Executive Labour cost pool will need to be managed by FBC and FEI throughout the PBR Period.²⁰⁶
162. Given that this proposed change relates to the allocation of Executive costs between FBC and FEI, it is essential that the same allocation method be approved for both of the Companies. Like FBC, FEI has requested that the Massachusetts Formula be used effective January 1, 2014.
163. The sharing of resources between FBC and FEI, other than the Board of Directors and Executive, has continued with the currently approved cross-charge process.²⁰⁷ Similarly, FBC is not proposing any changes with respect to the allocation methodology used for allocating costs from Fortis Inc., FortisBC Holdings Inc. or any other Fortis entity.²⁰⁸

²⁰³ Ex. B-24 - FBC Response to BCUC IR 2.25.2.

²⁰⁴ Ex. B-11 - FBC Response to BCPSO IR 1.90.1.

²⁰⁵ Ex. B-24 - FBC Response to BCUC IR 2.25.5.

²⁰⁶ Ex. B-24 - FBC Response to BCUC IR 2.25.2.

²⁰⁷ Ex. B-1 - FBC Application, p. 250.

²⁰⁸ Ex. B-11 - FBC Response to BCPSO IR 1.90.1.

D. Capitalized Overhead

(1) Continuation of 20 Percent Capitalization Rate

164. FBC seeks approval to continue to utilize a capitalized overhead rate of 20 percent during the PBR Period.²⁰⁹
165. FBC operates in a capital intensive industry, where an ongoing capital program is necessary in order for it to sustain its current system and to meet load growth. The expenses associated with these capital requirements extend beyond actual construction, and include expenses associated with planning, regulatory approval, budgeting, project management, accounting and other activities. While many of these activities can be charged directly to a specific project, others are not as directly attributable. However, the fact that an activity is not attributable to one specific project certainly does not suggest that the project was not performed in support of FBC's capital program.²¹⁰
166. To capture these activities, FBC charges a certain portion of total O&M costs to capital (or "capitalizes overhead"). The practice of capitalizing overhead is a common industry practice and is in accordance with the BCUC Uniform System of Accounts, prescribed for electric utilities.²¹¹
167. FBC's capitalized overhead methodology was last considered by the Commission in its 2012-13 RRA Decision, where the Commission approved that FBC's proposal capitalized overhead be determined as a percentage of O&M expenses, and that a rate of 20 percent be used. However, the Commission directed FBC to provide an external audit opinion on the appropriateness of its capitalized overhead methodology along with its next revenue requirements application.²¹²

²⁰⁹ Ex. B-1 - FBC Application, p. 10.

²¹⁰ Ex. B-1 - FBC Application, p. 251.

²¹¹ Ex. B-1 - FBC Application, p. 251.

²¹² Ex. B-1 - FBC Application, p. 251.

168. In accordance with this direction, FBC engaged KPMG to review its capitalization overhead methodology and capitalization rate (the **KPMG Review**). Based on the KPMG Review, FBC submits that its capitalized overhead methodology is appropriate and that the capitalization rate should remain at its current level of 20 percent of O&M for the PBR Period. FBC has reached this conclusion for the following reasons:

- a. as was determined in the KPMG Review, there is no one universally accepted guideline for capitalizing overhead, and FBC's allocation method was found to be a reasonable basis for the capitalization of costs;²¹³
- b. in an external survey performed by FBC to review the capitalization rates used by utilities across Canada and the United States, FBC's rate is reasonable and within the range of the capitalization rates approved for other Canadian utilities;²¹⁴
- c. FBC has been utilizing its capitalized overhead methodology and capitalization rate since 2006, with the approval of the Commission.²¹⁵ There has been no material change in utility operations since the 2012-13 RRA that would require a change to the capitalized overhead rate;²¹⁶
- d. the Company is expecting regular capital expenditures over the PBR Period to remain at levels that are generally consistent with, or higher than, regular capital expenditures made during 2010-2013. The Company also intends to submit CPCNs for several projects, which results in higher levels of total capital expenditures during the PBR

²¹³ Ex. B-1-1 - FBC Application Appendices, Appendix F3 - 2013 Overheads Capitalized Study, pp. 4-5.

²¹⁴ Ex. B-1 - FBC Application, p. 254.

²¹⁵ Ex. B-1-1 - FBC Application Appendices, Appendix F3 - 2013 Overheads Capitalized Study, p 11.

²¹⁶ Ex. B-1 - FBC Application, p. 254.

Period than previously. This is not consistent with reducing the capitalized overhead rate;²¹⁷ and

- e. reducing the capitalized overhead rate will have rate impacts for FBC's customers. For example, a 1 percent reduction in the overhead capitalization rate will result in an approximately 0.25 percent increase in customer rates, and a 3 percent reduction will result in a 0.75 percent increase.²¹⁸

169. The Company is requesting that the current capitalized overhead rate of 20 percent be approved by the Commission for the PBR Period.²¹⁹ If approved, this rate will be utilized throughout the entire PBR Period.²²⁰

(2) Specific Capitalized Overhead Issues

170. As part of this Application, the Industrial Customers Group (**ICG**) filed as Exhibit C10-5 the Direct Testimony of Mr. Tony Pullman (the **Pullman Evidence**).²²¹ The Pullman Evidence suggests several concerns with FBC's capitalized overhead methodology and rates. FBC has endeavoured to respond to these matters in this part of these FBC Non-PBR Submissions, but confirms that if ICG or other Interveners raise other issues in their final submissions, FBC may need to address those additional issues in its Reply Submissions.
171. The Pullman Evidence suggests that during the period of 2004 to 2013 the Company's capitalized overhead increased from 5 percent in 2004 to almost 30 percent, when assessed as a percentage of the Company's gross unloaded capital expenditures. The Pullman Evidence concludes that "on a prima facie

²¹⁷ Ex. B-1 - FBC Application, pp. 254-255.

²¹⁸ Ex. B-7 - FBC Response to BCUC IR 1.178.1.

²¹⁹ Ex. B-1 - FBC Application, p. 255.

²²⁰ Ex. B-11 - FBC Response to BCPSO IR 1.94.1.

²²¹ Ex. C10-5 - Pullman Evidence.

basis this would suggest that FBC's overhead capitalization policy requires further scrutiny".²²²

172. It appears that Mr. Pullman failed to properly distinguish direct overheads from capitalized overheads. As described in the Application, direct overhead is a methodology used to more efficiently allocate costs that are directly associated with transmission and distribution (**T&D**) capital projects, which would otherwise be direct charged to capital projects.²²³ Direct overhead is a direct cost that should be included in the total gross capital expenditures.²²⁴
173. To properly consider capitalized overhead as a percentage of capital expenditures, Mr. Pullman should have divided capitalized overhead by total capital expenditures including direct overhead. When the calculations are performed correctly, capitalized overhead as a percentage of unloaded gross capital expenditures for the period considered by Mr. Pullman varies by a much lesser amount than suggested by the Pullman Evidence.²²⁵
174. The Pullman Evidence also critiques the utilities considered by FBC in analyzing approved capitalization rates across Canada, suggesting that they are unhelpful as they are gas utilities and utilities with different degrees of maturity.²²⁶
175. Given that there is no one comparable utility, and that differences arise between utilities for a variety of reasons, the wide range of utilities considered by FBC is particularly appropriate. Further, Mr. Pullman himself has acknowledged that he does not have any data on other electric utilities in Canada that would be more comparable to FBC.²²⁷

²²² Ex. C10-5 - Pullman Evidence, pp. 1-2.

²²³ Ex. B-1 - FBC Application, p. 255.

²²⁴ Ex. B-43 - FBC Rebuttal to Pullman Evidence, p. 2.

²²⁵ Ex. B-43 - FBC Rebuttal to Pullman Evidence, pp. 1-2.

²²⁶ Ex. C10-5 - Pullman Evidence, p. 4.

²²⁷ Ex. C10-7 - ICG Response to BCUC IR 1.3.3.

176. The Pullman Evidence also suggests that there is a problem with FBC's treatment of capitalized overhead for tax purposes, as it is treated differently than the Company's tax treatment of direct overhead.²²⁸
177. However, the Company treats both capitalized overhead and direct overhead as it is required to do for tax purposes.²²⁹ To suggest that FBC should not deduct overhead costs that are permitted to be deducted for tax purposes pursuant to the *Income Tax Act* could be construed as improper forecasting for rate-setting purposes.
178. Since the early 2000s, FBC has submitted capitalized general overhead costs that are not directly related to capital projects for GAAP and regulatory purposes, while deducting such costs for tax purposes. During this time, the Commission has consistently approved this principle of capitalizing overhead costs for regulatory accounting purposes and deducting for determination of income taxes. FBC is proposing the same principle be used for the PBR Period.
179. Further, FBC's deduction of capitalized overhead costs for tax purposes is consistent with the Alberta Utilities Commission (**AUC**) Decision 2013-407 on AltaLink Management Ltd.'s 2013-2014 General Tariff Application.²³⁰
180. Another suggestion raised in the Pullman Evidence is that FBC's method of capitalizing overhead dilutes attention to O&M expenses by focusing only on net O&M, which "engenders a belief among the utility management that every incremental dollar of O&M has only an impact of 80 cents on the revenue requirement".²³¹

²²⁸ Ex. C10-5 - Pullman Evidence, p. 4.

²²⁹ Ex. B-23 - FBC Response to BCPSO IR 2.34.1.

²³⁰ AUC Decision 2013-407 on AltaLink Management Ltd.'s 2013-2014 General Tariff Application, pp. 219-220. A copy of this Decision has been filed with this Submission.

²³¹ Ex. C10-5 - Pullman Evidence, pp. 7-8.

181. This concern does not accurately reflect the business practices of FBC. The Company manages its costs on a Gross O&M basis and Department Managers at FBC do not see, or receive credit for, expenses associated with capitalized overhead. Instead, this is reported at the corporate-level only. Every month, Department Managers must review Gross O&M expenses, and must justify any variances between their actual Gross O&M expenses and the amounts that were budgeted. Accordingly, FBC's Department Managers are not influenced by Net O&M.²³²
182. The Pullman Evidence also challenges the overhead allocations utilized by FBC for the Finance and Regulatory, Governance and Corporate departments, based on view that "levels of staffing and expenditures in such Head Office functions are rarely affected by the level of capital activity".²³³ Mr. Pullman recommends that the Commission reduce the capitalization rate for these departments by 50 percent.²³⁴
183. Mr. Pullman does not provide any support for an arbitrary reduction of the capitalization rate. In fact, Mr. Pullman himself has acknowledges that he does not have a calculation to support his suggested 50 percent reduction, and that "it was arbitrary".²³⁵
184. In contrast, at FBC the allocations were done based on management's best estimates, after consideration of the KPMG Report, other utilities, the Company's history and anticipated future expenditures.²³⁶ Unlike Mr. Pullman, FBC's management has an intimate knowledge of its business. Further, while Mr. Pullman questions the overhead allocations made for certain departments, the B&V study attached to the Pullman Evidence states the following:²³⁷

²³² Ex. B-43 - FBC Rebuttal to Pullman Evidence, p. 4.

²³³ Ex. C10-5 - Pullman Evidence, p. 10.

²³⁴ Ex. C10-5 - Pullman Evidence, pp. 12-13.

²³⁵ Ex. C10-7 - ICG Response to BCUC IR 1.8.1.

²³⁶ Ex. B-1 - FBC Application, pp. 254-255.

²³⁷ Ex. C10-5 - Pullman Evidence, Attachment 2, p. 20.

Some of the more common types of support expenditures within this category include finance, corporate, communications, human resources, law, treasury, strategy, information technology, regulatory affairs and other corporate support costs.

185. The Pullman Evidence additionally suggests that FBC should determine its capitalized overhead as a function of its capital expenditures rather than its O&M expenses.²³⁸
186. In FBC's view, an overhead capitalization rate that is a function of O&M expense provides an overhead capitalized amount that is more stable.²³⁹ While it could be possible to use a percentage of forecast capital expenditures as an overhead capitalized allocator, this approach would introduce a high variability into customer rates,²⁴⁰ as is demonstrated by the following table:²⁴¹

	(\$000s)				
	Forecast				
	2014	2015	2016	2017	2018
Capitalized Overhead calculated as 20% of O&M Expense	12,277	12,349	12,192	12,476	12,660
Capitalized Overhead calculated as 22.3% (response to BCUC IR 2.50.1.1) of Base Capital Expenditures (response to BCUC IR2.50.1)	22,906	17,936	12,194	11,825	12,702
Rate Increase with Capitalized Overhead calculated as 20% of O&M Expense	3.30%	3.60%	3.60%	3.60%	3.60%
Rate Increase (Decrease) with Capitalized Overhead calculated as 22.3% (response to BCUC IR 2.50.1.1) of Base Capital Expenditures (response to BCUC IR 2.50.1)	(1.20%)	6.30%	6.20%	3.90%	3.30%

187. This table show rates increasing in a range of 3.3 percent to 3.6 percent when capitalized overhead is calculated as a percentage of O&M, while fluctuating between -1.2 percent to 6.3 percent when calculated as a percentage of capital expenditures.

²³⁸ Ex. C10-5 - Pullman Evidence, p. 10.

²³⁹ Ex. B-24 - FBC Response to BCUC IR 2.50.1.2.

²⁴⁰ Ex. B-7 - FBC Response to BCUC IR 1.178.7.

²⁴¹ Ex. B-24 - FBC Response to BCUC IR 2.50.1.2.

188. While Mr. Pullman relies on a study performed by B&V of Hydro One Networks Inc. (**Hydro One**) as support for the use of this methodology,²⁴² he acknowledges that he is not aware of any other jurisdiction that employs the methodology of using a percentage of forecast capital expenditures as an overhead allocator.²⁴³ In fact, Hydro One itself uses a very similar allocation methodology and criteria to FBC, even utilizing a 20 percent capitalization rate as percentage of Gross O&M.²⁴⁴
189. Further, the Pullman Evidence suggests that FBC has failed to pay sufficient attention to the nature of the assets it is capitalizing, noting that trucks and furniture require less planning and support than substations or lines and concluding that general plant should not have been included in the KPMG Review.²⁴⁵ However, this is not consistent with the statement made in the B&V Hydro One Report, which states that the same rate is applied to all capitalized assets.²⁴⁶
190. Finally, while the Pullman Evidence suggests that incentive payments should not be included in capitalized overhead,²⁴⁷ this ignores the fact that these payments are part of FBC's total compensation package and are appropriately included as costs.²⁴⁸

E. Direct Overhead

(3) FBC's Direct Overhead Methodology

191. The Company also charges a direct overhead loading, which recovers supervisory and administrative costs that may not easily be allocated to a specific capital project, but that are directly attributable to T&D capital

²⁴² Ex. C10-5 - Pullman Evidence, p. 10.

²⁴³ Ex. C10-7 - ICG Response to BCUC IR 1.2.2.

²⁴⁴ Ex. B-22 - FBC Response to ICG IR 2.17.1.

²⁴⁵ Ex. C10-5 - Pullman Evidence, p. 11.

²⁴⁶ Ex. C10-5 - Pullman Evidence, Attachment 1, p. 5.

²⁴⁷ Ex. C10-5 - Pullman Evidence, p. 13.

²⁴⁸ Ex. B-1 - FBC Application, p. 114.

projects.²⁴⁹ The use of this methodology was introduced by FBC in its 2004 Revenue Requirements Application. One of its predominant purposes was to reduce the administrative burden that was associated with charging labour time and costs to individual projects. Although theoretically it is possible to directly charge every cost to a capital project, this is not an efficient approach. Instead of using this intensive procedure, the direct overhead approach allows certain types of direct costs to instead be charged to a direct capital overhead loading pool. A mechanism is then used to distribute those costs to various capital projects on a prorated basis.²⁵⁰

192. To determine the appropriate allocation from the overhead loading pool to different capital projects, each department at FBC has estimated the amount of time, by position, and the expense that should be charged to T&D projects. All of the costs are totalled to determine the direct overhead cost pool, and the direct overhead loading rate is determined by the ratio of the total direct overhead cost pool to the total unloaded T&D capital costs. The costs that are included in direct overhead recovery are deducted from the respective department O&M budgets prior to determining the O&M subject to the capitalized overhead rate.²⁵¹
193. In the 2012-13 RRA Decision, the Commission approved FBC's proposed direct overhead approach, but directed FBC to provide an external audit opinion on its appropriateness along with its next revenue requirements application, much like the Commission's approach to capitalized overhead.²⁵² As part of the KPMG Review, KPMG was also retained by FBC to comment on the direct overhead loading. The KPMG Review confirms FBC's view that its direct overhead loading methodology is appropriate, and that it should be continued during the PBR.²⁵³ The Company has reached this view for the following reasons:

²⁴⁹ Ex. B-1 - FBC Application, p. 255.

²⁵⁰ Ex. B-1 - FBC Application, p. 255.

²⁵¹ Ex. B-1 - FBC Application, p. 255.

²⁵² Ex. B-1 - FBC Application, pp. 255-256.

²⁵³ Ex. B-1 - FBC Application, p. 256.

- a. as was determined in the KPMG Review, the direct overhead loading methodology used by FBC is a reasonable basis for capitalization of costs related to capital activities;²⁵⁴
 - b. the KPMG Review also found that FBC's direct overhead loading methodology did not result in a duplication in the level of overhead being capitalized by the direct overhead and capitalized overhead methodologies;²⁵⁵
 - c. the Company has been utilizing its direct overhead loading methodology for many years, with the approval of the Commission.²⁵⁶ There has been no material change in T&D operations since the 2012-13 RRA that would require a change to the direct overhead loading,²⁵⁷ and
 - d. the Company is expecting capital expenditures over the PBR Period to remain at levels that are generally consistent with, or higher than, regular capital expenditures made during 2010-2013.²⁵⁸
194. The Company is requesting that the direct overhead loading methodology be continued over the PBR Period.²⁵⁹

(4) Specific Direct Overhead Issues

195. The Pullman Evidence suggests several concerns with FBC's direct overhead methodology. FBC has endeavoured to respond to these matters in this part of its Non-PBR Submissions, but confirms that if ICG or other Interveners raise other issues in final submissions, it may need to address those issues in its Reply Submissions.

²⁵⁴ Ex. B-1-1 - FBC Application Appendices, Appendix F3 - 2013 Overheads Capitalized Study, p. 5.

²⁵⁵ Ex. B-1 - FBC Application, p. 256.

²⁵⁶ Ex. B-7 - FBC Response to BCUC IR 1.179.3.

²⁵⁷ Ex. B-1 - FBC Application, p. 256.

²⁵⁸ Ex. B-1 - FBC Application, p. 256.

²⁵⁹ Ex. B-1 - FBC Application, p. 255.

196. The Pullman Evidence expresses concern that FBC's direct overhead loading policy results in variability in the percentage of unloaded gross capital expenditures capitalized. In support of this concern, Mr. Pullman refers to a year of high capital expenditures (2010) where the rate of unloaded gross capital expenditures capitalized is lower than in a year with lower capital expenditures (2012).²⁶⁰
197. However, while Mr. Pullman is correct that the rate of unloaded gross capital expenditures capitalized is higher in 2010 versus 2012, he ignores the magnitude of these differences. For the two years, the unloaded gross capital expenditures are approximately \$130 million and \$52 million, for an average unloaded gross capital expenditure of \$91 million. In contrast, the direct overhead amount varies by only \$600,000 during this time, or just 0.6 percent of \$91 million, a small degree of variance.²⁶¹
198. However, the Pullman Evidence goes on to describe this variance as suggesting "that amounts are being directly charged which should really be allocated, such as time spent in administration and management".²⁶² Mr. Pullman does not say why such a conclusion would follow.
199. The Pullman Evidence acknowledges that the bulk of FBC's direct overhead comes from departments that are closely linked to the Company's T&D function. However, Mr. Pullman believes that the following three departments are not closely linked to T&D: the Environmental Health and Safety, Finance and Procurement & Materials Handling departments. He expresses concern that the inclusion of costs from these departments in direct overhead may result in double counting of the expenses in both direct overhead and capitalized overhead.²⁶³

²⁶⁰ Ex. C10-5 - Pullman Evidence, p. 6.

²⁶¹ Ex. C10-5 - Pullman Evidence, p. 2.

²⁶² Ex. C10-5 - Pullman Evidence, pp. 6-7.

²⁶³ Ex. C10-5 - Pullman Evidence, p. 7.

200. Again, it appears that Mr. Pullman has not properly distinguished between direct overheads and capitalized overheads. Unlike capitalized overhead, which captures costs that are related to capital but cannot be directly allocated, direct overhead is a methodology used to efficiently allocate costs that are directly associated with T&D capital projects, which would otherwise be direct charged to capital projects. If FBC was not charging these amounts to direct overhead, it would be directly recording them to projects (a more time-intensive procedure).²⁶⁴
201. Further, the KPMG Review considered the issue of double counting and, having reviewed FBC's direct overhead loading methodology, concluded that the methodology did not result in a duplication in the level of overhead being capitalized by both the direct overhead and capitalized overhead methodologies.²⁶⁵
202. Despite his apparent concerns, Mr. Pullman does not recommend that the Commission direct FBC to cease its practice of direct overhead loading.²⁶⁶
203. The direct overhead methodology is intended to reduce administrative burden, which includes the effort required by many different individuals to charge capital related time to many different projects, and the coding of every capital related phone bill, capital related invoice or other capital related item to many different orders.²⁶⁷ If the methodology is discontinued and there is change in capital cost, the efforts required to allocate the costs to capital will increase, thereby increasing costs to customers.
204. The Pullman Evidence suggests that, as is the case with capitalized overhead, direct overhead should be charged to operating, salvage and recoverable types

²⁶⁴ Ex. B-1 - FBC Application, p. 255; Ex. B-43 - FBC Rebuttal to Pullman Evidence, pp. 1-2.

²⁶⁵ Ex. B-1 - FBC Application, p. 256.

²⁶⁶ Ex. C10-5 - Pullman Evidence, p. 7.

²⁶⁷ Ex. B-22 - FBC Response to ICG IR 2.32.1.

of orders.²⁶⁸ FBC utilizes several types of work orders including, but not limited to, operating, capital, salvage and recoverable type orders. Direct overhead is only charged to T&D capital orders.²⁶⁹ By their very nature, operating orders are current period expenditures and, as such, are expensed. Accordingly, it would be inappropriate for operating orders to attract direct overhead, as suggested by Mr. Pullman.

²⁶⁸ Ex. C10-5 - Pullman Evidence, p. 7.

²⁶⁹ Ex. B-22 - FBC Response to ICG IR 2.31.5.

PART 4 - DEFERRAL ACCOUNTS

205. In its Application, FBC is seeking the following approvals with respect to deferral accounts.²⁷⁰
- a. approval pursuant to sections 59 to 61 of the UCA for the rate base treatment and financing of deferral accounts, as set out in Section D3.2 of the Application;
 - b. approval of financing costs for 2013 at FBC's Weighted Average Cost of Capital (as defined earlier, **WACC**) for the six deferral accounts approved by Order G-23-13, as set out in Sections D4.4.8 to D4.4.13 of the Application; and
 - c. approval pursuant to sections 59 to 61 of the UCA of the discontinuance, modification, and creation of deferral accounts,²⁷¹ as applicable, and the amortization and disposition of balances of deferral accounts, as set out in Section D4 and Appendix F4 of the Application, and as summarized in the table in Section A2.3 of the Application.
206. This part of the FBC Non-PBR Submission considers the approvals sought with respect to deferral accounts.

A. Deferral Account Financing

207. The Company seeks Commission approval pursuant to sections 59 to 61 of the UCA for changes to the rate base treatment and financing of certain deferral accounts, as described in Section D3.2 of the Application. These proposed changes in the treatment of certain of the deferral accounts will allow FBC to earn both an equity and debt return.²⁷²

²⁷⁰ Ex. B-1 - FBC Application, p. 7.

²⁷¹ Consistent with the Decision attached to Order G-7-03 in referencing the approval of individual deferral accounts for FEI, the FortisBC utilities have continued to employ deferral accounts previously approved by the Commission. Ex. B-1 – FBC Application, page 258

²⁷² Ex. B-1 - FBC Application, p. 246.

(1) The 2012-13 RRA Decision

208. In its 2012-13 RRA, FBC sought Commission approval of various rate base deferral accounts, to be financed at the WACC, or alternatively at a rate that is the equivalent of the Allowance for Funds Used During Construction (**AFUDC**) (a rate which is also reflective of WACC) where it is appropriate to hold the funds outside of rate base.²⁷³ In the 2012-13 RRA Decision, the Commission ordered that a number of the deferral accounts should be excluded from rate base and should attract a debt financing rate only, as opposed to an AFUDC equivalent rate. Depending on the specific deferral account, this debt financing was to be determined on the basis of either the Weighted Average Cost of Debt (**WACD**) or short-term interest rates.²⁷⁴ In its decision, the Commission found that “current period charges are not ‘investments’ which attract a capital return, they are deferred operating costs/current period expenses which, as noted above, in the Panel’s view should not attract rate base rate of return”.²⁷⁵

(2) FBC’s Concerns with the 2012-13 RRA Decision

209. Respectfully, FBC believes that the Commission’s decision on this point in the 2012-13 RRA Decision was incorrect, and that it erred in making a distinction between “investments” and “deferred operating costs/current period expenses” and by ordering that the deferral accounts be financed at a debt financing rate. As a result, the Company seeks approval to change the treatment of certain of its deferral accounts, in order to earn both an equity and debt return.²⁷⁶ The basis for FBC’s disagreement with the concept approved by the Commission is set out in this part of the FBC Non-PBR Submission. This part also addresses the suggestion made in the Pullman Evidence that the inclusion of deferral accounts in rate base is unwarranted, in light of the 2012-13 RRA Decision.²⁷⁷

²⁷³ See Section 5.

²⁷⁴ Ex. B-1 - FBC Application, p. 246.

²⁷⁵ Ex. B-1 - FBC Application, p. 246.

²⁷⁶ Ex. B-1 - FBC Application, p. 246.

²⁷⁷ Ex. C10-5 - Pullman Evidence, p. 16.

(a) Creates Inconsistency in FBC's Accounts

210. As a result of implementing the 2012-13 RRA Decision, FBC has been left with deferral accounts that are attracting different rates of financing under either WACC (for rate base accounts) or WACD or short term interest rates (for non-rate base accounts). These differences in financing are despite the fact that the deferral accounts otherwise have very similar characteristics and purposes.²⁷⁸
211. The Company has not been able to differentiate why certain of these accounts have received WACC treatment, while others have been given debt financing treatment, when each set of accounts has the same or similar characteristics.²⁷⁹

(b) Inconsistent with FBC's Past Experience

212. The distinction made in the 2012-13 RRA Decision between capital and operating expenses is not consistent with the Commission's historical treatment of FBC's deferral accounts. Prior to 2012, for many years the Commission had consistently approved FBC's deferral expenditures and credits into rate base, with a rate base return of WACC.²⁸⁰
213. The 2012-13 RRA Decision was the first time the Commission introduced this distinction between capital and operating expenses in deferral accounts, for either FBC or any other investor-owned utility in British Columbia. The decision did not set out an explanation that justified a departure from the long-established regulatory practices.²⁸¹ Further, for the Company, it is unclear how the economic substance of its deferral expenditures has changed after 2012, as compared to previous years.²⁸²

²⁷⁸ Ex. B-1 - FBC Application, p. 246.

²⁷⁹ Ex. B-7 - FBC Response to BCUC IR 1.180.2.

²⁸⁰ Ex. B-1 - FBC Application, p. 247.

²⁸¹ Ex. B-7 - FBC Response to BCUC IR 1.180.1.

²⁸² Ex. B-1 - FBC Application, p. 247.

(c) WACC is the Appropriate Financing Method

214. The Company finances all of its assets, including deferral accounts, with a mix of debt and equity, in the proportions and at the rates approved by the Commission.²⁸³ As FBC must finance the deferred expenses for the time they are contained in the deferral accounts, it is given a return on its deferral accounts as compensation for this financing.²⁸⁴
215. FBC finances its assets in accordance with the capital structure approved by the Commission. The characterizations of rate base versus non-rate base or investment versus deferred expenses does not change the necessity for FBC to fund the expenditure and as such, the expenditure should attract a WACC return. The use of a WACC return is reflective of FBC's actual practices and is therefore the appropriate method through which to finance FBC's deferral accounts. WACC reflects the costs to the Company of financing its regulated activities, at the proportion of debt to equity at the and ROE approved by the Commission. Where it is appropriate for funds to be held outside of rate base, they should continue to attract a rate that is reflective of a WACC return, a rate equivalent to AFUDC. It is appropriate for all deferral expenditures to attract a rate base rate of return.²⁸⁵

(d) Inappropriate Distinction between Capital & Maintenance

216. In moving away from the Commission's long-standing practice of allowing a rate base return on deferral accounts, the reasoning in the 2012-13 RRA Decision appears to differentiate between whether the expenses in a particular deferral account relate to O&M expenses or capital expenditures. The Commission held that a utility is not normally "entitled to receive a return on operating costs or

²⁸³ Ex. B-24 - FBC Response to BCUC IR 2.76.2.1.

²⁸⁴ Ex. B-7 - FBC Response to BCUC IR 1.181.3.

²⁸⁵ Ex. B-1 - FBC Application, p. 247.

current period charges but simply recovery of those amounts from its ratepayers”.²⁸⁶

217. This reasoning ignores the important point that once an item is placed into a deferral account, it immediately ceases to be an operating cost or a current period charge; rather, it becomes akin to a capital item. This is because costs are being incurred in one period, but recovered from ratepayers in future periods.²⁸⁷ As was set out by FBC in its response, dated September 5, 2012, to the 2012-13 RRA Decision:²⁸⁸

There is no distinction to be drawn between deferrals and capital in terms of the utility's financing costs or its right to a fair return. In both cases, the utility incurs a cash expenditure in one period and recovers the cash from ratepayers in a future period. To compensate the utility for the time lag between the expenditure and its recovery, the capital or deferral, as the case may be, is either included in rate base or attracts AFUDC to mimic a rate base return. Similarly, if operating expenses are incurred in the same period that they are recovered from ratepayers (through current period O&M) then the utility calculates an allowance for working capital which is included in rate base to compensate for the timing of expenses within the year. Therefore it is incorrect to draw a distinction between capital and operating costs based on the nature of the expenditures; in all cases the utility is compensated for the time lag between when expenditures are incurred and when they are recovered. [underlining added]

218. Accordingly, a distinction between the original nature of the expense (operating or capital) or the “purpose” of the deferral accounts, will not have any bearing on the utility's cost of financing the account,²⁸⁹ and should not affect the return recovered.

²⁸⁶ Ex. B-1 - FBC Application, p. 248.

²⁸⁷ Ex. B-1 - FBC Application, p. 248.

²⁸⁸ Ex. B-1 - FBC Application, p. 247.

²⁸⁹ Ex. B-24 - FBC Response to BCUC IR 2.76.2.

(e) *Inconsistent with Other Fortis Companies*

219. Further, the distinction made by the Commission in the 2012-13 RRA Decision is not consistent with its treatment of FEI's deferral accounts.²⁹⁰ By approving FBC's requested change to the financing of deferral accounts, the Commission will increase the consistency amongst the Fortis utilities, and will ensure that FBC and FEI are afforded the same treatment for their various deferral accounts.²⁹¹

(f) *Inconsistent with Other Companies and Jurisdictions*

220. In addition to the 2012-13 RRA Decision making FBC's treatment of deferral accounts inconsistent with FEI, it is also inconsistent with other decisions of the Commission, and the financing principles applied in other jurisdictions.
221. In its Application, FBC set out three recent decisions of the Commission,²⁹² in which the Commission confirmed that the financing applied to non-rate base deferral accounts should earn a return at the AFUDC rate.²⁹³ While the Commission has utilized the WACD rate in other decisions, this was done with reliance on the 2012-13 RRA Decision. As discussed previously, FBC respectfully does not believe this decision should be followed with respect to this point.²⁹⁴
222. The Commission's distinction between operating and capital expenses in deferral accounts is also inconsistent with financing principles applied in other jurisdictions. For example, on an application by one of FBC's sister companies, FortisAlberta Inc., the Alberta Utilities Commission summarized its position with respect to financing deferral expenditures as follows:²⁹⁵

²⁹⁰ Ex. B-1 - FBC Application, p. 247.

²⁹¹ Ex. B-1 - FBC Application, p. 246.

²⁹² Order G-163-12, Order G-66-13 and Order G-56-13.

²⁹³ Ex. B-1 - FBC Application, p. 247.

²⁹⁴ Ex. B-7 - FBC Response to BCUC IR 1.180.1.

²⁹⁵ Ex. B-1 - FBC Application, p. 248.

similar to tangible assets, these costs are capitalized and recovered through amortization charges over a period of years. This creates an intangible or financial asset that is effectively a long-term receivable to be collected over time from customers. Since necessary working capital is a part of rate base, the change indicated by FAI to classify this intangible asset as rate base rather than working capital does not affect the revenue requirement. The Commission considers that a deferred debt cost is a rate base asset that must be financed like any other rate base asset. Such an asset should be financed, like any other component of rate base, using the weighted average cost of capital and should not be considered to be financed by debt alone. [underlining added]

223. This decision supports FBC's position that deferred expenditures should be included in rate base, and that where deferred expenditures are held in a non-rate base deferral account, these costs should appropriately earn a return at the AFUDC rate, which reflects a WACC rate of return for those funds held outside rate base.

(g) Specific Problems created by using WACD Treatment

224. Not only is an AFUDC equivalent rate the appropriate financing measure to use for non-rate base deferral accounts, but using WACD can actually create problems.
225. For example, distinguishing between capital and operating expenses creates a situation where the financing method used for a deferral account may change inappropriately. For example, consider a situation where GAAP has changed, resulting in an item that was previously capitalized for tax purposes being required to be expensed. Under the principles articulated by the Commission, historically the deferral account for this item would have been afforded a WACC return (using an AFUDC equivalent rate) due to being capital in nature. However, as a result of the changes in GAAP, it would now be afforded only a return on debt under WACD or based on interest rates, under the Commission's principles. This inconsistency in treatment is despite the fact that there have

not been any changes in the fundamental nature of the item or its regulatory treatment.²⁹⁶

226. Attempting to make a distinction between deferral accounts that are capital or non-capital in nature also creates an illogical situation. Certain deferral accounts hold items that have both a capital and non-capital nature. Trying to determine whether, in the absence of a deferral account, each item would have been of a capital or operating nature, is illogical, particularly when the very act of recording that item in the deferral account removes that original classification.²⁹⁷ FBC is not aware of any other utilities that continue to maintain a distinction between capital and operating items after the items are placed into the same deferral account.²⁹⁸
227. Further, a utility will not necessarily be able to capitalize its deferral accounts with 100 percent debt, regardless of whether the Commission characterizes these accounts as capital or operating in nature. Accordingly, under the principles set out in the 2012-13 RRA Decision, the net effect may reduce the utility's ROE below a level which has been approved by the Commission. This is not an appropriate result.²⁹⁹

(h) Concerns Raised by Interveners

228. In addition to suggesting that the inclusion of deferral accounts in rate base is unwarranted,³⁰⁰ which FBC has responded to above, the Pullman Evidence suggests that FBC's debt issuance costs should not earn any return and should be amortized into the weighted average cost of debt.³⁰¹ Mr. Pullman indicated

²⁹⁶ Ex. B-7 - FBC Response to BCUC IR 1.180.1.

²⁹⁷ Ex. B-7 - FBC Response to BCUC IR 1.180.1.

²⁹⁸ Ex. B-7 - FBC Response to BCUC IR 1.180.3.

²⁹⁹ Ex. B-7 - FBC Response to BCUC IR 1.180.1.

³⁰⁰ Ex. C10-5 - Pullman Evidence, p. 16.

³⁰¹ Ex. C10-5 - Pullman Evidence, p. 17.

in responses to IRs that he believes this to be “normal practice” for utilities.³⁰² FBC disagrees with Mr. Pullman’s characterization of this practice.

229. The Commission has previously approved debt issuance costs for inclusion in rate base in determining FBC’s revenue requirements for many years.³⁰³ As such, the continued recognition of debt issuance costs in rate base is a normal and recurring practice for FBC and the Commission.
230. FBC’s recovery and recognition of debt issuance costs in rate base is a reasonable and accepted practice. FBC forecasts its revenue requirements with the amortization of its debt issue costs over the life of the related debt which results in a recovery period consistent with what has been implied as “normal practice”.³⁰⁴
231. FBC’s treatment of recognizing debt issuance as a deferred charge is consistent with US GAAP, which permits transaction costs incurred in respect of financial liabilities, such as debt issuance costs, to be deferred and recognized on the balance sheet as either a separate asset or as a reduction of the carrying value of the debt. It is also consistent with the Accounting Standards Codification 835-30-45-3, which states that “issue costs shall be reported in the balance sheet as a deferred charge”. This is the approach that FBC has used in preparing its Application, which recognizes debt issue costs in rate base. Finally, as was described above, the practice of including debt issuance costs in rate base is consistent with the practices used in other jurisdictions.³⁰⁵

(3) FBC’s Recommendation

232. FBC is entitled to earn an equity return, through rate base treatment, on its deferral accounts; as deferral accounts are financed as part of the Company’s total investment, FBC must earn a fair return on its deferral accounts in order to

³⁰² Ex. C10-7 - ICG Response to BCUC IR 1.12.2.

³⁰³ Ex. B-1 – FBC Application, p. 247.

³⁰⁴ Ex. B-43 - FBC Rebuttal to ICG Evidence, p. 3.

³⁰⁵ Ex. B-43 - FBC Rebuttal to ICG Evidence, p. 3.

earn a fair return on its invested capital. It has been a long-standing practice in British Columbia for investor-owned utilities to have deferral accounts included as part of utility base, attracting a full rate base return. In addition, non-rate base deferral accounts have attracted a rate equivalent to an AFUDC rate. Removing certain deferral accounts from rate base and applying a debt financing rate of return is simply an artificial way of decreasing the Company's return on invested capital.³⁰⁶ This is not appropriate.

233. The Company's recommendation for determining when a deferral account should be included or excluded from rate base depends on the timing of the deferral account request. Where the Company is able to forecast balances for the account and include them in revenue requirements, that is the preferable treatment. In situations where the rates for a particular year have already been set and costs need to be recorded, the Company will request approval of a non-rate base deferral account. This non-rate base deferral account should attract an AFUDC equivalent rate until such a time as rates are re-set under the next revenue requirements or Annual Review. At that time, the account will be transferred into rate base.³⁰⁷
234. Given all the above, FBC believes that deferred expenditures should be included in rate base and attract a WACC rate of return. Where timing requires, certain expenditures should be held in non-rate base deferral accounts, where they should attract a rate of return reflective of WACC, an AFUDC equivalent rate, until they may be transferred into rate base.

F. Specific Deferral Accounts

235. As is summarized in Table A2-1 of FBC's Application, the Company is seeking approval of the discontinuance, modification, and creation of various deferral accounts, as well as the amortization and disposition of balances of certain

³⁰⁶ Ex. B-15 - FBC Response to ICG IR 1.41.1.

³⁰⁷ Ex. B-1 - FBC Application, p. 272.

deferral accounts.³⁰⁸ The specific details of these changes are described in Section D4 of the Application.

236. The deferral accounts proposed by the Company are reasonable. Together, these accounts deal with variances that are beyond the reasonable control of the Company, or that would otherwise create fluctuations in customer rates or in the Company's earnings.³⁰⁹ The use of the proposed deferral eliminates the potential for windfall gains for the customers or the Company.³¹⁰
237. The details of each of the accounts being added, discontinued or modified are set out in the Application. FBC submits that these requests should be approved by the Commission. The following part of the FBC Non-PBR Submission deals with specific issues that have arisen with respect to certain of the deferral accounts in the course of the proceeding, though the Company notes that additional issues may need to be addressed in its Reply Submissions, depending on issues raised by the Interveners in their submissions.

(4) New Deferral Accounts

238. A summary of the new deferral accounts that FBC is seeking in its Application is provided in the following table:³¹¹

Table A2-1: Summary of Deferral Account Requests

Type of Change	Account Name	Reference
New Account – Rate Base	Rate Stabilization Deferral Mechanism (RSDM)	Section D4.3.1; amortization period of 5 years commencing January 1, 2014.
	Earnings Sharing Mechanism (ESM) Deferral	Section D4.3.2; balance at December 31 of each year to be amortized into rates in the subsequent year
	BC Hydro Application for a Power Purchase Agreement with FBC (RS 3808)	Section D4.3.3; amortization in 2014.
	Generic Cost of Capital Revenue Requirement Impact	Section D4.3.4; amortization in 2014.

³⁰⁸ Ex. B-1 - FBC Application, pp. 8-10.

³⁰⁹ Ex. B-7 - FBC Response to BCUC IR 1.210.1.

³¹⁰ Ex. B-15 - FBC Response to ICG IR 1.10.1.

³¹¹ Ex. B-1-6 - FBC Evidentiary Update, pp. 8-10.

<u>Type of Change</u>	<u>Account Name</u>	<u>Reference</u>
	Insurance Expense Variance	Section D4.3.5; amortization in following year.
	Interest Expense Variance	Section D4.3.6, amortization period of 3 years
	Tax Variance	Section D4.3.7; amortization in following year.
	Property Tax Variance	Section D4.3.8; amortization period of 3 years.
	2014 – 2018 Annual Reviews	Section D4.3.9; amortization period of 1 year.
New Account – Non Rate Base	CPCN Projects Preliminary Engineering	Section D4.7.4; transfer to capital project upon approval.

(a) Rate Stabilization Deferral Mechanism Account

239. FBC is seeking approval of a Rate Stabilization Deferral Mechanism (**RSDM**) for the PBR Period.³¹² The RSDM is a mechanism for mitigating rate variability over the PBR Period.³¹³
240. The RSDM is proposed in part to address the Commission’s direction to FBC contained in Order E-15-12.³¹⁴ In its acceptance of the WAX Capacity Purchase Agreement (**WAX CAPA**), the Commission recognized that even though it is a long-term capacity purchase agreement and is in the public interest, “there is a potential for disproportionate rate impacts in the early years of the agreement”.³¹⁵ In response, the Commission directed FBC to develop a rate smoothing proposal for the Commission’s approval, either through a separate submission or with FBC’s next revenue requirements application.³¹⁶

³¹² Ex. B-1 – FBC Application, p. 7.

³¹³ Ex. B-1 - FBC Application, p. 3.

³¹⁴ Ex. B-1 - FBC Application, p. 3.

³¹⁵ Ex. B-11 - FBC Response to BCPSO IR 1.97.3.

³¹⁶ Order E-15-12, p. 2.

241. In the Application, FBC proposed that this rate smoothing be accomplished by recognizing a deferred credit in rate base, to be amortized over the PBR Period.³¹⁷ This is accomplished through the introduction of the RSDM Deferral Account with an initial credit of \$24.4 million.³¹⁸ The forecast withdrawals from the RSDM Deferral Account are shown in Table D4-2 of the Application.³¹⁹ The drawing down of this initial balance in the deferral account provides a rate smoothing effect for customers.³²⁰
242. The RSDM was designed on the basis that the amortization of the balance in the RSDM deferral account will be such that the account balances to zero by 2018. It does this in a manner that generates a uniform rate impact in all years based on current forecasts for the 2014-2018 period..³²¹ However, as there will likely be changes in the precise forecasts of various items over the PBR Period, the annual rate increases will not remain perfectly uniform over the PBR Period.³²² The RSDM is not intended to create a perfectly even rate profile, but to mitigate large fluctuations over the PBR Period (which, in the absence of the RSDM, would have seen a 6 percent rate reduction in 2014, followed by a 15 percent increase in 2015). With the RSDM rates will still fluctuate over the period, but to a much smaller degree. FBC is not proposing to adjust the RSDM balance over the PBR Period in order to create a perfectly even rate profile.³²³
243. The adoption of the proposed RSDM will not only mitigate rate variability, but will also result in lower rate increases over the PBR Period.³²⁴ This occurs due to RSDM being given rate base treatment, as the RSDM is a credit to rate base, which reduces both the cost of equity (shareholder return) and income tax component associated with the RSDM balance, when compared to financing

³¹⁷ Ex. B-1 - FBC Application, p. 75.

³¹⁸ Ex. B-1-6 - FBC Evidentiary Update, p. 261.

³¹⁹ Ex. B-1-6 - FBC Evidentiary Update, p. 261

³²⁰ Ex. B-7 - FBC Response to BCUC IR 1.185.3.

³²¹ Ex. B-7 - FBC Response to BCUC IR 1.185.1.

³²² Ex. B-7 - FBC Response to BCUC IR 1.185.3.1.

³²³ Ex. B-7 - FBC Response to BCUC IR 1.185.3.2.

³²⁴ Ex. B-1 - FBC Application, p. 3.

the credit only at the Company's WACD.³²⁵ The lower rate base in earlier years of the PBR Period also contributes to this lower rate increase. Overall, using this approach will result in rates being 1.5 percent lower than they would result in the absence of rate smoothing.³²⁶

244. As stated above in Part 2(A), in Order G-151-13, the Commission ordered an interim general rate increase of 3.3 percent, effective January 1, 2014. FBC proposes to apply the RSDM to this increase to maintain the 3.3 percent rate increase for 2014 and to apply the balance of the account to the 2015-2018 period. This will result in an increase of 3.6 percent in each of those years.³²⁷

(b) GCOC Revenue Requirements Impact Account

245. As stated above in Part 2(J)(2), FBC is proposing that a GCOC Revenue Requirements Impact Deferral Account be approved, to deal with the impact of the decrease in ROE (from 9.9 percent to 9.15 percent) used to calculate FBC's rates effective January 1, 2013.³²⁸
246. Following the decision in Stage 1 of the GCOC proceeding, FBC recorded the 2013 revenue requirements impact of the decision in a deferral account and proposes to amortize this amount in 2014. While FBC had planned to use this account to record and flow through any additional revenue requirements impacts following the Stage 2 GCOC decision,³²⁹ this is not necessary as the decision confirms FBC's equity component at 40 percent of its capital structure and its equity risk premium at 40 basis points over the Benchmark.³³⁰

³²⁵ Ex. B-24 - FBC Response to BCUC IR 2.56.3.

³²⁶ Ex. B-1 - FBC Application, p. 75.

³²⁷ Ex. B-1-6 - Evidentiary Update, p. 3.

³²⁸ Ex. B-1 - FBC Application, p. 232.

³²⁹ Ex. B-1 - FBC Application, p. 262.

³³⁰ Order G-47-14.

247. Accordingly, FBC requests approval to record the 2013 revenue requirements impact from the Stage 1 GCOC proceeding into the GCOC Revenue Requirements Impact Deferral Account and to amortize this account in 2014.

(c) Insurance Expense Variance Account

248. FBC is seeking approval of an Insurance Expense Variance, which will allow flow-through treatment of insurance expense, which is uncontrollable in nature and beyond the Company's control.³³¹ Specifically, the account will capture variances in insurance premiums, but not include first or third party liability and asset valuation variations.³³²
249. The insurance market is very volatile, and expenses may vary due to changes in economic factors that are beyond the Company's control. The following examples of volatility have an influence on the Company's premiums year over year, and make it very challenging to accurately prepare forecasts:³³³
- a. copper theft;
 - b. global market conditions for companies, and their investment returns and losses;
 - c. impacts of large losses in the marketplace; and
 - d. increased concern over the occurrence of potential catastrophic events.
250. By utilizing a deferral account, customers will only pay for the insurance premiums that are actually incurred.³³⁴ Further, approval of this account is consistent with the Commission's decision on the FEI 2012-2013 Revenue Requirements Application, where it held that an insurance expense deferral account is appropriate, due to considerable global market uncertainty.

³³¹ Ex. B-7 - FBC Response to BCUC IR 1.187.1.

³³² Ex. B-24 - FBC Response to BCUC IR 2.54.1.

³³³ Ex. B-1 - FBC Application, p. 263.

³³⁴ Ex. B-24 - FBC Response to BCUC IR 2.58.2.

(d) Interest Expense Variance Deferral Account

251. FBC is seeking approval of an Interest Expense Variance Deferral Account.
252. FBC previously requested a similar deferral account as part of the 2012-13 RRA. In the 2012-13 RRA Decision, the Commission denied FBC's request for an Interest Expense Variance Deferral Account, on the basis that interest expense is "somewhat controllable" and "somewhat predictable".³³⁵
253. However, as explained below, the interest expense is not "somewhat controllable or somewhat predictable". Debt capital markets are dynamic and volatile, changing constantly to reflect current and economic conditions and government monetary and fiscal policy. While FBC takes appropriate measures to develop a forecast of interest rates, it has no control over actual interest rates.³³⁶ As interest expense is affected by global economic factors and market conditions that are beyond the Company's control, and gains and losses between actual and forecast interest expense occur independently and do not balance out over time,³³⁷ approval of this account will avoid any potential gains or losses from forecast interest expense.³³⁸
254. Establishing this deferral account will be consistent with the Interest Expense Variance deferral accounts that were approved by the Commission for FBC's sister companies, FEI,³³⁹ FEW,³⁴⁰ and the Fort Nelson Service Area.³⁴¹ Further, while the Commission denied this account in the 2012-13 RRA Decision, it previously approved the treatment of Interest Expense as a flow-through

³³⁵ 2012-13 RRA Decision, p. 117.

³³⁶ Ex. B-7 - FBC Response to BCUC IR 1.190.1.

³³⁷ Ex. B-7 - FBC Response to BCUC IR 1.172.2.

³³⁸ Ex. B-1 - FBC Application, p. 237.

³³⁹ Order G-7-03.

³⁴⁰ Order G-35-09.

³⁴¹ Order G-147-09.

account for FBC under its 2007 PBR Plan, in order to allow FBC to capture all interest expense variances from forecast.³⁴²

(e) Tax Variance Account and Property Tax Variance Account

255. FBC also seeks approval of both a Tax Variance Deferral Account and a Property Tax Variance Account, as expenses captured in these accounts are outside of the Company's control.³⁴³
256. The Tax Variance Account is intended to capture the uncontrollable aspects of income taxes and sales taxes, including changes in income tax laws, tax rate changes and audit reassessments.³⁴⁴ The establishment of the Tax Variance Deferral Account is consistent with the current treatment utilized by FEI.³⁴⁵ It does not include any amount for property tax variance.³⁴⁶
257. This is instead addressed by the Property Tax Variance Account. Property taxes are primarily driven by legislation, market values of property, property tax rates, municipal boundaries and political programs outside the control of the Company.³⁴⁷
258. FBC has previously been granted deferral accounts to deal with unexpected property tax variations. FBC's request is consistent with the treatment of property tax variances that have previously been granted by the Commission,³⁴⁸ as well as with the current treatment utilized by FEI.³⁴⁹

³⁴² Ex. B-1 - FBC Application, p. 237.

³⁴³ Ex. B-24 - FBC Response to BCUC IR 2.54.1.

³⁴⁴ Ex. B-7 - FBC Response to BCUC IR 1.183.3.

³⁴⁵ Ex. B-1 - FBC Application, p. 242.

³⁴⁶ Ex. B-7 - FBC Response to BCUC IR 1.183.2.1.

³⁴⁷ Ex. B-1 - FBC Application, p. 238; Ex. B-7 - FBC Response to BCUC IR 1.83.1.

³⁴⁸ Ex. B-7 - FBC Response to BCUC IR 1.183.1.

³⁴⁹ Ex. B-1 - FBC Application, p. 264.

(5) Changes to Deferral Accounts

259. A summary of the deferral accounts to which FBC is seeking to make changes as part of its Application is provided in the following table:³⁵⁰

Table A2-1: Summary of Deferral Account Requests

Type of Change	Account Name	Reference
Amortization Period – New or Modified Rate Base	Demand Side Management	Section D4.4.1: change in amortization period from 10 years to 15 years
	On-Bill Financing Pilot Program	Section D4.4.2; change in amortization period from 10 years to 15 years.
	2014 - 2018 PBR Application	Section D4.4.3; amortization over 5 years beginning January 1, 2014.
	Pension and OPEB Expense Variance	Section D4.4.4; change from 3 year amortization period to an 11 year amortization period (EARS), commencing January 1, 2014
	City of Kelowna Acquisition Customer Benefit	Section D4.4.5; amortization in 2014.
	City of Kelowna Acquisition Legal and Regulatory Costs	Section D4.4.5; amortization in 2014.
	2014 - 2018 Capital Expenditure Plan (Pre Engineering Costs)	Section D4.4.7; amortization period of 2 years beginning in 2014.
	BCUC Generic Cost of Capital Proceeding	Section D4.4.8; amortization over 2 years beginning in 2014.
	BCUC Inquiry into the MRS Program	Section D4.4.9; amortization in 2014.
	Kettle Valley Expenditure Review	Section D4.4.10; amortization in 2014.
	Transmission Customer Rate Design	Section D4.4.11; amortization in 2014
	2012 Mandatory Reliability Standards Audit	Section D4.4.12; amortization in 2014.
	Mandatory Reliability Standards 2012 -2013 Incremental O&M Expense	Section D4.4.13; amortization in 2014.
Other Rate Base	On-Bill Financing Participant Loans	Section D4.5.2; transfer the balance of this account as at December 31, 2014 to rate base on January 1, 2015 and continue to recover the balance from OBF pilot program customers over approximately a ten year period until the account is fully recovered
	Debt Issue Costs	Section D4.5.9; debt issue costs will be incorporated into one account.

³⁵⁰ Ex. B-1-6 - FBC Evidentiary Update, pp. 8-10.

260. As was described above, in Part 4(A) on Deferral Account Financing, the Company is seeking Commission approval for changes to the rate base treatment and financing of certain deferral accounts, to allow FBC to earn an equity return, through rate base treatment, on its deferral accounts.³⁵¹ This section deals with some of the other changes that FBC is requesting with respect to its deferral accounts.

(a) DSM Account and On-Bill Financing Pilot Program Account

261. The Company has requested to change the amortization periods for its DSM and On-Bill Financing Pilot Program deferral accounts from 10 years to 15 years. The changes to the DSM amortization period are discussed in detail, below in Part 5(H)(1). The proposed change in the amortization period for the On-Bill Financing Pilot Project Account is to maintain consistency with the proposed DSM amortization period.³⁵²

(b) Pension and OPEB Expense Variance Deferral Account

262. FBC is also seeking to extend the amortization period for its Pension and OPEB Expense Variance Deferral Account from 3 years to 11 years. This extension is to bring the amortization period in line with the Expected Average Remaining Service Life (**EARS**L) of FBC's benefit plans, which will more appropriately allocate the costs over the future period to which they are applicable.³⁵³
263. To calculate the amortization period of 11 years, FBC has used a weighted average of the EARS L of its benefit pension plan (10 years) and its OPEB (13 years), over the PBR Period. This weighted average of 11 years will be used over the PBR Period.³⁵⁴

³⁵¹ Ex. B-1 - FBC Application, p. 246.

³⁵² Ex. B-1 - FBC Application, p. 265.

³⁵³ Ex. B-1 - FBC Application, p. 265.

³⁵⁴ Ex. B-1 - FBC Application, p. 265.

264. Additionally, the Company is seeking approval to discontinue the net-of-tax treatment that it utilizes in recording the difference between amounts funded by ratepayers for pensions/OPEB and amounts actually paid out by the Company in a deferral account. Historically, this net-of-tax approach was used instead of adjusting for the difference between the expenses and the contributions as a timing difference in the calculation of income tax. FBC is now proposing to discontinue this treatment as the Prepaid Pension and OPEB liability deferral accounts are not amortized into rates, as are the other deferral accounts subject to net-of-tax treatment, and are not drawn down in the same manner.³⁵⁵
265. Further, discontinuing the net-of-tax treatment would be consistent with the treatment used by FEI, as approved by the Commission in Order G-141-09.³⁵⁶
266. If the net-of-tax treatment is discontinued, FBC will instead add back the pension/OPEB expenses and deduct the contributions when performing income tax calculations.³⁵⁷

G. Accounts to be Discontinued

267. Finally, FBC is seeking to discontinue the following accounts, effective on either January 1, 2014 or January 1, 2015:

268. Table A2-1: Summary of Deferral Account Requests

<u>Type of Change</u>	<u>Account Name</u>	<u>Reference</u>
Discontinuance	Kelowna Bulk Transformer Capacity Addition Project	Section D4.5.3; discontinuation of this account effective January 1, 2015.
	Section 71 Filing (Waneta Expansion Power Purchase Agreement)	Section D4.5.4; discontinuation of this account effective January 1, 2015.
	Negotiation of new PPA between BC Hydro and FBC	Section D4.5.5; discontinuation of this account effective January 1, 2015.
	Right of Way Encroachment Litigation	Section D4.5.6; discontinuation of this account effective January 1, 2015

³⁵⁵ Ex. B-1 – FBC Application, p. 242.

³⁵⁶ Ex. B-1 – FBC Application, pp. 242-243.

³⁵⁷ Ex. B-1 – FBC Application, p. 242.

<u>Type of Change</u>	<u>Account Name</u>	<u>Reference</u>
	Trail Office Lease Cost	Section D4.5.7; discontinuation of this account effective January 1, 2014.
	Trail Office Rental to School District 20	Section D4.5.8; discontinuation of this account effective January 1, 2014.
	2011 Flow-Through and ROE Sharing Mechanism Adjustments	Section D4.6; discontinuation of this account effective January 1, 2015.
	2012 Deferred Revenue	Section D4.6; discontinuation of this account effective January 1, 2014.
	Harmonized Sales Tax Removal/ Provincial Sales Tax Implementation	Section D4.6; discontinuation of this account effective January 1, 2015.
	Cost of Service and Rate Design Application	Section D4.6; discontinuation of this account effective January 1, 2015.
	2012 - 2013 Revenue Requirements Application and 2012 Integrated System Plan	Section D4.6; discontinuation of this account effective January 1, 2015.
	2011 Revenue Requirement Application Costs	Section D4.6; discontinuation of this account effective January 1, 2014.
	BC Hydro Waneta Transaction Proceeding	Section D4.6; discontinuation of this account effective January 1, 2014
	Residential Inclining Block Rate	Section D4.6; discontinuation of this account effective January 1, 2015.
	Implementation of New Rate Structures	Section D4.6; discontinuation of this account effective January 1, 2015.
	Irrigation Rate Payer Group Consultation and Load Research	Section D4.6; discontinuation of this account effective January 1, 2015.
	Princeton Light and Power Deferred Pension Credit	Section D4.6; discontinuation of this account effective January 1, 2015.
	Princeton Light and Power Computer Software	Section D4.6; discontinuation of this account effective January 1, 2014.
	US GAAP Conversion Costs	Section D4.6; discontinuation of this account effective January 1, 2015.
	Joint Pole Use Audit, 2008	Section D4.6; discontinuation of this account effective January 1, 2014.
	Joint Pole Use Audit, 2013	Section D4.6; discontinuation of this account effective January 1, 2015.
	Mandatory Reliability Standards Implementation	Section D4.6; discontinuation of this account effective January 1, 2015.
	Revenue Protection	Section D4.6; discontinuation of this account effective January 1, 2015.

269. These accounts were created for specific purposes during FBC's previous revenue requirements and PBR periods, and they are expected to have no remaining balance or to be fully amortized by December 31, 2014.³⁵⁸

³⁵⁸ Ex. B-1 - FBC Application, p. 272.

PART 5 - DEMAND SIDE MANAGEMENT PROGRAM

A. Introduction

270. Demand side management (as defined earlier, **DSM**) consists of actions that modify customer demand for electricity, helping to defer the need for new utility energy and capacity additions. FBC has a long history with DSM and similar energy efficiency programs. Presently, these programs are available to all of FBC's customers and to the Company's wholesale customers of Grand Forks, Nelson Hydro, Penticton and Summerland.³⁵⁹
271. DSM is predominantly offered by FBC through its PowerSense program, although the Residential Conservation Rate (as defined earlier, **RCR**) also results in demand reductions. This program has a primary goal of encouraging both energy efficiency (the using of less energy to provide the same or an improved level of service) and energy conservation (the reducing or going without a level of service in order to reduce energy use).³⁶⁰
272. In its Application, FBC is seeking approval to continue its DSM programs for the next five years. More specifically, FBC is seeking the following approvals with respect to DSM:³⁶¹
- a. acceptance pursuant to section 44.2(3) of the UCA of the following DSM expenditure schedules as described in Appendix H1 of the Application: up to \$3.0 million for 2014, \$3.2 million for 2015, \$3.2 million for 2016, \$3.2 million for 2017, and \$3.3 million for 2018;
 - b. approval to change the amortization period of existing and future DSM expenditures from 10 years to 15 years, effective January 1, 2014;

³⁵⁹ Ex. B-1-1 - FBC Application Appendices, Attachment H1 - FBC 2014-2018 DSM Plan, p. 3.

³⁶⁰ Ex. B-7 - FBC Response to BCUC IR 1.231.1.

³⁶¹ Ex. B-1 - FBC Application, p. 11.

- c. approval to discontinue semi-annual reporting on its DSM Program and to submit annual reports as of December 31 in each year, effective January 1, 2014; and
 - d. approval for the following funding transfer rules:
 - i. funding transfers under 25 percent between approved areas be permitted without prior approval of the Commission;
 - ii. funding transfers of more than 25 percent into or out of approved areas would require prior approval of the Commission; and
 - e. funding transfers from an existing program to a new program would be permitted, provided the new program meets the DSM Regulation and the benefits/cost test requirements and has not previously been rejected by the Commission.³⁶²
273. The requested DSM expenditures are supported by the 2014-2018 DSM Plan (the **DSM Plan**), which is found at Attachment H1 of Exhibit B-1-1, the FBC Application Appendices. The DSM Plan sets out the details of the proposed programs for the residential, commercial, industrial and irrigation customer classes, as well as setting out portfolio-level expenditures.
274. The evidence filed by FBC in this proceeding demonstrates that the proposed DSM expenditures are cost-effective and in the public interest, and that they should be accepted pursuant to section 44.2 of the UCA.

B. FBC's History of DSM

275. FBC's history with DSM programs now extends back 25 years, with the Company actively and continuously promoting its PowerSense programs since 1989.³⁶³ Further, FBC has consistently delivered superior results from its

³⁶² Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 11.

³⁶³ Ex. B-1-1, Attachment H1 - FBC 2014-2018 DSM Plan, p. 3; Ex. B-24 - FBC Response to BCUC IR 2.110.2.2.

PowerSense DSM program; over the past five years, on average expenditures have been at 94 percent of budget and savings have been at 107 percent of planned.³⁶⁴ For reference, a summary of FBC's planned and actual DSM expenditures for the period of 2008 through 2012 may be summarized as follows:³⁶⁵

Table H-3: Plan and Actual DSM Expenditures Since 2008

DSM Expenditures since 2008

2008		2009		2010		2011		2012	
Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual
2,355	2,683	3,667	3,464	3,952	3,712	7,842	5,907	7,731	7,300

276. Over the past 25 years, DSM has been a priority for the Company.³⁶⁶ It continues to be. As is discussed in detail below in Part 5(D)(4), while the level of DSM expenditures proposed by the DSM Plan has been reduced from the expenditures under FBC's 2012-2013 plan (the **2012-13 DSM Plan**), FBC remains committed to supporting all cost-effective DSM, as prescribed by the UCA and its related regulation (as defined above, the **DSM Regulation**)..

C. The Proposed DSM Plan

277. The DSM Plan is a modified extension of the 2012-13 DSM Plan, which was accepted by the Commission in the 2012-13 RRA Decision.³⁶⁷ Additional details of the DSM Plan are described in this part of the FBC Non-PBR Submission.

(1) Proposed Expenditures

278. Pursuant to the DSM Plan, FBC is seeking acceptance of the following DSM expenditures for the period of 2014 through 2018:³⁶⁸

³⁶⁴ Ex. B-7 - FBC Response to BCUC IR 1.231.4.

³⁶⁵ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 8.

³⁶⁶ Ex. B-24 - FBC Response to BCUC IR 2.110.2.2.

³⁶⁷ Ex. B-1-1 - FBC Application Appendices, Attachment H1 - FBC 2014-2018 DSM Plan, p. 3.

³⁶⁸ Ex. B-1-1, Attachment H1 - FBC 2014-2018 DSM Plan, p. 4.

Table H1-1a: 2014-18 DSM Plan Expenditures

<u>Program Area</u>	<u>Plan Cost</u>	<u>2014</u>		<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
		TRC	TRC incl mTRC				
		B/C	B/C				
Programs by Sector	<u>\$(000s)</u>	<u>ratio</u>	<u>ratio</u>	<u>\$(000s)</u>	<u>\$(000s)</u>	<u>\$(000s)</u>	<u>\$(000s)</u>
Residential	1,037	1.2	1.3	1,081	1,008	1,015	1,024
General Service	1,134	1.4	1.7	1,166	1,195	1,223	1,256
Industrial	148	2.8	2.8	150	152	154	156
Sub-total Programs:	2,319	1.4	1.5	2,397	2,355	2,392	2,436
Supporting Initiatives	190			190	190	190	190
Planning & Evaluation	492	-	-	500	509	518	527
Total (incl. Portfolio spend):	3,001	1.2	1.4	3,087	3,054	3,100	3,153

279. Much like the 2012-13 DSM Plan, the DSM Plan was designed with several guiding principles in mind. Specifically, the DSM Plan is:³⁶⁹

- a. customer-focused;
- b. cost-effective;
- c. inclusive of industry best-practices; and
- d. compliant with the applicable sections of the UCA, the DSM Regulation and the *Clean Energy Act*³⁷⁰ (the **CEA**).

280. While the proposed expenditures under the DSM Plan are lower than FBC's previous accepted levels for DSM spending, this is predominantly a result of a decline in the long-run marginal cost (**LRMC**) for electricity. As is discussed below in Part 5(E), this has resulted in a decrease in the number and breadth of DSM measures and programs that are cost-effective, as defined by the DSM Regulation. This change has been incorporated into the DSM expenditure request made in this Application.

³⁶⁹ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 11.

³⁷⁰ SBC 2010, c. 22.

(2) Expenditures excluded from PBR Formula

281. While FBC is seeking approval of the DSM Plan as part of its PBR Application, the DSM program costs are not included in the PBR structure.
282. All direct DSM program costs are to be recovered under cost-of-service principles, where actual expenditures are recorded in the rate base deferral account and recovered in rates by way of amortization over a period of time determined by the Commission, rather than being determined in accordance with the PBR formula.³⁷¹ However, while direct program costs are excluded, the DSM program is supported by various corporate functions, the labour costs of which are determined according to the PBR formula, such as the Executive, Human Resources and Finance and Regulatory departments.³⁷²
283. The exclusion of direct DSM program costs from the PBR formula is not only consistent with the practice used in both of FBC's prior PBR periods,³⁷³ but it also encourages the goal of improving DSM efficiency. In the report "Performance-Based Ratemaking for Electric Utilities: Review of Plans and Analysis of Economic and Resource Planning Issues", the authors recognized that in most jurisdictions DSM costs and revenues are not subject to the PBR formula, as their inclusion in the formula may make them the target for cost-cutting measures.³⁷⁴
284. Further, excluding DSM from PBR largely addresses the "two fundamental impediments to improving efficiency", as described in the American Council for an Energy-Efficient Economy (**ACEEE**) report "Carrots for Utilities: Providing Financial Returns for Utility Investments in Energy Efficiency", which are the existence of:

³⁷¹ Ex. B-12 - FBC Response to BCSEA IR 1.33.1.1; Ex. B-12 - FBC Response to BCSEA IR 1.35.1.

³⁷² Ex. B-12 - FBC Response to BCSEA IR 1.33.1.1.

³⁷³ Ex. B-12 - FBC Response to BCSEA IR 1.35.1.

³⁷⁴ Ex. B-12 - FBC Response to BCSEA IR 1.36.1, referencing Comnes et al (1995).

- a. a disincentive to using energy efficiency programs to reduce customer energy consumption because utility revenues will also be reduced; and
- b. a lack of incentive to spend money on programs to improve customer energy efficiency as compared to making investments in new utility facilities and equipment.³⁷⁵

(3) Term of the DSM Plan

285. FBC is seeking a five-year spending approval period for the DSM Plan, in conjunction with the PBR Period.³⁷⁶
286. By extending the term to five years, FBC will be able to establish a level of certainty in the market, by demonstrating that the Company will be able to offer the various DSM programs over an extended period of time. This, in turn, will allow FBC's external partners to better plan for, and support, these DSM initiatives.³⁷⁷

(4) Program Funding Transfer Rules

287. To support the five-year expenditure period requested, FBC has designed the DSM Plan with flexibility in mind. This will allow the Company to adequately respond and react to changes in market conditions, customer responses to programs, input from stakeholders (including program partners) and changes in the political environment in which the Company operates.³⁷⁸
288. This flexibility may be accomplished through the program funding transfer rules applicable to the DSM Plan. Specifically, FBC is seeking the Commission's approval for the following rules:

³⁷⁵ Ex. C6-20 - CEC Response to BCSEA IR 1.15.1, Attachment 15.1, p. iii.

³⁷⁶ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 9.

³⁷⁷ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 9.

³⁷⁸ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 10.

- a. funding transfers under 25 percent between approved areas be permitted without prior approval of the Commission;
 - b. funding transfers of more than 25 percent into or out of approved areas would require prior approval of the Commission; and
 - c. funding transfers from an existing program to a new program would be permitted, provided the new program meets the DSM Regulation and the benefits/cost test requirements and has not previously been rejected by the Commission.³⁷⁹
289. If approved, these rules will provide FBC with the flexibility to manage and adjust (where appropriate) programs, without the need for a full Commission review.³⁸⁰ This will allow the Company to launch new programs to take advantage of unexpected opportunities that emerge over the PBR Period. This flexibility will help ensure that all cost-effective DSM opportunities are developed and initiated in a timely manner.³⁸¹
290. While FBC's proposed program funding transfer rules allow FBC to respond quickly to emerging opportunities by reducing regulatory burden, funding transfers will have transparency. FBC will detail any new programs that are introduced, as well as the factors that supported the decision for their introduction, in its year-end annual DSM report.³⁸²

(5) DSM Reporting Period

291. FBC also seeks Commission approval to switch its reporting schedule for DSM reports from semi-annually to annually.
292. A semi-annual reporting period was introduced for FBC (at the time, West Kootenay Power Ltd.) by the Commission in Decision G-109-90. At that time, a

³⁷⁹ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 11.

³⁸⁰ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 10.

³⁸¹ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 11.

³⁸² Ex. B-7 - FBC Response to BCUC IR 1.262.1.

more frequent reporting interval was appropriate due to the limited experience of the Company and the Province with DSM and the PowerSense program. Since 1990, FBC's experience with DSM has matured, making an annual reporting period more appropriate.³⁸³

293. Further, submitting reports on an annual basis is consistent with the practice used by other British Columbia utilities, including FEI and BC Hydro.³⁸⁴
294. The proposed annual DSM report would contain the same information as in the current semi-annual report³⁸⁵ and would be submitted on a year-end basis.³⁸⁶

D. Legal Framework

295. FBC's request for approval of DSM expenditures is filed pursuant to section 44.2 of the UCA, which provides that a utility may file "a statement of the expenditures on demand-side measures the public utility has made or anticipates making during the period addressed by the utility".
296. Pursuant to section 44.2(3) and (4), the Commission must accept all (or a part of) the expenditure schedule if it considers the schedule, or a part of it, to be in the public interest.
297. In considering whether a DSM expenditure schedule is in the public interest, the Commission must consider the following criteria under section 44.2(5):
- a. the applicable of British Columbia's energy objectives;
 - b. the most recent long-term resource plan filed by the public utility under section 44.1, if any;

³⁸³ Ex. B-10 - FBC Response to CEC IR 1.11.1.

³⁸⁴ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 19.

³⁸⁵ Ex. B-24 - FBC Response to BCUC IR 2.120.1.

³⁸⁶ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 19.

- c. the extent to which the schedule is consistent with the applicable requirements under sections 6 and 19 of the CEA;
- d. if the schedule includes expenditures on demand-side measures, whether the demand-side measures are cost-effective within the meaning prescribed by regulation, if any; and
- e. the interests of persons in British Columbia who receive or may receive service from the public utility.

298. Each of these considerations is discussed below.

(1) British Columbia's Energy Objectives

299. In determining whether a DSM expenditure schedule is in the public interest, the Commission must consider energy objectives set out for British Columbia in section 2 of the CEA.
300. The programs associated with the DSM expenditure schedule support British Columbia's energy objectives as defined in section 2 of the CEA, as is summarized in Table H-1 of Appendix H of Exhibit B-1-1.³⁸⁷

Table H-1: BC's Energy Objectives Met by FBC DSM Activity

Energy Objective	FBC DSM Portfolio
(b) to take demand-side measures and to conserve energy...	FBC's DSM proposals are designed to implement cost-effective (as defined by the DSM Regulation) demand-side measures.
(d) to use and foster the development in British Columbia of innovative technologies that support energy conservation and efficiency and the use of clean or renewable resources;	FBC supports pilot projects of new DSM technologies, and the DSM Plan allows new measures to be incented if B/C ratio is positive.
(h) to encourage the switching from one kind of energy source or use to another that decreases greenhouse gas emissions in British Columbia;	FBC does not have a fuel switching program at this time.
(i) to encourage communities to reduce greenhouse gas emissions and use energy efficiently;	The Rossland Energy Diet was a pilot in community energy engagement, that has been expanded to the regionally-based Kootenay Energy Diet.

³⁸⁷ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, pp. 3-4.

301. Additionally, since the filing of the Application, FBC has launched the Okanagan Energy Diet, to further expand the Rossland and Kootenay Energy Diets and to further encourage communities to use energy efficiently.³⁸⁸
302. Section 2(b) of the CEA states that it is an energy objective of the Province:
- to take demand-side measures and to conserve energy, including the objective of the authority reducing its expected increase in demand for electricity by the year 2020 by at least 66 percent.
303. Under this section, FBC considers the energy objective of the province for it to take DSM measures and to conserve energy. However, despite the suggestion in some IRs, only the first portion of this section is applicable to FBC, whereas the objective of “reducing its expected increase in demand for electricity by the year 2020 by at least 66 percent” applies specifically to “the authority”,³⁸⁹ BC Hydro.³⁹⁰
304. As is noted above, FBC’s proposed DSM expenditure schedule is designed with the objective in mind of taking demand-side measures and conserving energy, and seeks to implement cost-effective DSM measures.

(2) Long-Term Resource Plan

(a) Consistency

305. Further, as is required by section 44.2(5) of the UCA, FBC’s proposed DSM expenditure schedule is consistent with its most recent Long-Term Resource Plan (the **2012 LTRP**). The 2012 LTRP was submitted by FBC to the Commission in June 2011 as part of FBC’s 2012-13 RRA and was accepted as meeting the requirements of the UCA in August 2012.³⁹¹ The DSM

³⁸⁸ Ex. B-7 – FBC Response to BCUC IR 1.256.1.

³⁸⁹ Section 1 of the CEA defines “Authority” as having “the same meaning as in section 1 of the Hydro and Power Authority Act”, which in turn defines “Authority” as “the British Columbia Hydro and Power Authority”.

³⁹⁰ Ex. B-24 - FBC Response to BCUC IR 2.102.1.

³⁹¹ 2012-13 RRA Decision, p. 149.

expenditures are also consistent with the directives that the Commission provided in its Decision to the 2012-13 RRA, with respect to the 2012 LTRP.³⁹²

306. Since the approval of the 2012 LTRP, the LRMC used in the 2012 LTRP (\$84.94/MWh) has declined to \$56.61/MWh.³⁹³ As is discussed in more detail below in Part 5(E), this decline results predominantly from a decline in the market price for natural gas in British Columbia.³⁹⁴ This change in LRMC does not change the fact that the DSM Plan continues to be consistent with the 2012 LTRP. Nor, as suggested by the BC Sustainable Energy Association and Sierra Club British Columbia (**BCSEA**), does it suggest that the 2012 LTRP should be reconsidered by the Commission, as further explained below.³⁹⁵
307. The 2012 LTRP includes wholesale market purchases of both energy and capacity as required to meet gaps through 2020³⁹⁶ and therefore the wholesale market is a reasonable proxy for the Company's LRMC at this time.
308. Further, the proposed expenditures under the DSM Plan continue to be consistent with the methodology used in the 2012 LTRP, as well as the Commission's directives with respect to the 2012 LTRP.³⁹⁷ By way of example, in accordance with the methodology set out in the 2012 LTRP:³⁹⁸
- a. the DSM economic potential was determined at three different LRMC values, with the most appropriate value being selected for the DSM Plan;
 - b. the energy savings in the DSM Plan continue to be calculated by multiplying the economic achievable potential by the appropriate ramp rate; and

³⁹² Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, pp. 4.

³⁹³ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 4.

³⁹⁴ Ex. B-10 - FBC Response to CEC IR 1.6.2.

³⁹⁵ Ex. B-12 - FBC Response to BCSEA IR 1.12.11.

³⁹⁶ 2012-13 RRA Decision, p. 146.

³⁹⁷ Ex. B-12 - FBC Response to BCSEA IR 1.12.10.

³⁹⁸ Ex. B-12 - FBC Response to BCSEA IR 1.23.1.

- c. the expenditures in the DSM Plan are determined by multiplying plan savings by the requisite incentive plus the addition of program administration costs plus portfolio level expenditures.
309. Similarly, the proposed DSM Plan continues to achieve FBC's target of using DSM and other conservation measures to mitigate 50 percent of annual load growth. This 50 percent target was accepted by the Commission as part of the 2012 LTRP.³⁹⁹ With the reduced load forecast presented as part of the 2013-2018 process, the proposed DSM plan, in combination with the RCR, still achieves this target.⁴⁰⁰
310. The LTRP is intended to be a planning document, as its name suggests; it identifies the planned resource stack, but the actual resource stack can, and should, be modified as circumstances change.⁴⁰¹ While the 2012 LTRP provides some context to an application for approval of DSM expenditures, FBC is ultimately seeking approval under section 44.2 of the UCA of its DSM Plan. In doing so, the Company has provided the Commission with the best and most current information available to support its application, rather than relying on the now-dated LRMC provided in the 2012 LTRP.⁴⁰²
311. The DSM Plan remains consistent with the 2012 LTRP, and the change does not warrant a reconsideration of the 2012 LTRP.⁴⁰³ Even when the higher levels of DSM expenditures approved for 2012-13 are used, the changes in DSM expenditures do not constitute a substantial change in FBC's resource acquisition strategy, representing less than 1 percent of the total resource stack in the LTRP.⁴⁰⁴

³⁹⁹ 2012-13 RRA Decision, pp. 145, 147; Ex. B-24 – FBC Response to BCUC IR 2.100.1.

⁴⁰⁰ Ex. B-24 – FBC Response to BCUC IR 2.106.1.1.

⁴⁰¹ Ex. B-12 - FBC Response to BCSEA IR 1.12.7.

⁴⁰² Ex. B-12 - FBC Response to BCSEA IR 1.12.11.1.

⁴⁰³ Ex. B-12 - FBC Response to BCSEA IR 1.12.10 and 1.12.11.

⁴⁰⁴ Ex. B-12 - FBC Response to BCSEA IR 1.12.10.

312. The Company's 2016 Long-Term Resource Plan (the **2016 LTRP**) will include a full portfolio analysis, including DSM, to meet future load growth, and will update the LRMC at that time based on the results of that analysis.⁴⁰⁵

(b) Adequacy

313. The Commission has accepted that the 2012 LTRP is "in the interests of British Columbians who receive or may receive service from FortisBC" and "has adequately met the provisions for consideration laid out in subsection 44.1(8) of the Act".⁴⁰⁶
314. Under section 44.1(8)(c) of the UCA, in determining whether to approve a LTRP, the Commission must consider whether it "shows that the public utility intends to pursue adequate, cost-effective demand-side measures". A LTRP meets this criterion if it includes DSM that addresses specific issues related to low-income households, rental accommodations and educational programs for students.⁴⁰⁷
315. As is described in the DSM Plan, the DSM Plan was designed with this context in mind, and it includes programs that are mandated to meet the adequacy provisions of the DSM Regulation.⁴⁰⁸
316. While these adequacy provisions have already been found to be satisfied by the Commission with respect to the 2012 LTRP,⁴⁰⁹ FBC confirms its portfolio continues to be adequate and meets the requirements of 44.1(8)(c) of the UCA, as follows:

- a. Assist Low-Income Residents in Reducing Energy Consumption:

⁴⁰⁵ Ex. B-24 - FBC Response to BCUC IRs 2.99.1 and 2.99.2.

⁴⁰⁶ 2012-13 RRA Decision, p. 148.

⁴⁰⁷ DSM Regulation, s. 3.

⁴⁰⁸ Ex. B-1-1 - FBC Application Appendices, Attachment H1 - DSM Plan, p. 3.

⁴⁰⁹ 2012-13 RRA Decision, p. 148.

- i. FBC will continue to provide low-income households with Energy Savings Kits and to distribute them directly to qualified customers and to evaluate other complementary funding sources, where available, to cover enabling costs;
 - ii. more generally, in collaboration with the provincial government and other public utilities, the Company provides a direct installation program which includes the basic and some extended energy conservation measures. The Energy Conservation Assistance Program (**ECAP**) employs screening tools to determine what measures are appropriate and cost-effective for each application. It is expected that the measures will be primarily insulation of ceilings, basements and draft-proofing as well as ENERGY STAR lighting products and bathroom fans; and
 - iii. FBC will also continue a direct-install lighting program for common area lighting in qualified housing stock and will supply ENERGY STAR screw-in lighting products for in-suite installation.⁴¹⁰
- b. Improve Energy-Efficiency for Rental Accommodations:
- i. the Commercial Lighting and Building Improvement Program (**BIP**) is available which provides property managers and rental agencies with financial incentives to upgrade rental properties;
 - ii. in collaboration with other public utilities, FBC offers walk-through audits or third party Energy Assessments for multi-unit residential buildings; and
 - iii. through these programs, the Company identifies and recommends cost-effective measures such as insulation, heating equipment and energy efficient lighting.⁴¹¹

⁴¹⁰ Ex. B-1-1 - FBC Application Appendices, Attachment H1 - DSM Plan, pp 6-7.

c. Educational Programs for Students:

- i. the Company has long supported elementary, middle and high school energy conservation education initiatives through its financial sponsorship of educational events and programs, as well its delivery of curriculum approved longer-term educational programs through non-profit organizations. FBC intends to continue to build on these partnerships and to seek additional opportunities going forward.⁴¹²

d. Educational Programs for Post-Secondary Students:

- i. FBC supports energy efficiency training for post-secondary students and by providing guest lecturers upon request. Further, in conjunction with the FortisBC Energy Utilities (**FEU**), the Company has sponsored university and college focused “Do It in the Dark” and “Shut the Sash” programs.⁴¹³

317. FBC submits that the proposed DSM expenditures satisfy the adequacy requirements set out in the DSM Regulation.

(3) Sections 6 and 19 of the CEA

318. In determining whether to approve a DSM expenditure schedule as being in the public interest, the Commission will consider “the extent to which the schedule is consistent with the applicable requirements under sections 6 and 19 of the CEA”.⁴¹⁴

319. Section 6 of the CEA deals with electricity self-sufficiency and section 19 deals with clean or renewable resources. However, as FBC is not a “prescribed

⁴¹¹ Ex. B-1-1 - FBC Application Appendices, Attachment H1 - DSM Plan, p 7.

⁴¹² Ex. B-1-1 - FBC Application Appendices, Attachment H1 - DSM Plan, p 11.

⁴¹³ Ex. B-1-1 - FBC Application Appendices, Attachment H1 - DSM Plan, p 12.

⁴¹⁴ UCA, s. 44.2(5)(c).

public utility” under section 19 of the CEA, that section is not an applicable requirement for the Commission to consider.

320. Section 2(a) of the CEA lists achieving energy self-sufficiency as an energy objective in British Columbia, and accordingly, it is a consideration that FBC considers in its resource planning and as part of its design of the DSM Plan. As is described in the 2012 LTRP, over the long-term, FBC plans to become 100 percent self-sufficient.⁴¹⁵

321. While some Interveners have suggested that FBC has not achieved self-sufficiency, the specific requirement mandating self-sufficiency under section 6(2) of the CEA is applicable only to “the authority”, BC Hydro.⁴¹⁶ In contrast, the portion of section 6 applicable to FBC reads as follows:

6(4) A public utility, in planning in accordance with section 44.1 of the Utilities Commission Act for

(a) the construction or extension of generation facilities,
and

(b) energy purchases,

must consider British Columbia's energy objective to achieve electricity self-sufficiency.

322. Accordingly, FBC is required to consider BC’s energy objective of achieving electricity self-sufficiency in long-term resource planning in accordance with s. 44.1 of the UCA in two circumstances: construction or extension of generation facilities and energy purchase. DSM programs and expenditures do not fall under these circumstances and thus are not directly related to achieving self-sufficiency.⁴¹⁷

⁴¹⁵ Ex. B-21 - FBC Response to BCSEA IR 2.45.6.

⁴¹⁶ As described above, section 1 of the CEA defines “Authority” as having “the same meaning as in section 1 of the Hydro and Power Authority Act”, which in turn defines “Authority” as “the British Columbia Hydro and Power Authority”.

⁴¹⁷ Ex. B-12 - FBC Response to BCSEA IR 1.3.

323. As noted previously, BC Hydro is mandated by the CEA to achieve self-sufficiency. BCSEA has suggested that FBC could directly or indirectly contribute to BC Hydro meeting this mandate, by reducing through the use of DSM measures the amount of electricity BC Hydro must supply to it.⁴¹⁸
324. There is no requirement in the CEA that FBC must assist BC Hydro in meeting its mandate by reducing the energy it purchases from BC Hydro. In any event, reductions in FBC's customer load growth from DSM alone most likely will not directly or indirectly contribute to BC Hydro's self-sufficiency. This is as a result of the capacity limit and energy cap in place in the PPA between FBC and BC Hydro, which provides a limit on FBC's use of the PPA to meet any future FBC load growth. BC Hydro bases its long-term planning on this limit. Given the capacity cap, any increase in PPA purchases to meet FBC load growth would be in the shoulder or summer seasons, where BC Hydro currently has surplus resources. It is also expected that PPA will not be FBC's marginal resource.⁴¹⁹

(4) Cost-Effectiveness of Expenditures

325. As is required by section 44.2(5) of the UCA, the DSM expenditures proposed by FBC are cost-effective within the meaning of the DSM Regulation.⁴²⁰

(a) Portfolio-Level Analysis

326. Section 4(1) of the DSM Regulation stipulates that the Commission may compare the costs and benefits of (a) the DSM measure individually, (b) the DSM measure and other DSM measures in the portfolio, or (c) the portfolio as a whole, when determining cost-effectiveness. As in past proceedings, it is FBC's position that a portfolio-level analysis remains the appropriate level of cost-effectiveness testing.⁴²¹

⁴¹⁸ Ex. C8-6 - BCSEA IR to FBC 2.40.3.

⁴¹⁹ Ex. B-21 - FBC Response to BCSEA IR 2.40.3.

⁴²⁰ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 12.

⁴²¹ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 12.

327. In the 2012-13 RRA Decision, the Commission indicated that it had previously assessed FBC's DSM programming on a portfolio level, and elected to use this approach again.⁴²² For the following reasons, the portfolio approach remains the appropriate method for determining the cost-effectiveness of the DSM Plan:
- a. sections 4(4) and 4(5) of the DSM Regulation require the Commission to, at a minimum, use the portfolio approach in assessing the cost-effectiveness of certain specified demand-side measures and public awareness programs;⁴²³
 - b. the portfolio approach to cost effectiveness promotes FBC's goal of making DSM accessible to all customers;⁴²⁴ and
 - c. portfolio-level analysis provides the Company with the flexibility to include measures that are important, such as public-awareness, but with below unity Total Resource Cost (**TRC**) results and/or supporting initiatives.⁴²⁵

(b) TRC Test and mTRC Test

328. Section 4 of the DSM Regulation also provides the basis on which the cost-effectiveness of DSM programs is to be assessed by the Commission: the Total Resource Cost (as defined above, **TRC**) and the modified TRC (**mTRC**) Tests.
329. Section 4(1.1) of the DSM Regulation provides that "[t]he commission must make determinations of cost effectiveness by applying the total resource cost test...". The TRC Test is a ratio of the benefits of a DSM measure divided by the cost of the measure, including the utility's program costs.⁴²⁶ The benefits of a DSM measure are the present value of the measure's energy savings, over its

⁴²² 2012-13 RRA Decision, p. 136.

⁴²³ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, pp. 12-13.

⁴²⁴ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, pp. 12-13.

⁴²⁵ Ex. B-24 - FBC Response to BCUC IR 2.115.1.

⁴²⁶ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 13.

effective life, valued at the LRMC levelized price.⁴²⁷ The LRMC utilized in the TRC Test is discussed further in Part 5(E) below.

330. Pursuant to amendments made to the DSM Regulation in December 2011, cost-effectiveness may be determined with reference to a modified version of the TRC test (as previously defined, the **mTRC**) for up to 10 percent of the DSM portfolio budget. FBC manages its activities to stay within this 10 percent mTRC cap.⁴²⁸ Programs that pass the mTRC Test but not the TRC test are included in the mTRC portfolio. If the mTRC portfolio exceeds 10 percent of the DSM budget, only the programs with better TRC ratios are included in the mTRC portfolio to fit within the mTRC threshold.⁴²⁹
331. The mTRC Test modifies the TRC Test to include a consideration of the added benefits of the use of clean or renewable resources in British Columbia and Non-Energy Benefits (**NEB**) to the utility and customers.⁴³⁰
332. More specifically, section 4(1.1)(b) of the DSM Regulation requires FBC to incorporate the provincial energy price for clean or renewable resources into its mTRC calculation.⁴³¹ This energy price was defined in the 2012-13 RRA as being BC Hydro's LRMC of acquiring energy from clean or renewable resources.⁴³² This may be contrasted with the TRC Test, where FBC uses a market price forecast for energy for the remaining 90 percent of its measures.⁴³³
333. The second inclusion in the mTRC Test is an amount for NEBs to the utility and customers, under section 4(1.1)(c) of the DSM Regulation, the amount of which may be determined by the Commission or may be deemed to be 15 percent of

⁴²⁷ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 13.

⁴²⁸ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 13.

⁴²⁹ Ex. B-21 - FBC Response to BCSEA IR 2.57.2.

⁴³⁰ DSM Regulation, s. 4(1.1)(b) and (c).

⁴³¹ Ex. B-24 – FBC Response to BCUC IR 2.101.2.2.

⁴³² Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 14.

⁴³³ Ex. B-24 - FBC Response to BCUC IR 2.101.2.2.

the benefits of the expenditure portfolio.⁴³⁴ In performing its mTRC calculations for the DSM Plan, FBC has incorporated the deemed 15 percent NEB adder, which increases the “benefits side” of the mTRC calculation for the 10 percent of the Company’s DSM portfolio budget determined by way of the mTRC calculation.⁴³⁵

334. As is demonstrated below, the proposed DSM Plan passes the tests required by the currently-approved approach for determining cost-effectiveness:⁴³⁶

Table H1-1a: 2014-18 DSM Plan Expenditures

<u>Program Area</u>	Plan Cost	<u>2014</u>		Plan Cost	Plan Cost	Plan Cost	Plan Cost
		TRC	TRC incl				
		B/C	mTRC				
		ratio	B/C				
		ratio	ratio				
<u>Programs by Sector</u>	<u>\$(000s)</u>	<u>ratio</u>	<u>ratio</u>	<u>\$(000s)</u>	<u>\$(000s)</u>	<u>\$(000s)</u>	<u>\$(000s)</u>
Residential	1,037	1.2	1.3	1,081	1,008	1,015	1,024
General Service	1,134	1.4	1.7	1,166	1,195	1,223	1,256
Industrial	148	2.8	2.8	150	152	154	156
Sub-total Programs:	2,319	1.4	1.5	2,397	2,355	2,392	2,436
Supporting Initiatives	190			190	190	190	190
Planning & Evaluation	492	-	-	500	509	518	527
Total (incl. Portfolio spend):	3,001	1.2	1.4	3,087	3,054	3,100	3,153

335. Accordingly, the DSM Plan satisfies section 44.2(5) of the UCA, as the expenditures are cost-effective within the meaning of the DSM Regulation.

(5) Interests of Persons in British Columbia

336. Finally, section 44.2(5) of the UCA allows the Commission to consider “the interests of persons in British Columbia who receive or may receive service from the public utility”. This section allows the Commission to consider other relevant factors that may affect ratepayers. FBC submits that the proposed DSM expenditure is in the best interests of ratepayers in British Columbia. Further, consistent with the interests of ratepayers, one of the Company’s key

⁴³⁴ DSM Regulation, s. 4(1.1)(c)(ii)(A).

⁴³⁵ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 14.

⁴³⁶ Ex. B-1-1 - FBC Application Appendices, Attachment H1 - DSM Plan, p. 4.

guiding principles in designing its DSM Plan was to ensure that a range of DSM measures were available to the majority of its customers.⁴³⁷

(6) Summary

337. For all the reasons set out in these FBC Non-PBR Submissions, FBC submits that the DSM Plan is in the public interest, and that the Commission should approve the proposed expenditure schedule under section 44.2(2) of the UCA.

E. Long-Run Marginal Cost

(1) LRMC as a Proxy for Avoided Costs

338. As previously described, the TRC Test and the mTRC Test are ratios used to assess the cost-effectiveness of a DSM portfolio. These ratios compare the benefits (or the “avoided costs”) that FBC receives as a result of the DSM measures with the costs of the measure (including the overall DSM program costs).⁴³⁸ To measure the benefits received from a DSM measure, the present value of the measure’s energy savings, over its effective life, is valued at the LRMC levelized price.⁴³⁹
339. For the reasons set out in this section, FBC believes that the LRMC of market purchases is the price that best reflects the Company’s avoided cost, making it the appropriate value to utilize in its cost-effectiveness assessment. The LRMC has been used by FBC in previous applications as a proxy for avoided costs,⁴⁴⁰ and in the 2012-13 RRA Decision, the Commission implicitly accepted the use of a market-based LRMC as the avoided cost of DSM.⁴⁴¹ Further, as FBC does

⁴³⁷ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 11.

⁴³⁸ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 13.

⁴³⁹ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 13.

⁴⁴⁰ Ex. B-7 - FBC Response to BCUC IRs 1.242.1 – 1.242-4.

⁴⁴¹ Ex. B-24 - FBC Response to BCUC IR 2.98.2.

not currently have a need to acquire or build generation resources, a market-base number is an appropriate indicator of LRMC.⁴⁴²

340. While both the TRC Test and the mTRC Test incorporate LRMC as a proxy for avoided cost, the calculation of LRMC varies between the two tests. This is due to section 4(1.1) of the DSM Regulation, which allows the Commission to determine the amount it is satisfied represents LRMC of acquiring electricity generated from British Columbia clean or renewable resources for the mTRC Test.⁴⁴³ Accordingly, the LRMC used in the mTRC Test is based upon the price of acquiring only these clean or renewable energy resources.⁴⁴⁴
341. In the 2012-13 RRA, the LRMC for mTRC purposes was defined as being BC Hydro's LRMC of acquiring energy from clean or renewable resources.⁴⁴⁵ At the time, BC Hydro had a LRMC for clean energy of \$112/MWh.⁴⁴⁶ With the addition of a Deferred Capital Expenditure (**DCE**) factor of \$35.60/KW-year, this figure has continued to be used to calculate mTRC in the present Application.⁴⁴⁷
342. In contrast, the LRMC incorporated in the TRC Test (as well as the Utility Cost Test, discussed below in the Part 5(G)(2) on Other Tests) represents a market price forecast for energy.⁴⁴⁸ This LRMC is calculated based on forecast annual average Mid-Columbia (**Mid-C**) market pricing, plus Bonneville Power Administration (**BPA**) wheeling and losses to deliver it to the BC/US border.⁴⁴⁹ This methodology looks to the benefits received as a result of avoided supply

⁴⁴² Ex. B-50 - FBC Response to BCUC Rebuttal IR 1.2.4.

⁴⁴³ Ex. B-7 - FBC Response to BCUC IR 1.238.1 (emphasis added).

⁴⁴⁴ Ex. B-7 - FBC Response to BCUC IR 1.238.3.

⁴⁴⁵ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 14.

⁴⁴⁶ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 14.

⁴⁴⁷ Ex. B-24 - FBC Response to BCUC IR 2.103.2. The DCE Factor was emitted from the original mTRC calculation as an oversight. When included, the total portfolio level of mTRC is increased from the filed amount of 1.39 (without DCE) to 1.42. This does not affect the proposed DSM Portfolio.

⁴⁴⁸ Ex. B-24 - FBC Response to BCUC IR 2.101.2.2.

⁴⁴⁹ Ex. B-12 - FBC Response to BCSEA IR 1.3.1.

costs, which is the reduction in transmission, distribution, generation, and capacity costs, valued at marginal cost.⁴⁵⁰

343. The methodology used by FBC to determine LRMC for the TRC Test is consistent with the California Standard Practice Model: Economic Analysis of Demand-Side Programs and Projects, with some adaptation to account for FBC's specific circumstances,⁴⁵¹ as well as with the approach used in the 2012-13 RRA.⁴⁵²

(2) Effect of LRMC on DSM Expenditures

344. The predominant reason for the reduction in the proposed expenditures under the DSM Plan, as compared to FBC's previously approved expenditure levels, is a decline in LRMC.
345. When the 2012 LTRP was prepared and approved, it was predicated on a levelized market price for electricity of \$84.94/MWh (the **2012 LRMC**). As with the presently proposed LRMC, the 2012 LRMC was a levelization of the 30-year FBC's British Columbia Wholesale Market Energy Price Curve, calculated using a 8 percent nominal discount rate and assuming 2.1 percent per annum inflation. FBC retained Midgard Consulting Inc. (**Midgard**) to prepare this assessment.
346. Since the 2012 LTRP, the market price for natural gas has remained lower than expected, as a result of market developments across North America and momentum behind carbon regulation and legislation slowing. To determine the effects that this had on the 2012 LRMC, FBC again retained Midgard to prepare an independent price forecast in June 2013, and to update the Wholesale Market Energy Price Curve using natural gas price forecasts from GLJ Petroleum Consultants (**GLJ**) in January 2013.⁴⁵³

⁴⁵⁰ Ex. B-7 - FBC Response to BCUC IR 1.238.1.

⁴⁵¹ Ex. B-7 - FBC Response to BCUC IRs 1.238.1 and 1.238.2.1.

⁴⁵² Ex. B-12 - FBC Response to BCSEA IRs 1.12.7 and 1.12.10.

⁴⁵³ Ex. B-10 - FBC Response to CEC IR 1.6.2.

347. This update has resulted in the reduced levelized price of \$56.61/MWh, which is used to calculate the cost-effectiveness of the currently proposed DSM Plan. As a result, the number and breadth of DSM measures and programs that pass the TRC Test have also declined commensurate with the lower LRMC.⁴⁵⁴
348. In this proceeding, the BCSEA filed as Exhibit C8-9 the Direct Testimony of Mr. John Plunkett and Mr. Paul Chernick of Green Energy Economics Group, Inc. (the **GEEG Evidence**).⁴⁵⁵ In the GEEG Evidence, the authors question Midgard's estimated LRMC, on the basis that it is not a "true" LRMC, but rather only an estimate of a series of short-run marginal energy costs.⁴⁵⁶ However, FBC's LRMC of market purchases is not a short-run market price estimate, but rather it is based on a 30 year forecast of market prices delivered to British Columbia.⁴⁵⁷

(3) Specific LRMC Issues

(a) *The Mid-Columbia Trading Hub*

349. LRMC is calculated based on a forecast of the future electricity prices in British Columbia. While there is not a formal trading hub within British Columbia that may be utilized to estimate the LRMC of electricity, a transparent and liquid market exists in a neighbouring jurisdiction at the Mid-Columbia (as defined above, **Mid-C**) trading hub.⁴⁵⁸
350. While FBC does not transact directly at Mid-C, when the Mid-C prices are adjusted to account for the costs of moving the electricity into British Columbia, they represent an appropriate proxy for FBC's various market purchases.⁴⁵⁹

⁴⁵⁴ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 4.

⁴⁵⁵ Ex. C8-9 – GEEG Evidence.

⁴⁵⁶ Ex. C8-9 – GEEG Evidence, p. 59.

⁴⁵⁷ Ex. B-24 - FBC Response to BCUC IR 2.8.3.

⁴⁵⁸ Ex. B-1-1 - FBC Application Appendices, Attachment H4 - Midgard Memorandum, p. 1.

⁴⁵⁹ Ex. B-1-1 - FBC Application Appendices, Attachment H4 - Midgard Memorandum, p. 2; Ex. B-7 - FBC Response to BCUC IRs 1.238.2.1 and 1.240.4.1.

351. This reliability as a proxy comes from the fact that Mid-C trading hub represents the wholesale market for the Pacific Northwest. It is the third largest electricity trading point in the United States and second largest in the WECC region.⁴⁶⁰ In contrast, the wholesale electricity market in British Columbia has a limited number of buyers and sellers. This results in the Province's wholesale market pricing being essentially equal the wholesale prices at the much larger, Mid-C Market, once an adjustment is made to take into account the costs of moving electricity into British Columbia.⁴⁶¹
352. Accordingly, in the absence of a formal trading hub within British Columbia, the future electricity prices in British Columbia may be accurately forecast based on the Mid-C price of electricity, plus the costs of having that electricity delivered to the British Columbia border.⁴⁶²

(b) Firm vs. Non-Firm Resources

353. In the GEEG Evidence, the authors suggest that the use of the Mid-C spot supply pricing in the LRMC is inappropriate, as Mid-C pricing is generally non-firm until the day before delivery, when the price is fixed.⁴⁶³ The authors suggest that the use of non-firm market purchases cannot be a reliable proxy for reductions in firm load.⁴⁶⁴
354. However, this suggestion ignores the fact that market purchases may be short-term, or they may be locked in for a longer term. Typically, market purchases are firm when they are contracted.⁴⁶⁵ Additionally, this suggestion does not address the fact that more than 99 percent of FBC's market purchases in 2010-2012 were short-term supplies of firm power.⁴⁶⁶ Further, while the authors

⁴⁶⁰ Ex. B-7 - FBC Response to BCUC IR No. 1.240.1.

⁴⁶¹ Ex. B-12 - FBC Response to BCSEA IR 1.8.3.

⁴⁶² Ex. B-1-1 - FBC Application Appendices, Attachment H4 – Midgard Memorandum, p. 1.

⁴⁶³ Ex. C8-9 – GEEG Evidence, p.65.

⁴⁶⁴ Ex. C8-9 – GEEG Evidence, p. 60.

⁴⁶⁵ Ex. B-42 - Rebuttal of FBC to BCSEA, p. 3.

⁴⁶⁶ Ex. B-21 - FBC Response to BCSEA IR 2.51.1.

suggest “increasing the non-firm spot market price to reflect firm supply”,⁴⁶⁷ this does not consider the fact that for longer-term purchases, in addition to offering fixed prices, power marketers are willing to offer an option of having longer-term market purchases indexed to prices at the Mid-C hub. Doing this reduces their risk, without the necessity of adding a risk premium.⁴⁶⁸

355. Further, the authors of the GEEG Evidence have not taken into account the fact that a nuanced approach is needed when considering whether DSM is firm or not; some is and some is not. Overall, while broad-based DSM programs will return reliable energy savings over time, traditional DSM measures are a non-firm resource, and cannot be shaped or dispatched.⁴⁶⁹

(c) Using Market Purchases as a Proxy

356. While the authors of the GEEG Evidence suggest that using market purchases is not a reliable proxy for LRMC,⁴⁷⁰ this suggestion does not take into account the specific circumstances in which FBC operates.
357. FBC is in a favorable geographic location, with direct transmission access to the US, is directly interconnected to the BC Hydro system (which has large hydro storage dams and is forecasting an energy surplus through at least F2021), and has indirect access to the Alberta system. Almost all of FBC’s required supply of energy and capacity is available under long-term contracts or owned generation. FBC’s existing contracts, as well as short term capacity and energy blocks that firm up and supplement FBC’s own resources, allows FBC to manage risks created by Mid-C.⁴⁷¹
358. Relying on the spot market to meet long-term load carries an element of risk; however, in the short to medium time frame the risk is manageable. The most

⁴⁶⁷ Ex. C8-9 – GEEG Evidence, p. 84.

⁴⁶⁸ Ex. B-42 - Rebuttal of FBC to BCSEA, p. 3.

⁴⁶⁹ Ex B-7 - FBC Response to BCUC IR 1.241.2.1.1.

⁴⁷⁰ Ex. C8-9 – GEEG Evidence, p. 66.

⁴⁷¹ Ex. B-24 - FBC Response to BCUC IRs 2.99.2 and 2.103.3; Ex. B-50 - FBC Response to BCUC Rebuttal IR 1.2.5.

appropriate resources to meet FBC's long-term load will be re-examined in the 2016 LTRP.⁴⁷²

(d) *Alleged Understatement of FBC's LRMC*

359. The authors of the GEEG Evidence also suggest that the LRMC forecast by Midgard contains an understatement of the avoided T&D. They estimate load-growth incremental costs of \$233/kW-year, compared to \$35/kWh-year figures used by FBC.⁴⁷³
360. However, FBC does not agree with the \$233/kW-year figure advanced by the authors of the GEEG Evidence. That figure is clearly an outlier when it is compared with the load-growth incremental costs of other utilities.⁴⁷⁴ In contrast to the figure in the GEEG Evidence, the Northwest Power and Planning Council reviewed a range of avoided transmission and distribution costs for utilities, and recommended a value of \$23/kW-yr as being representative of avoided transmission system expansion cost and \$25/kW-yr as representative of avoided cost of distribution system expansion. This recommended value much more closely accords with FBC's estimate of \$35/kW-yr, rather than the authors' estimate of \$233/kW-year.⁴⁷⁵

F. Collaboration with Other Utilities & Government

361. In the 2012-13 RRA Decision, the Commission encouraged FBC to continue to make efforts to integrate and collaborate amongst other utilities.⁴⁷⁶
362. Correspondingly, where possible, FBC does collaborate with both FEU and BC Hydro with respect to the DSM measures it pursues to ensure that its customers have the same opportunities as those in other service areas. A good example

⁴⁷² Ex. B-7 – FBC Response to BCUC IR 1.243.2; Ex. B-24 - FBC Response to BCUC IR 2.99.2.

⁴⁷³ Ex. C8-9 – GEEG Evidence, p. 74.

⁴⁷⁴ Ex. B-42 - Rebuttal of FBC to BCSEA, p. 4.

⁴⁷⁵ Ex. B-42 - Rebuttal of FBC to BCSEA, p. 5.

⁴⁷⁶ 2012-13 RRA Decision, p. 141.

of this collaboration is the ENERGY STAR appliance program.⁴⁷⁷ FBC plans to continue to collaborate with FEU and BC Hydro, as well as with the government whenever appropriate to design and promote DSM programs.⁴⁷⁸

363. While there is no requirement in UCA or the DSM Regulation for FBC to fully integrate its DSM programs with FEI, or for FBC to assess cost-effectiveness as a combination between the two companies, FBC has been, and will continue to, work towards the full integration of marketing and process of program offers for the customer-facing components of program officers.

G. Intervenors Proposed Changes to DSM Expenditures

(1) Increasing DSM Spending Level

364. The Company believes that the expenditure schedule that it has included as part of its Application represents an appropriate level of DSM spending.⁴⁷⁹ While the proposed level of expenditures is lower than in recent years due to the reduced LRMC, the proposed DSM Plan continues to represent a significant expenditure, and is greater than FBC's expenditure level in 2008 and all prior years.⁴⁸⁰
365. Further, FBC considered the cost-effectiveness of continuing at the approximate levels of expenditures previously approved and determined it was not viable for FBC. Not only did a number of individual DSM measures fail the TRC Test, but the residential portfolio as a whole also would fail the TRC Test.⁴⁸¹
366. Some of the Intervenors have suggested that FBC should increase its DSM expenditures beyond the levels that FBC has proposed. However, such an

⁴⁷⁷ Ex. B-24 - FBC Response to BCUC IR 2.107.3.

⁴⁷⁸ Ex. B-1-1 - FBC Application Appendices, Attachment H1 - DSM Plan, p. 13.

⁴⁷⁹ Ex. B-10 - FBC Response to CEC IR 1.6.3.

⁴⁸⁰ Ex. B-24 - FBC Response to BCUC IR 2.110.2.2.

⁴⁸¹ Ex. B-12 - FBC Response to BCSEA IR 1.21.1.

increase would not represent the appropriate level of spending, is not supported by the UCA and the DSM Regulation and would have negative consequences.

367. In this regard, while the authors of the GEEG Evidence acknowledge that cost-effectiveness is “generally determined by the total resource cost test, subject to certain modifications in the DSM Regulation” they suggest that this imposes a requirement on FBC “to pursue all cost-effective energy efficiency and conservation measures”.⁴⁸² Similarly, the authors suggest that FBC should plan to acquire all DSM resources available for less than the long-run marginal cost of avoided supply.⁴⁸³
368. As was described above in the Legal Basis section in Part 5(D), this does not accurately describe the legal framework set out in the UCA and the DSM Regulation. This framework only requires the Commission to determine if the expenditures are in the public interest by considering if the proposed expenditures are cost-effective under the DSM Regulation. There is no requirement that all cost-effective expenditures must be made.
369. In determining its DSM expenditure schedule, the Company generally pursues all cost-effective measures.⁴⁸⁴ However, in certain cases FBC has opted not to pursue a cost-effective DSM measure. This decision could relate to a number of factors that may inhibit the effectiveness of the particular measure, including the complexity of delivering a program, low program uptake based on previous experience, the fact that use of efficient equipment is already the norm, or high levels of free ridership in certain market segments.⁴⁸⁵
370. Further, the suggestion in the GEEG Evidence ignores the fact that not all conservation efforts need to be addressed through the use of DSM programs. Conservation measures may be achieved through the use of other

⁴⁸² Ex. C8-9 – GEEG Evidence, p. 11.

⁴⁸³ Ex. C8-9 – GEEG Evidence, p. 10.

⁴⁸⁴ Ex. B-49 - FBC Response to BCSEA Rebuttal IR 1.12.3.

⁴⁸⁵ Ex. B-49 - FBC Response to BCSEA Rebuttal IR 1.13.2.

mechanisms, including conservation rates and Customer Information Portal (Energy Analytics).⁴⁸⁶ Additionally, some conservation measures are better suited for introduction in a Codes and Standards approach, for example when appliances are regulated to consume less than a set wattage of power.⁴⁸⁷

371. The authors of the GEEG Evidence also suggest that FBC may cost-effectively double its achievement of DSM savings, when compared to the 2012-13 DSM Plan, and that FBC should follow industry best-practices in targeting 2 percent total retail energy sales.⁴⁸⁸
372. The proposal in the GEEG Evidence would result in negative load growth for FBC, as a result of the reduced load forecast presented in the Application. As shown in the following table, a 2 percent energy savings in the GEEG Evidence would be higher than the load forecast during the PBR Period:⁴⁸⁹

	Before-Savings	
	GWh fcst	% Increase
2013	3520	
2014	3570	1.4%
2015	3607	1.0%
2016	3642	1.0%
2017	3675	0.9%
2018	3715	1.1%

373. The 2012 LTRP includes wholesale market purchases of both energy and capacity as required to meet gaps through 2020 and therefore the Wholesale market is a reasonable proxy for the Company's LRMC at this time. Instead, the proposed DSM Plan continues to achieve FBC's target of using DSM and conservation measures to mitigate 50 percent of annual load growth. This 50

⁴⁸⁶ Ex. B-49 - FBC Response to BCSEA Rebuttal IR 1.12.3.

⁴⁸⁷ Ex. B-49 - FBC Response to BCUC Rebuttal IR 1.12.3.

⁴⁸⁸ Ex. C8-9 – GEEG Evidence, p. 50.

⁴⁸⁹ Ex. B-1 – FBC Application, p. 80.

percent target was accepted by the Commission as part of the 2012 LTRP.⁴⁹⁰ With the reduced load forecast presented as part of the 2013-2018 process, the proposed DSM plan still achieves this target.⁴⁹¹

(2) Other Tests to Assess Cost Effectiveness

374. While the DSM Plan is being put forward on the basis of the TRC and mTRC cost-effectiveness tests, as is required by the DSM Regulation, FBC considers that it is useful to calculate and monitor other cost-effectiveness tests.⁴⁹² Accordingly, the Company has reported on a range of cost-effectiveness tests in its DSM semi-annual reports, including the Ratepayer Impact Measure (**RIM**), the Utility Cost Test (**UCT**) and the Participant Cost Test (**PCT**).⁴⁹³
375. Considering these additional tests is consistent with the California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, as well as with FBC's past practices.⁴⁹⁴
376. Ultimately, it must be remembered that these measures should not be used to determine whether a program is implemented or not.⁴⁹⁵

(a) RIM Test

377. One of the tests considered by FBC when designing a DSM portfolio is the RIM Test,⁴⁹⁶ which quantifies the impacts on rates from changing utility revenues and operating costs. It does this by comparing the utility's avoided costs and revenue gains with the cost of administering the DSM program plus lost revenue from reductions in customer energy consumption.⁴⁹⁷

⁴⁹⁰ 2012-13 RRA Decision, pp. 145, 147.; Ex. B-24 – FBC Response to BCUC IR 2.100.1.

⁴⁹¹ Ex. B-24 – FBC Response to BCUC IR 2.106.1.1.

⁴⁹² Ex. B-7 - FBC Response to BCUC IR 1.236.3.1.

⁴⁹³ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 14.

⁴⁹⁴ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 14.

⁴⁹⁵ Ex. B-7 - FBC Response to BCUC IR 1.236.3.1.

⁴⁹⁶ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 14.

⁴⁹⁷ Ex. B-7 – Attachment 248.2, Appendix B, p. 86.

378. The authors of the GEEG Evidence suggest that while FBC did not use the RIM test “*per se*” to design the DSM Plan, it selected a LRMC for the TRC Test on the basis of rate impact. They suggest that FBC should not screen DSM measures on the basis of adverse rate impact, and without recognizing corresponding bill impacts.⁴⁹⁸
379. FBC agrees with the suggestion in the GEEG Evidence that one of the risks of increasing DSM expenditures to expand the DSM program is rate impact and that the Company is concerned about the rate impact resulting from DSM programs and continues to manage the PowerSense program in a fiscally prudent manner. However, the authors of the GEEG Evidence do not take into account the fact that FBC has repeatedly indicated that it does not screen DSM measures on the basis of rate impact and that while rate impacts to customers are important, they are a secondary consideration to the cost-effectiveness test prescribed in the DSM Regulation.⁴⁹⁹
380. Further, FBC has not ignored any corresponding bill impact related to adverse rate impacts. Rates reflect themselves in bills. In the short term a favourable bill impact from DSM would only be obtained by those participating in the DSM measure.
381. While FBC is not able to precisely count the number of participants in DSM programs, it estimates that there are 14,000 participants, and therefore roughly 148,000 non-participants.⁵⁰⁰ Accordingly, given that non-participants make up an estimated 91.4 percent of customers, they should not be ignored in determining the appropriate level of DSM spending.
382. If previously approved DSM levels were maintained, as suggested in the GEEG Evidence, rates would be 2.2 percent higher over the PBR Period,⁵⁰¹ with the

⁴⁹⁸ Ex. C8-9 – GEEG Evidence, p. 45.

⁴⁹⁹ Ex. B-21 - FBC Response to BCSEA IR 2.66.3.

⁵⁰⁰ Ex. B-21 - FBC Response to BCSEA IR 2.68.2.

⁵⁰¹ Ex. B-21 - FBC Response to BCSEA IR 2.66.2.

proposed lower expenditure resulting in lower customer rates of -0.2 percent to -0.5 percent annually.⁵⁰²

(b) UCT

383. The UCT is another test that was considered by FBC in designing its DSM Plan, and that FBC has reported on in the Application.⁵⁰³ The UCT is a measure of the change in total costs to the utility as a result of a DSM program.⁵⁰⁴
384. As was discussed above, the DSM Plan was developed in the context of the legal framework set out by the UCA and the DSM Regulation, and it was designed to be cost-effective according to the currently approved approach to determining cost-effectiveness.⁵⁰⁵ This determination of cost-effectiveness was made on the basis of the TRC Test and the mTRC Test. The DSM Regulation requires the use of these measures rather than the UCT proposed by the GEEG Evidence. Further, the authors of the GEEG Evidence have acknowledged that the DSM Regulation does not indicate a requirement, nor a preference, that DSM Programs pass the UCT.⁵⁰⁶

(c) PCT

385. Finally, the PCT is another test that the Company has reported on and considered in designing its DSM Portfolio.⁵⁰⁷ While the DSM Plan is being put forward on the basis of the TRC and mTRC cost-effectiveness tests, as is required by the DSM Regulation,⁵⁰⁸ the PCT provides useful information when considering the relative impact of the DSM measures on various customer classes, as is described below.

⁵⁰² Ex. B-12 - FBC Response to BCSEA IR 1.17.1.

⁵⁰³ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 14; Ex. B-1-1 - FBC Application Appendices, Attachment H1 - DSM Plan, p. 14.

⁵⁰⁴ Ex. B-7 – Attachment 248.2, Appendix B, p. 86.

⁵⁰⁵ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 12; Ex. B-1-1 - FBC Application Appendices, Attachment H1 - DSM Plan, p. 3.

⁵⁰⁶ Ex. C8-14 - BCSEA Response to BCUC IR 1.1.2.

⁵⁰⁷ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 14.

⁵⁰⁸ Ex. B-7 - FBC Response to BCUC IR 1.236.3.1.

386. The GEEG Evidence also suggests that FBC should rebalance its portfolio within and between sectors and market segments to increase net benefits by shifting expenditures towards those more cost-effective saving sources.⁵⁰⁹
387. This suggestion overlooks the difficulties that may arise as a result of increasing DSM expenditures in the Commercial/Industrial sectors relative to Residential customers. Rather than having the objective of maximizing TRC outright, the Company's DSM programs target its customers in each class to give all customers the opportunity to participate in the program.⁵¹⁰
388. In establishing customer incentives, FBC looks at a number of factors, including the customer payback periods, the take-up rate of customers, the relative size of the incentive compared to other customer classes within FBC, and the relative size of the incentive externally.⁵¹¹ Expanding DSM expenditures in the Commercial/Industrial sectors is inconsistent with meeting these objectives.⁵¹²
389. The FBC Commercial/Industrial programs have higher PCT ratios than the Residential programs, meaning that where everything else is held equal, the payback is faster for Commercial/Industrial customers as compared to Residential customers. Based on FBC's considerations in establishing incentives, this disparity is a basis for concern in increasing incentives for Commercial/Industrial customers.⁵¹³ These relatively higher PCT ratios for Commercial/Industrial customers as compared to Residential customers indicate that there is a strong economic signal for Commercial/Industrial customers to themselves invest in DSM programs.⁵¹⁴
390. Further, while higher incentives for Commercial/Industrial customers will not generally impact the results of FBC's predominant measure of cost-

⁵⁰⁹ Ex. C8-9 – GEEG Evidence, p. 44.

⁵¹⁰ Ex. B-49 - FBC Response to BCSEA Rebuttal IR 1.12.4.

⁵¹¹ Ex. B-42 - Rebuttal of FBC to BCSEA, p. 1.

⁵¹² Ex. B-50 - FBC Response to BCUC Rebuttal IR 1.3.2.

⁵¹³ Ex. B-42 - Rebuttal of FBC to BCSEA, p. 1.

⁵¹⁴ Ex. B-50 - FBC Response to BCUC Rebuttal IR 1.2.1.

effectiveness (the TRC/mTRC tests), it will have a negative impact on the UCT.⁵¹⁵

(d) Savings as Percentage of Sales

391. The GEEG Evidence also looks to the metric of FBC's DSM savings as a percentage of its sales, in noting that FBC previously achieved 0.9 percent of its sales in energy savings, while it now only has 0.5 percent.⁵¹⁶ This reference to "Savings as a Percentage of Sales" is not a metric that governs DSM program targets, or a metric that FBC used in determining the budget for its DSM Plan.⁵¹⁷
392. Instead, FBC looks to a target of using DSM and conservation measures to mitigate 50 percent of annual load growth, which was accepted by the Commission as part of the 2012 LTRP.⁵¹⁸ This is consistent with the methodology of the DSM target placed on BC Hydro by the CEA, to reduce its expected increase in demand for electricity.⁵¹⁹ FBC believes it will offset more than 50 percent of load growth through its conservation measures.⁵²⁰

H. The Treatment of DSM Expenditures

(1) Amortization Period

393. In conjunction with the DSM Plan, FBC seeks approval to increase its amortization period from 10 years to 15 years for past and future DSM expenditures.⁵²¹
394. A 15 year amortization period is consistent with the measure life of 15.9 years, which was determined based on FBC's own programs set out in the DSM

⁵¹⁵ Ex. B-50 - FBC Response to BCUC Rebuttal IR 1.1.1.

⁵¹⁶ Ex. C8-9 – GEEG Evidence, p. 41.

⁵¹⁷ Ex. B-50 - FBC Response to BCUC Rebuttal IR 1.6.2.

⁵¹⁸ 2012-13 RRA Decision, pp. 145, 147; Ex. B-24 – FBC Response to BCUC IR 2.100.1.

⁵¹⁹ CEA, s. 2.

⁵²⁰ Ex. B-24 - FBC Response to BCUC IR 2.106.1.1.

⁵²¹ Ex. B-24 - FBC Response to BCUC IR 2.97.2.

Plan.⁵²² Ratepayers benefit when there is an appropriate temporal matching of costs with benefits. A shorter amortization period results in costs being incurred (amortized) over a shorter time frame than the benefits (largely power purchase costs) are realized.⁵²³

395. If approved, this longer amortization period will provide customers will steady and manageable rate increases, while providing FBC with the opportunity to continue to request DSM funding envelopes that will adequately support customer energy efficiency needs.⁵²⁴ Further, the cumulative rate reduction associated with approving a longer amortization period is approximately 0.4 percent.⁵²⁵
396. The proposed amortization period is also consistent with the Provincial Government's Special Direction to the Commission authorizing BC Hydro to increase its amortization period to 15 years, which was implemented by the Commission.⁵²⁶

I. Monitoring & Evaluation

(1) The Proposal

397. Evaluation, Measurement & Verification (**EM&V**) is an important aspect of the DSM Plan proposed by FBC. EM&V is an encompassing term that is used to describe measurement, verification, monitoring and evaluation activities.⁵²⁷
398. Pursuant to EM&V, the Company will evaluate all programs with comprehensive, impact, process and/or market reviews at appropriate times in the program life cycle.⁵²⁸ Briefly, the activities undertaken as part of Evaluation

⁵²² Ex. B-24 - FBC Response to BCUC IR 2.97.8.

⁵²³ Ex. B-24 - FBC Response to BCUC IR 2.97.9.

⁵²⁴ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 19.

⁵²⁵ Ex. B-10 - FBC Response to CEC IR 1.9.3.

⁵²⁶ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 18.

⁵²⁷ Ex. B-7 - FBC Response to BCUC IR 1.234.2.

⁵²⁸ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 16.

and as part of Measurement & Verification (**M&V**) may be summarized as follows:⁵²⁹

Evaluation, Measurement and Verification (EM&V)	Activities	Personnel responsible for activities	Rationale
Evaluation	Applied at the program level: - impact, process, and market reviews of programs, - examine projects approved under a DSM program over the program's study interval (typically two to three years).	Monitoring & Evaluation Analyst and/or consultants	These personnel are responsible for evaluation of programs.
Measurement & Verification (M&V)	Applied at the project level: - determine actual savings associated with individual projects that are submitted by customers for incentive consideration.	PowerSense Engineer, FBC technical advisors, consultants, and/or equipment vendors	These personnel are responsible for determining savings associated with DSM projects.

399. There are three key aspects of the Company's EM&V activities: the three-year Monitoring and Evaluation plan (the **M&E Plan**), the EM&V framework, and the attribution rules for claiming energy savings from multi-utility programs.

(a) M&E Plan

400. The M&E Plan ensures that the DSM program expenditures will yield the savings expected and that the programs are operating effectively, and includes evaluations for process, impact and communication, as well as measurement and verification of activities for current and planned DSM programs.⁵³⁰
401. The M&E Plan is a three-year plan, ending in 2015. This term reflects past practice to incorporate a complete M&E program cycle of three years. Prior to 2015 year-end, a subsequent plan will be prepared to cover the 2016-2018 period (the **2016-18 M&E Plan**) and will be filed in advance of the PBR Plan

⁵²⁹ Ex. B-7 - FBC Response to BCUC IR 1.234.2.

⁵³⁰ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 16.

Annual Review. Like the M&E Plan, the 2016-18 M&E Plan will comply with the EM&V Framework, with the addition of any revisions made thereto.⁵³¹

(b) EM&V Plan

402. Additionally, in its April 12, 2012 decision in the FEU 2012-13 revenue requirements application, the Commission recognized the benefit of establishing an EM&V Framework and directed FEU to develop one.
403. FBC worked in conjunction with FEU to develop this EM&V Framework in 2012 to formalize the background, objectives, principles and general practices that guide the companies' approach, resources and timeframes for EM&V activities.⁵³² The two key objectives of the EM&V Framework are to:⁵³³
- a. provide assurances to both internal and external stakeholders for the continued support of DSM programs; and
 - b. ensure the companies and ratepayers are obtaining value from their DSM investments.
404. In developing the EM&V Framework, FBC and FEU reviewed several industry guidelines and common practices.⁵³⁴ In British Columbia, regulatory approval is not required of an EM&V Framework.⁵³⁵

(2) Budgeted EM&V Spending

405. FBC's actual and planned expenditures on EM&V activities are as follows:⁵³⁶

⁵³¹ Ex. B-7 - FBC Response to BCUC IR 1.235.2.

⁵³² Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 16.

⁵³³ Ex. B-24 - FBC Response to BCUC IR 2.110.3.2.

⁵³⁴ See Ex. B-24 - FBC Response to BCUC IR 2.121.1 for these Guidelines.

⁵³⁵ Ex. B-24 - FBC Response to BCUC IR 2.110.3.

⁵³⁶ Ex B-7 - FBC Response to BCUC IR 1.235.7.

2012 Actual	2013 Approved	2014 Plan	2015 Plan	2016 Plan	2017 Plan	2018 Plan
\$ 356	\$ 396	\$ 296	\$ 303	\$ 311	\$ 319	\$ 326
4.2%	4.3%	9.8%	9.8%	10.2%	10.3%	10.4%

406. These proposed EM&V expenditure levels are consistent with the 2004 California Evaluation Framework, which references a spending range of 1-10 percent (excluding an outlier of 23%) of overall DSM budget spending on EM&V activities, with the average spending being 5 percent.⁵³⁷ In the 2012-13 RRA Decision, the Commission described the 2004 California Evaluation Framework as being “a seminal document for DSM evaluation”.⁵³⁸
407. Further, the FBC EM&V expenditures are reasonable and in line with other British Columbia utilities and, correspondingly, prudent.⁵³⁹

(3) Avoidance of Conflicts of Interest

408. The proposed framework also ensures that EM&V activities operate in a manner that avoids any potential conflicts of interest. For example, the EM&V activities are appropriately segregated and operate under a separate manager from those DSM staff responsible for program development and implementation.⁵⁴⁰
409. The Company does not believe review by a third party is warranted or a good use of ratepayer funds.⁵⁴¹
410. Further, independent consultants are retained by the Company to undertake comprehensive M&E reports.⁵⁴²

⁵³⁷ Ex. B-7 - FBC Response to BCUC IRs 1.235.7.1 and 1.235.10.1.

⁵³⁸ 2012-13 RRA Decision, p. 131.

⁵³⁹ Ex. B-24 - FBC Response to BCUC IR 2.110.3.3.

⁵⁴⁰ Ex. B-7 - FBC Response to BCUC IR 1.233.1.

⁵⁴¹ Ex. B-24 - FBC Response to BCUC IR 2.110.3.3.

⁵⁴² Ex. B-7 - FBC Response to BCUC IR 1.233.2.

(4) Attribution Rules

411. Further to a direction made to FEI in the 2012-13 RRA, FEI has developed attribution rules for integrated DSM programs, which prevent the double-counting of savings claimed by each utility. Presently, double counting is avoided between the utilities by attributing savings based on respective service areas.⁵⁴³
412. FBC is continuing to work to develop more comprehensive attribution rules, in cooperation with BC Hydro and FEU, so that the reporting of the benefits of combined programs is maximized, while the potential for double-counting of energy saving is minimized.⁵⁴⁴

⁵⁴³ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 17.

⁵⁴⁴ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 17.

PART 6 - CONCLUSION

413. In light of the evidentiary record and the submissions made above, FBC repeats its requests for the approvals and acceptances outlined in its Application, namely:

Rate Stabilization

- a. approval pursuant to sections 59 to 61 of the UCA for the rate stabilization mechanism set out in Section B7.1 of the Application for setting rates for the years 2014-2018;

General Rate Increases

- b. approval of then-existing interim rates as permanent rates effective January 1, 2013;⁵⁴⁵
- c. approval pursuant to sections 59 to 61 of the UCA of permanent rates for 2014 for customers effective January 1, 2014, reflecting an increase of 3.3 percent compared to 2013 rates. The general rate increase will be applied to the RCR (Rate Schedule 1) in accordance with the pricing principles⁵⁴⁶ set out in Order G-3-12.⁵⁴⁷
- d. approval to flow through during 2014 the decrease in ROE (from 9.9 percent to 9.15 percent) used to calculate FBC's rates effective January 1, 2013;

⁵⁴⁵ Ex. B-1 - FBC Application, p. 7.

⁵⁴⁶ For the years 2012-2015:

- (d) The Customer Charge is exempt from general rate increases;
- (e) The Block 1 rate is subject to the general rate increase; and
- (f) The Block 2 rate is increased by an amount sufficient to recover the remaining required revenue.

⁵⁴⁷ Ex. B-1-6 - Evidentiary Update, p. 7.

Deferral Accounts

- e. approval pursuant to sections 59 to 61 of the UCA for the rate base treatment and financing of deferral accounts, as set out in Section D3.2 of the Application;
- f. approval of financing costs for 2013 at FBC's WACC for the six deferral accounts approved by Order G-23-13, as set out in Sections D4.4.8 to D4.4.13 of the Application; and
- g. approval pursuant to sections 59 to 61 of the UCA of the discontinuance, modification, and creation of deferral accounts, as applicable, and the amortization and disposition of balances of deferral accounts, as set out in Section D4 and Appendix F4 of the Application, and as summarized in the table in Section A2.3 of the Application.

Accounting Policies

- h. approvals pursuant to sections 59 to 61 of the UCA of changes to the following accounting policies to be used in the determination of rates for FBC effective January 1, 2014:
 - i. approval to discontinue the reconciliation of US GAAP to Canadian GAAP in future BCUC Annual Reports as set out in Section D3.1 of its Application;
 - ii. approval to discontinue the net-of-tax treatment for the pension and OPEB funding differences effective 2014, and instead add back the pension and OPEB expense and deduct the contributions in the calculation of income tax expense, as explained in Section D3.1 of its Application;
 - iii. approval to allocate Executive costs between FEI and FBC effective January 1, 2014 by way of applying the Massachusetts Formula described in Section C4.17 of its Application;

- iv. continued approval of FBC's capitalized overhead rate of 20 percent as set out in Section D3.7 of its Application; and
- v. continued approval of FBC's direct overhead charging methodology as set out in Section D3.8 of its Application.

Demand Side Management

- i. acceptance pursuant to section 44.2(3) of the Act of the following DSM expenditure schedules as described in Appendix H1 of the Application: up to \$3.0 million for 2014, \$3.2 million for 2015, \$3.2 million for 2016, \$3.2 million for 2017, and \$3.3 million for 2018;
- j. approval to change the amortization period of existing and future DSM expenditures from 10 years to 15 years, effective January 1, 2014; and
- k. approval to discontinue semi-annual reporting on its DSM Program and to submit annual reports as of December 31 in each year, effective January 1, 2014.⁵⁴⁸
- l. approval for the following funding transfer rules:
 - i. funding transfers under 25 percent between approved areas be permitted without prior approval of the Commission;
 - ii. funding transfers of more than 25 percent into or out of approved areas would require prior approval of the Commission; and
 - iii. funding transfers from an existing program to a new program would be permitted, provided the new program meets the DSM Regulation and the benefits/cost test requirements and has not previously been rejected by the Commission.⁵⁴⁹

⁵⁴⁸ Ex. B-1 - FBC Application, p. 11.

⁵⁴⁹ Ex. B-1-1 - FBC Application Appendices, Appendix H - Demand Side Management, p. 11.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

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Erica C. Miller

Dated: April 25, 2014

AUTHORITY

AUC Decision 2013-407 on AltaLink Management Ltd.'s
2013-2014 General Tariff Application



AltaLink Management Ltd.

2013-2014 General Tariff Application

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Contents

1	Introduction and procedural motions	1
2	Forecasting and application preparation.....	4
2.1	Forecasting methodology and application preparation	4
2.2	Forecast parameters and assumptions	8
2.3	Vacancy rates and other staffing forecast parameters/assumptions	10
3	Staffing forecasts	11
3.1	General staffing level trends	11
3.2	O&M staffing levels.....	14
3.3	Capital-related FTEs	16
4	O&M expenses	17
4.1	Staff compensation.....	17
4.1.1	Market assessment	17
4.1.2	Base pay	19
4.1.3	Pension and benefits	20
4.1.4	STIP and LTIP	21
4.2	Vegetation management (USA 571.1)	21
4.3	Contracted manpower	23
4.3.1	USA 561 – control centre operations.....	23
4.3.2	USA 562 - station equipment maintenance	23
4.3.3	USA 563 - overhead line expense.....	24
4.3.4	USA 566 – O&M miscellaneous transmission	25
4.3.5	USA 575 – O&M IT support	27
4.3.6	USA 923 – outside services employed	27
4.3.7	USA 934 – IT G&A expenses	29
4.3.8	USA 935 – General O&M expenses	29
4.4	General operating expense (GOE)	30
4.4.1	USA 560 – supervision and engineering	30
4.4.2	USA 561 – control centre operations.....	31
4.4.3	USA 562 – station equipment maintenance.....	32
4.4.4	USA 563 – overhead line expense	33
4.4.5	USA 566 – O&M miscellaneous transmission	33
4.4.6	USA 575 – O&M IT support	34
4.4.7	USA 921 – administration corporate / office supplies and expenses.....	35
4.4.8	USA 924 – insurance premiums	36
4.4.9	USA 925 – injuries and damages.....	37
4.4.9.1	Damage claims and reserve funding requirement	37
4.4.9.2	Reconciliation of SIR	37
4.4.10	USA 928 – Commission expenses (hearing costs)	37
4.4.11	USA 930.1 – general advertising expenses	38
4.4.12	USA 930.2 – miscellaneous general expense.....	38
4.4.13	USA 931 – rents other than head office	38
4.4.14	USA 931.1 – head office rent.....	39
4.4.15	USA 934 – IT G&A expenses.....	39
4.4.16	USA 935 – general O&M expenses	40
4.5	Right-of-way payments	40

4.5.1	Annual structure payments	40
4.5.2	Easements	44
4.6	Taxes other than income taxes	45
5	Revenue offsets	46
5.1	Revenues from affiliates and inter-affiliates	48
5.2	Services to TransAlta	50
5.3	Lease revenue and other.....	52
6	Capital costs.....	54
6.1	Direct assign (DA) projects (forecasting issues).....	54
6.1.1	Scope of GTA proceeding	54
6.1.2	Uncertainty adjusted approach.....	56
6.1.2.1	Application of the uncertainty adjusted approach	60
6.1.3	DA project prioritization and in-service dates	67
6.1.4	Treatment of contingency allowances in DA capital forecasts.....	75
6.1.5	DA project cost and design matters	80
6.1.5.1	Project execution efficiency matters.....	80
6.1.5.2	WATL project HVDC converter station costs.....	84
6.1.5.3	Transmission line/tower design and selection matters	90
6.1.5.4	Detailed engineering costs	99
6.1.5.5	Direct assign project benchmarking	102
6.1.5.6	Project competitive procurement matters	106
6.1.6	Cost and performance audits.....	109
6.1.7	Project reporting and oversight processes.....	113
6.1.8	Minimum filing requirements for DA capital forecasts in AltaLink GTAs ..	117
6.2	Contracted EPC/EPCM services and related matters	118
6.2.1	EPC/EPCM competitive procurement process	118
6.2.2	Risk and reward model	146
6.3	Capital replacements and upgrades	151
6.4	IT capital costs	156
6.5	Facility capital costs.....	157
6.5.1	Acheson material yard	157
6.5.2	Foothills technical services relocation	161
6.5.3	Other facilities projects	164
7	Working capital allowances	166
8	Depreciation.....	167
8.1	Minimum filing requirements	169
8.2	Service life and Iowa curve adjustments.....	172
8.2.1	Account 350.1 – land rights	173
8.2.2	Account 352 – structures and improvements.....	174
8.2.3	Account 354 – towers and fixtures	175
8.2.4	Remaining accounts	176
8.2.5	Update to contribution amortization rate	176
8.2.6	Additional issues not specifically identified by the UCA.....	177
8.3	Net salvage rate adjustments	178
8.3.1	Account 352 – structures and improvements.....	178
8.3.2	Account 353 – station equipment	179

8.3.3	Account 354 – towers and fixtures	180
8.3.4	Account 355 – poles and fixtures.....	180
8.3.5	Remaining accounts	181
8.3.6	Disclosure of gross salvage and cost of removal	182
8.4	Alternative depreciation methodologies	182
9	Financial and return on rate base matters	184
9.1	Credit metrics	184
9.1.1	Credit metric support	185
9.1.2	FFO to debt ratio and risk of a downgrade	187
9.1.3	Cost of a downgrade	195
9.1.4	Ratings action by S&P	198
9.1.5	Tax uplift.....	200
9.1.6	Base capital plan versus uncertainty adjusted plan.....	200
9.1.7	Additional credit metric relief requested by AltaLink.....	201
9.1.7.1	FIT method for provincial taxes	201
9.1.7.2	A temporary increase of two per cent in AltaLink’s equity thickness	202
9.1.8	Implications from credit metric relief approved	202
9.2	Financing plan.....	203
9.3	Credit facilities and other costs associated with short term debt	207
9.4	Request for exemption order respecting certain long term debt transactions	209
9.5	Discontinuance of long-term debt deferral account.....	212
10	Income taxes	217
10.1	Timing/temporary difference calculations	217
10.2	Treatment of directly attributable, indirectly charged (DAIC) costs for income tax purposes	217
10.3	Other income tax matters – amount of DAIC costs	221
11	Other deferral account reconciliations	221
11.1	Taxes other than income tax	221
11.2	Annual structure payments.....	221
11.3	Other costs associated with short-term debt deferral account.....	222
11.4	2010 long-term debt deferral account	222
11.5	2010 income tax deferral account reconciliation	223
11.6	Reconciliation of USA/MFR implementation project costs	223
11.7	IFRS deferral account	224
12	Other matters	225
12.1	Performance statistics	225
12.2	Accounting policies.....	225
12.3	Compliance with directives.....	225
12.4	Deferral mechanisms.....	226
13	Rate mitigation	226
14	2010-2011 direct assign capital deferral account (DACDA)	229
14.1	Prudence principles	229
14.2	SW project variances	232

14.3 Other 2010-2011 DACDA projects	255
14.3.1 Projects without final cost reports	256
14.3.2 Engineering costs	258
14.3.3 Summary	259
14.4 Reconciliation and other DACDA matters	259
14.5 Minimum filing requirements for DACDA applications	260
15 Order	264
Appendix 1 – Proceeding participants	265
Appendix 2 – Oral hearing registered appearances	267
Appendix 3 – Summary of Commission directions.....	269
Appendix 4 – Abbreviations.....	276

List of tables

Table 1. Summary of major AltaLink forecast parameters	8
Table 2. Mid-year O&M vs. capital FTE splits for 2013 and 2014	12
Table 3. Operating FTE growth analysis	12
Table 4. Growth in number of substations.....	12
Table 5. USA 561 contracted manpower – prior vs. current GTA	23
Table 6. USA 562 contracted manpower – prior vs. current GTA	24
Table 7. USA 563 contracted manpower – prior vs. current GTA	25
Table 8. USA 566 contracted manpower activities summary.....	26
Table 9. USA 566 contracted manpower – prior vs. current GTA	27
Table 10. USA 923 contracted manpower – prior vs. current GTA	28
Table 11. USA 934 contracted manpower – prior vs. current GTA	29
Table 12. USA 935 contracted manpower – prior vs. current GTA	30
Table 13. USA 560 general operating expense – prior vs. current GTA	31
Table 14. USA 561 general operating expense – prior vs. current GTA	32
Table 15. USA 562 general operating expense – prior vs. current GTA	32
Table 16. USA 563 vehicles breakdown	33
Table 17. USA 563 general operating expense – prior vs. current GTA	33

Table 18. USA 566 general operating expense – prior vs. current GTA	34
Table 19. USA 575 general operating expense – prior vs. current GTA	35
Table 20. USA 921 – per FTE costs breakdown	35
Table 21. USA 921 general operating expense – prior vs. current GTA	36
Table 22. USA 924 general operating expense – prior vs. current GTA	36
Table 23. Head office leasing intentions	39
Table 24. USA 924 general operating expense – prior vs. current GTA	40
Table 25. Right-of-way payments (USA 567)	41
Table 26. Per-structure compensation rates summary	41
Table 27. Revenue offsets	47
Table 28. March 15, 2013 updated revenue offsets.....	48
Table 29. AltaLink response to undertaking – affiliate revenue comparison	49
Table 30. Lease revenue and other average over five years	52
Table 31. Capital expenditures and capital additions: base plan forecast versus uncertainty adjusted forecast.....	63
Table 32. Years of delay for forecasted peak load – AESO forecasts 2008, 2009 & 2012... 	69
Table 33. ATCO vs. AltaLink engineering cost comparison	99
Table 34. Track record analysis for ongoing CRU programs	155
Table 35. AHAT analysis	156
Table 36. Acheson material yard capital expenditure forecast	157
Table 37. FTSB capital expenditure forecast	161
Table 38. DeVry relocation project capital expenditure forecast	164
Table 39. General facility maintenance expenditures	164
Table 40. Schedule of transmission depreciation and amortization expense	168
Table 41. Summary of approved and proposed depreciation parameters	169
Table 42. Estimated cost of credit rating downgrade.....	197
Table 43. Net present value of credit metric relief	197

Table 44. 2013-2014 AltaLink’s forecast long-term debt issues	204
Table 45. Average forecast credit spreads.....	204
Table 46. Forecast short-term borrowing rates	205
Table 47. 2013-2014 forecast credit facility amounts	207
Table 48. Forecast and actual long-term debt issues, 2010-2012	213
Table 49. 2010-2012 customer debt costs in the absence of a LTDDA	213
Table 50. Taxes other than income taxes – 2010-2011	221
Table 51. Annual structure payments – 2010-2011	222
Table 52. Proposed reconciliation of USA/MFR project deferral account	224
Table 53. Summary of GTA to actual capital additions.....	260

1 Introduction and procedural motions

1. On July 30, 2012, AltaLink Management Ltd. (AML or AltaLink), in its capacity as General Partner of AltaLink L.P. (ALP), filed an application (the application) with the Alberta Utilities Commission (AUC or Commission) for approval of:

- AltaLink's revenue requirements for the years 2013 and 2014
- AltaLink's transmission facility owner (TFO) tariff and terms and conditions (T&Cs) of service for the years 2013 and 2014
- certain deferral and reserve accounts for the 2013-2014 test period
- an exemption order in respect of long-term debt applications
- the reconciliation of certain deferral accounts for the years 2010 and 2011

2. Proceeding ID No. 2044 was assigned to the application.

3. Notice of the application (notice) was issued by the Commission on August 2, 2012. The notice was published in major daily newspapers in Edmonton and Calgary during the week of August 7, 2012. In accordance with the deadline set out in the notice, statements of intent to participate (SIPs) in Proceeding ID No. 2044 were received on or before August 22, 2012 from the following parties:

- the Alberta Direct Connect Consumers Association (ADC)
- the Alberta Electric System Operator (AESO)
- ATCO Electric Ltd. (ATCO Electric)
- the Brooks to Whitla Landowner Committee (BWLC)
- the Canadian Association of Energy and Pipeline Landowner Associations (CAEPLA)
- the Consumers' Coalition of Alberta (CCA)
- ENMAX Power Corporation (ENMAX)
- FortisAlberta Inc. (FAI)
- the Industrial Power Consumers Association of Alberta (IPCAA)
- the Office of the Utilities Consumer Advocate (UCA)

4. On August 17, 2012, the Commission issued Decision [2012-221](#)¹ in respect of the first refiling of AltaLink's general tariff application (GTA) for the years 2011 and 2012.² The

¹ Decision 2012-221: AltaLink Management Ltd., Refiling Pursuant to Decision 2011-453 and Decision 2011-474, Application No. 1608178, Proceeding ID No. 1734, August 17, 2012.

² In application 1606895, AltaLink applied for approval of a tariff covering the test period from January 1, 2011 to December 31, 2013. However, in Decision 2011-453 in respect of that application, the Commission approved a test period of 2011 and 2012 (paragraph 66).

Commission did not approve AltaLink's first refiling of its 2011-2012 GTA in Decision 2012-221 and directed AltaLink to refile its 2011-2012 tariff to reflect findings, conclusions and directions set out in that decision on or before September 17, 2012.

5. On August 22, 2012, the Commission received a request for an advance ruling on cost eligibility for CAEPLA and BWLC. The Commission issued its ruling in respect of the CAEPLA/BWLC request on September 19, 2012. In that ruling, the Commission denied the request of CAEPLA and BWLC.³ CAEPLA and BWLC did not participate further in the proceeding.

6. As part of the findings set out in Decision 2012-221, AltaLink was directed to ensure that future GTAs reflected certain revised minimum filing requirements described in that decision. In addition, the Commission directed AltaLink to propose a date, time and venue for a technical meeting to discuss the issue of potential position-by-position tracking of operations and maintenance (O&M)-related activities and capital-related activities as part of its next GTA. AltaLink held the technical meeting at its offices on September 24, 2012⁴ and filed an amendment of its 2013-2014 GTA⁵ on September 28, 2012.

7. The Commission issued an initial process schedule in respect of Proceeding ID No. 2044 on October 2, 2012. On November 23, 2012, the Commission received a motion from IPCAA seeking a direction from the Commission to compel AltaLink to provide improved responses to certain information requests (IRs).⁶ Following a process to consider the motion set out in Commission correspondence,⁷ the Commission issued a ruling and provided an update to the process schedule for Proceeding ID No. 2044.⁸

8. On January 14, 2013, AltaLink filed a number of IR responses in accordance with the Commission's December 24, 2012 findings.⁹ On the same date, AltaLink filed a motion pursuant to sections 9 and 13 of AUC [Rule 001](#)^{10 11} that sought confidential treatment in respect of its responses to certain IRs identified in the Commission's December 24, 2012 ruling. On February 8, 2013, the Commission issued a ruling on AltaLink's request for confidential treatment of certain IRs identified in AltaLink's January 14, 2013 motion.

9. On January 25, 2013, the Commission received an additional motion from IPCAA which claimed that AltaLink had not provided complete responses to certain of the supplementary IR responses filed on January 14, 2013. On January 31, 2013, and February 7, 2013, AltaLink filed further enhanced supplementary responses to certain of the IRs identified in IPCAA's motion. The Commission issued its ruling on this motion on February 11, 2013. In accordance with this ruling, AltaLink filed supplementary responses to certain IR responses not deemed confidential on February 15, 2013.

³ Exhibit 29.

⁴ Materials prepared by AltaLink for the technical meeting were filed as Exhibit 30.

⁵ Exhibit 31.

⁶ Exhibit 55.01.

⁷ Exhibit 57.01.

⁸ Exhibit 61.01.

⁹ Exhibit 63.02 and attachments.

¹⁰ AUC Rule 001: *Rule of Practice*.

¹¹ Exhibit 63.01.

10. On March 15, 2013, AltaLink submitted a further update to the GTA schedules filed on September 28, 2012. With this filing, AltaLink's requested revenue requirement for 2013 changed to \$491.7 million, declining from \$501.0 million, as set out in AltaLink's September 28, 2012 update. Similarly, AltaLink's requested 2014 revenue requirement changed to \$636.2 million, declining from the \$656.1 million figure set out in the September 28, 2012 update.

11. Intervener evidence was filed on or before April 17, 2013 by the following parties:

- the UCA, composed of the following primary documents:
 - the general evidence of the UCA (UCA general evidence)¹²
 - the depreciation evidence of the UCA (UCA depreciation evidence)¹³
- the ADC, composed of the following:
 - the evidence of Colette Chekerda (ADC Chekerda evidence)¹⁴
 - the evidence of Greg Meyer (ADC Meyer evidence)¹⁵
 - the evidence of James Dauphinais (ADC Dauphinais evidence)¹⁶
 - the evidence of Michael Gorman (ADC Gorman evidence)¹⁷
- the Ratepayer Group (RPG),¹⁸ composed of the following:
 - the RPG general evidence¹⁹
 - two separate documents prepared by Trevor Cline of Grid Power Development and Design Inc. (RPG Grid Power 1 evidence)²⁰ and (RPG Grid Power 2 evidence)²¹
 - evidence prepared by Dr. Mohamed Rashwan of TransGrid Solutions (RPG TGS evidence)²²
 - evidence prepared by FTI Consulting, Inc. (FTI) by or under the direct supervision of Mr. Todd Mohr (RPG FTI evidence)²³

12. On May 23, 2013, AltaLink filed rebuttal evidence, composed of several documents, including the following:

- a document entitled "Rebuttal evidence of AltaLink Management Ltd." (AltaLink general rebuttal)²⁴
- rebuttal evidence prepared by Pricewaterhouse Coopers LLP (PwC) entitled "Direct Assign Capital Forecast Probabilistic Modelling,"²⁵ prepared in response to Section 6 of the RPG general evidence²⁶

¹² Exhibit 110.02.

¹³ Exhibit 110.03.

¹⁴ Exhibit 112.01.

¹⁵ Exhibit 112.02.

¹⁶ Exhibit 112.03.

¹⁷ Exhibit 112.04.

¹⁸ The RPG includes the ADC, the CCA and IPCAA.

¹⁹ The Commission considers that the updated errata versions of the RPG general evidence filed as Exhibit 122.05 on April 17, 2013, to be the final version of this evidence.

²⁰ Exhibit 114.01.

²¹ Exhibit 117.01.

²² Exhibit 113.01.

²³ Exhibit 116.01.

²⁴ Exhibit 150.02.

²⁵ Exhibit 150.03.

²⁶ Exhibit 115.01.

- the rebuttal evidence of Steven M. Fetter (AltaLink Fetter rebuttal)²⁷ prepared in response to the UCA general evidence and the ADC Gorman evidence
- rebuttal evidence prepared by Will Lipson of KPMG LLP (KPMG)²⁸ in response to the RPG FTI evidence

13. On May 30, 2013, AltaLink filed a submission containing certain corrections to portions of its GTA evidence and a research update dated May 23, 2013 prepared by Standard & Poor's Financial Services LLC (S&P).

14. An oral hearing to consider the application was held at the offices of the AUC in Edmonton between June 3, 2013, and June 7, 2013, and at the offices of the AUC in Calgary between June 10, 2013, and June 20, 2013. During this period, confidential modules of the oral hearing, open to only those who had filed confidentiality undertakings, were held on June 14, 2013, and on June 20, 2013.

15. In accordance with the schedule set out in Commission correspondence dated July 22, 2013, written argument was filed on or before July 26, 2013 by AltaLink, the ADC, the CCA, the RPG and the UCA. Written reply argument was filed by each of these same parties on or before August 14, 2013.

16. The Commission considers the record for Proceeding ID No. 2044 to have closed on August 14, 2013.

17. The Commission is a public body and, as such, unless otherwise directed, all documents submitted to the Commission, as well as the decisions of the Commission, are publicly available. As noted above, the Commission granted confidential treatment to a discrete portion of the evidence on the record of this proceeding. This decision reflects the Commission's findings from all of the evidence on the record of this proceeding, including those issues that were addressed in further detail in the confidential portion of this proceeding. No separate confidential decision will be issued.

18. In reaching the determinations set out within this decision, the Commission has considered all relevant materials comprising the record of this proceeding, including the evidence, argument and reply argument provided by each party. Accordingly, references in this decision to specific parts of the record are intended to assist the reader in understanding the Commission's reasoning relating to a particular matter and should not be taken as an indication that the Commission did not consider all relevant portions of the record with respect to that matter.

2 Forecasting and application preparation

2.1 Forecasting methodology and application preparation

19. AltaLink described its forecasting methodology and application preparation processes in Section 1.8 of the application. In Decision [2011-453](#),²⁹ the Commission provided direction

²⁷ Exhibit 150.04.

²⁸ Exhibit 149.01.

²⁹ Decision 2011-453: AltaLink Management Ltd., 2011-2013 General Tariff Application, Application No. 1606895, Proceeding ID No. 1021, November 18, 2011.

regarding the use of management update forecasts as the baseline for its requested test year forecasts, and requested that AltaLink instead develop its forecasts from a zero base. AltaLink submitted that it had presented its forecasts in accordance with the consensus document³⁰ setting out the Commission's uniform system of accounts (USA) and minimum filing requirements (MFR) and in accordance with Decision 2011-453 requirements.

20. AltaLink explained that, as part of its implementation of a zero-based approach, it had required each department to assess all activities required to be performed in order to meet its statutory duties and business obligations during the 2013-2014 test period. These department level re-assessments formed the basis of its full-time equivalent (FTE) and contractor level forecasts required to carry out AltaLink's forecast workload, as well as its forecast general operating expenses. Guidelines established by its finance department, as described in Section 1.8.3.3 of the application, were followed in the preparation of forecasts, and these department forecasts were adjusted to reflect general (e.g., inflation) forecasting parameters to prepare a roll-up forecast for the company.

21. AltaLink noted that, once activities for the GTA test years were forecast, these activities were assessed to determine which were capital-related in accordance with its capitalization policy. In accordance with International Financial Reporting Standards (IFRS) and its capitalization policy, no indirectly attributable internal labour costs were included in the capital program, and operating labour reflects only labour that is operating expense-related.³¹ Its 2013 and 2014 forecasts were then tested for general reasonableness against 2011 actuals and 2012 management update amounts. In addition, in order to assess the consistency and reasonableness of its forecast, AltaLink examined the level of expenditure attributed to each USA activity code against its total operating expenses for each test year.³²

22. AltaLink explained that, following a review of department level forecasts, the forecasts were consolidated for review by AltaLink's chief executive officer (CEO), chief financial officer (CFO) and chief operating officer (COO). AltaLink submitted that, in the course of the review of the consolidated application, forecasts were challenged to see if there were areas where departments could reduce costs in their forecasts in light of industry developments such as:

- the large number of new transmission infrastructure projects forecast for the test years
- the impact of increased rate base on operations and maintenance activities
- the impact of new and more stringent industry standards such as the AESO's increased reliability standards and changing Independent System Operator (ISO) rules
- the impact of aging assets on maintenance requirements³³

23. In argument, AltaLink discussed its compliance with USA/MFR requirements and noted that its direct assign project capital forecast has been enhanced through the adoption of the uncertainty adjusted forecasting approach. However, notwithstanding its use of the uncertainty adjusted approach, AltaLink noted that its forecast reflects the fact that it continues to work toward executing the base plan for direct assign project capital expenditures.

³⁰ EUB Bulletin 2006-25, July 12, 2006.

³¹ Application, paragraphs 67 and 68.

³² Application, paragraphs 69 through 71.

³³ Application, paragraphs 84 through 87.

Commission findings

24. As acknowledged by AltaLink in paragraph 48 of its application, in Decision 2011-453, the Commission directed AltaLink to employ a zero-based approach in the preparation of its GTA forecast.

48. In Decision 2011-453, the Commission expressed concern with AltaLink's use of its management update forecast as the baseline for its requested test year forecasts and that AltaLink would be best to develop its forecasts from an assumed zero-base, which seeks to re-assess the resources and costs required to fulfill its statutory duties on an annual basis, without assuming that costs are simply incremental to the actual costs of the preceding year.

25. AltaLink outlined the changes it made to its forecasting process, in response to the Commission's directive, in paragraphs 50 and 51 of the application:

50. AltaLink further enhanced its forecast for this Application by implementing a zero-based approach for the 2012 Management Update. This involved having each department assess all activities required to be performed in order to meet the objectives necessary to fulfilling its statutory duties and business obligations during the test period. These departmental reassessments established the FTE and contractor levels required to carry out the forecast workloads, as well as the general operating expenses. These levels then formed the basis for the forecast portion of the 2012 Management Update.

51. The impact of activity drivers was specifically assessed for each department. The specific activities that will have to be undertaken in the test years as a result of the drivers were considered and need duration (short term or on-going), type (FTE or contractor) and amount of resources required to perform the identified activities were quantified so that the causal relationship between the specific activity drivers and the need for resources within each department could be determined. When drivers caused needs for on-going activities, new FTEs were forecast to be included when either there were not enough current resources to perform the workload or new resources were required to perform a new activity. Explanations of the need for all forecast FTE additions are included in the write-ups for each department in Sections 5.2 and 25.2. (emphasis added)

26. From this narrative, the Commission understands that AltaLink has relied on the fact that it requested department managers to build their forecasts on an assessment of overall resource requirements to fulfill the activities within the responsibility of each department to support its compliance with the Commission's directive in Decision 2011-453. However, the write-ups in support of FTEs by USA account in sections 5.2 and 25.2 only provide justification for FTE additions in light of activity level increases from baselines established in prior years. Because the presentation of the activity driver justifications in sections 5.2 and 25.2 are provided on an additions basis, there is little that the Commission can do to test AltaLink's compliance with its direction, other than to accept AltaLink's representations in its evidence that zero-based forecasting was carried out by its department managers. The Commission is prepared to accept this particular evidence-based representation.

27. However, while accepting that AltaLink's department level forecasts were prepared from a zero-base, the Commission is concerned that the significant rate of growth of AltaLink's capital program is unreasonably driving the rate of growth in O&M expenditures beyond that required to fulfill its statutory obligation to provide service.

28. The Commission understands from its review of the application that it is the responsibility of AltaLink's senior executives to test the overall reasonableness of its forecasts. However, the Commission finds little evidence in the application that demonstrates the extent to which the consolidated department level forecast was questioned or tested by senior executives. For example, because the Commission was not provided with the initial department forecasts, there is no evidence on the record regarding the specific adjustments made to the departmental forecasts. This matter is discussed in greater detail in Section 3.1 below.

29. It is clear from AltaLink's description of its forecasting process that this process begins at the department level, and is based on an overall assessment of the resources required to conduct its anticipated departmental activities, and does not distinguish between O&M and capital.

30. The fact that AltaLink's initial forecast is created without distinguishing between O&M-related and capital-related resources, limits the Commission's ability to assess the reasonableness of AltaLink's GTA forecast methodology and the GTA forecast generated therefrom.

31. The Commission must have full visibility of the process by which AltaLink converts its department-level forecasts into the FTEs requested in individual O&M USA accounts. The Commission directs AltaLink to clearly and precisely set out the following information in an updated FTE forecast in the refiling:

- the name of each AltaLink staff position, specified at the most detailed level possible, by department
- a clear identification of the AltaLink cost centre (not USA account) for each AltaLink staff position
- for each AltaLink staff position, the specific allocation that has been applied between O&M and capital, expressed as a percentage
- for each AltaLink staff position allocated wholly or partially to O&M, the USA to which the FTE is assigned

32. The Commission recognizes that the information it is requesting is at a level of detail that it has not previously requested. However, the relationship between capital project forecasts and the number of capital and O&M FTEs forecast has been a long-standing matter of concern for the Commission and has been raised by the Commission in several previous applications. The Commission anticipates that it may need to provide additional and more specific direction to AltaLink following AltaLink's filing response to the Commission's direction in Section 6.1.3. The Commission will provide such further direction, if required, at that time.

2.2 Forecast parameters and assumptions

33. AltaLink discussed the primary general assumptions it used in Section 1.8.2 of the application and provided a summary of its primary forecast parameters in application Table 1.8.2-1 (reproduced, in part, as Table 1 below):

Table 1. Summary of major AltaLink forecast parameters

	2013	2014
Labour escalation		
Salary and wages (labour)	4.81%	4.81%
Union	4.50%	4.50%
Non-union	5.25%	5.25%
Executive	3.25%	3.25%
Contractor	4.81%	4.81%
General inflation	2.30%	2.30%
Capital escalation	4.0%	4.0%

Source: Application, Table 1.8.2-1.

34. AltaLink submitted that its use of a 2.3 per cent general inflation rate based on the Alberta Government's *Economic Outlook* provides an independently determined and unbiased assessment of the effect of inflation on expected costs during the test period. This method is consistent with the Commission's direction in Decision 2011-453.³⁴

35. AltaLink also proposed an uncertainty adjusted approach for forecasting capital expenditures in which any delayed capital expenditures are adjusted upward by 4.0 per cent per year, thereby reflecting the impact of cost inflation on those delayed expenditures.³⁵

36. In its argument, the CCA noted that AltaLink proposed to use an escalation rate of 4.81 per cent per year for contracted manpower notwithstanding that AltaLink's proposed 4.0 per cent per year escalation rate for capital expenditures includes contracted manpower costs.

37. The CCA noted that the 4.81 per cent contractor escalation rate was derived as a weighted average of different salary escalation rates for AltaLink union, non-union, and executive staff, and expressed concern that AltaLink had not provided any independent support for its contracted manpower escalator. The CCA expressed specific concern that AltaLink's approach of using a blended weighted average of salary escalation rates, for different types of AltaLink staff, reflected AltaLink's internal staff escalation practices, including progression-related increases for union staff and adjustments for non-union staff designed to achieve market compensation levels. Accordingly, rather than reflecting AltaLink's internal salary structure, the CCA submitted that AltaLink should be directed to use contracted manpower escalation rates for both O&M and capital in a range between 3.5 per cent and 3.75 per cent.

38. The ADC presented evidence³⁶ that questioned whether the 2.3 per cent per year general escalator proposed by AltaLink will accurately reflect the general cost increases likely to be incurred by AltaLink. The ADC's witness, Mr. Meyer, suggested that productivity increases would likely completely offset any inflationary increases in O&M costs. In his evidence, Mr. Meyer provided the example of a U.S.-based utility that was able to reduce non-fuel

³⁴ Decision 2011-453, paragraph 132.

³⁵ Exhibit 3, page 10-11, paragraph 597.

³⁶ Exhibit 112.02, pages 8 to 10.

expenditures in each year, despite the effect of inflation.³⁷ On this basis, the ADC submitted that AltaLink's non-internal labour expenses should be reduced by \$1.0 million and \$1.2 million for 2013 and 2014, respectively.

39. In reply, AltaLink submitted that the position of the ADC ignored the fact that its proposed escalator was developed in accordance with a Commission direction in AltaLink's last GTA.³⁸ AltaLink submitted that, as it has fully complied with the Commission's past decision, the Commission should reject the ADC's evidence and approve AltaLink's general operating expenses as forecast.

Commission findings

40. In Decision 2011-453 at paragraphs 132 to 135, the Commission stated:

132. Further to the Commission's findings in Section 2.1 above, the Commission has determined that the GTA test period will only reflect the 2011 and 2012 calendar years. Accordingly, the Commission will only consider the reasonableness of AltaLink's 2011 and 2012 inflation forecasts and non-salary related escalators in this decision.

133. The Commission considers AltaLink's general inflation escalator of 2.1 per cent per year to be reasonable because AltaLink's general inflation forecast reflects the Alberta Government's *Economic Outlook 2010-2013* forecast factors which have been developed from independent third party resources.

134. The Commission also accepts AltaLink's evidence that construction and engineering related costs have historically risen significantly faster than Alberta CPI over the last 20 years and have escalated in the four to six per cent range. Given that all capital expenditure forecasts are ultimately subject to true up to actual expenditures, and in the absence of persuasive evidence to the contrary, the Commission accepts AltaLink's forecasted capital related escalators of four per cent per year for each of 2011 and 2012. The Commission considers that although the large transmission build commencing during the GTA test period is occurring during a period of comparatively modest economic activity for Alberta, it is reasonable to expect that transmission construction related cost inputs may be relatively scarce. Accordingly, the Commission finds that AltaLink's forecast capital related escalators may be conservative.

135. AltaLink has proposed that the forecast escalation rate for contracted manpower resources should increase at a rate similar to, though not necessarily identical to, the rate at which base pay for AltaLink staff is forecast to increase. The Commission considers it reasonable to assume that general contracted manpower costs will increase at a rate similar to the escalation of total salary and benefit costs for AltaLink staff. Accordingly, the Commission considers AltaLink's assumed escalation rate of 4.24 per cent for both 2011 and 2012 to be reasonable.

41. As can be seen from these findings, there was no specific direction to AltaLink to use the methodology approved for use in that decision for the current GTA.

42. However, the Commission considers AltaLink's use of an updated version of the Alberta Government's *Economic Outlook* document that was found to be reasonable for the purposes of

³⁷ Exhibit 112.02, page 10, lines 14 to 17.

³⁸ Decision 2011-453, paragraphs 132 to 135.

AltaLink's prior GTA remains reasonable as the basis for a general inflation forecast for AltaLink's present GTA.

43. The Commission is not persuaded by the ADC evidence that AltaLink ought to be able to achieve sufficient productivity gains to offset inflation. The sole support in the ADC evidence for this position was an anecdotal reference to a Missouri utility. The Commission does not find this evidence to be sufficient to demonstrate the reasonableness of the significant reduction to non-labour expenses that the ADC proposes. Accordingly, the Commission approves AltaLink's proposal to apply the 2.3 per cent per year general escalator to all forecasts where a more specific escalator has not been provided in the application.

44. The Commission considers that AltaLink's proposal to use a 4.0 per cent escalator for costs delayed under its uncertainty adjusted capital forecasting approach is reasonable in light of market conditions in Alberta.

45. The Commission shares some of the CCA's concerns that AltaLink's proposed escalator for contracted manpower may be excessive. In particular, it is not clear to the Commission that agreed-upon escalators arising from union labour agreements with AltaLink apply to the market for contracted manpower. The Commission also considers that the increases included in AltaLink's salary escalator for non-union labour do not apply to the market for contractor services. In view of the foregoing, the Commission considers that an escalator of 3.75 per cent per year, which is at the high end of the range proposed by the CCA, is reasonable. AltaLink is directed to make adjustments to all contracted manpower forecasts that relied upon AltaLink's proposed 4.81 per cent escalator at the time of its refiling.

2.3 Vacancy rates and other staffing forecast parameters/assumptions

46. In Section 1.8.5.2 of the application, AltaLink proposed a 3.2 per cent vacancy rate adjustment to its staffing forecasts. AltaLink indicated that its proposed vacancy rate adjustment was calculated using a formula that reflects staff turnover statistics; time-to-hire assumptions, as set out in Section 1.8.5.2;³⁹ and historical vacancy rates for O&M labour.⁴⁰ AltaLink submitted that its proposed 3.2 per cent vacancy rate also reflected Commissions findings in Decision 2011-453 that a longer term average vacancy rate should be used for O&M vacancy rate estimates, subject to the need to make adjustments for anomalous results that might be observed in specific years.⁴¹

47. AltaLink noted that as its actual operating FTEs at year-end 2012 of 272.8 FTEs were greater than the approved level of year-end operating FTEs of 269.0,⁴² it is likely to experience a lower vacancy rate than forecast, and could possibly experience a negative vacancy rate. The likelihood of achieving a negative vacancy rate is further evidenced by the fact that its actual FTEs as at June 30, 2013 were 288 FTEs as compared to its mid-year forecast of 285.3 FTEs and because these reported actual year-end 2012 and mid-year 2013 FTE figures reflect only those positions actually filled and not positions still within the recruitment process.

48. AltaLink's proposal to apply a 3.2 per cent vacancy adjustment to its operating FTE forecasts was not challenged by interveners in evidence or argument.

³⁹ Exhibit 3, paragraph 112 to 117.

⁴⁰ Exhibit 3, paragraph 114.

⁴¹ Exhibit 3, paragraph 115, Decision 2011-453, paragraph 153.

⁴² Exhibit 163.01 and Exhibit 287, AltaLink response to AUC.AML-085, page 6.

Commission findings

49. Having reviewed AltaLink's reported actual O&M staffing levels at December 31, 2012 and June 30, 2013, relative to forecast, the Commission finds that AltaLink's proposed vacancy rate is reasonable and should be approved as filed.

3 Staffing forecasts

3.1 General staffing level trends

50. In argument, AltaLink indicated that the forecasted staffing levels requested in the application represented the absolute minimum staffing levels that it requires to maintain and operate its transmission system assets safely and reliably.

51. AltaLink stated that its requests for additional funding in the 2013-2014 test period for 43.0 operating and 115.2 capital FTEs related primarily to the complexity of integrating new and old technologies as new technology is added to its transmission network. In addition to these increases, AltaLink noted that it sought funding for three additional corporate operating FTEs and submitted that its funding request for three additional corporate FTEs was reasonable in light of the relative stability of corporate FTE levels over the past few years.

52. Referencing the ADC Meyer evidence in its argument, the ADC submitted that the record is clear that AltaLink's labour force additions are driven primarily by AltaLink's capital program. The ADC noted that AltaLink has historically over-forecast both direct assign project capital expenditure levels and FTE levels.

53. A delay in the construction of certain capital programs may reduce the number of O&M-related FTEs needed. Therefore, the ADC recommended that the Commission include only 50 per cent of the forecasted increase in labour expense for 2013 and 2014 in revenue requirement and establish a deferral mechanism to ensure that AltaLink fully recovers expenses incurred. The adoption of this proposal would reduce AltaLink's 2013 and 2014 revenue requirements by \$1.6 million and \$2.9 million, respectively.

54. AltaLink responded that ADC's assumption that the forecast increase in operating FTEs is entirely caused by the increase in capital work is erroneous. AltaLink submitted that its application explains the drivers for the increase in this expense category.

55. Last, AltaLink submitted that the ADC's request for deferral account treatment for O&M FTEs ignores an admission provided by Mr. Meyer that his operating labour expense deferral account proposal did not meet the usual requirements for establishing a deferral account.⁴³

Commission findings

56. As discussed in Section 2.1 above, it is clear from AltaLink's evidence that AltaLink's projected capital program has a direct impact on both O&M and capital-related staffing levels. AltaLink has clearly indicated that its resource planning is designed to meet the base capital plan and its GTA forecast is primarily driven by an initial department level forecast of required activities done prior to applying an O&M/capital split to the majority of AltaLink's staff.

⁴³ Transcript, Volume 10, pages 2267 to 2270.

57. As indicated in Table 2 below, derived from AltaLink's evidence, 63.5 per cent of total forecast mid-year FTEs for 2013 and 63.8 per cent of total forecast overall mid-year FTEs for 2014 are identified as either O&M-related or capital-related after AltaLink's department level activities and staffing forecasts have been completed.

Table 2. Mid-year O&M vs. capital FTE splits for 2013 and 2014

	2013				2014			
	Forecast	Op only	Cap only	Mixture	Forecast	Op only	Cap only	Mixture
CEO	10.0	0.0	0.0	10.0	10.0	0.0	0.0	10.0
Human Resources	10.6	0.0	0.0	10.6	11.6	0.0	0.0	11.6
Corporate Development	4.0	0.0	0.0	4.0	4.0	0.0	0.0	4.0
Projects	218.5	0.0	218.5	0.0	247.0	0.0	247.0	0.0
Finance	39.3	4.0	0.0	35.3	41.0	4.0	0.0	37.0
Regulatory/Legal Services	52.6	8.0	44.6	0.0	55.1	9.0	46.1	0.0
Customer Service	17.5	0.0	0.0	17.5	19.0	0.0	0.0	19.0
External Engagement	47.2	0.0	27.1	20.1	33.2	0.0	14.1	19.1
AB Ops	18.5	0.0	0.0	18.5	20.5	0.0	0.0	20.5
Asset	91.1	0.0	0.0	91.1	101.1	0.0	0.0	101.1
Field	102.1	0.0	0.0	102.1	112.9	0.0	0.0	112.9
INIOS	63.6	0.0	0.0	63.6	66.1	0.0	0.0	66.1
Ops Serv	60.8	0.0	0.0	60.8	64.3	0.0	0.0	64.3
SHET	37.6	0.0	0.0	37.6	40.6	0.0	0.0	40.6
Sys Ops	54.0	0.0	0.0	54.0	58.5	0.0	0.0	58.5
Total	827.4	12.0	290.2	525.2	884.9	13.0	307.2	564.7

Source: Exhibit 50.04, response to AUC.AML-16(d) and (e).

58. In contrast, Table 2 shows that only about 1.5 per cent of overall FTEs for both 2013 and 2014 are directly forecast as O&M-related FTEs. It is therefore clear that the vast majority of AltaLink's activity forecasts in support of O&M resourcing and expense forecasts are driven, at the department level, by a forecast that is itself driven, in large part, by AltaLink's forecast of the capital program it expects to be carried out during the GTA test period.

59. In addition, and setting aside the impact that the forecast capital program has on the forecast of FTEs, including O&M FTEs, the Commission also remains concerned that the rate of growth of both O&M-related and capital-related FTEs is excessive relative to underlying activity drivers. This is reflected in the following tables:

Table 3. Operating FTE growth analysis

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total	175	175	233	217.	217.4	232.6	238.8	279.2	297.8	315.8
FTE index	1.00	1.00	1.33	1.24	1.24	1.33	1.36	1.6	1.7	1.8
Annualized FTE growth		0.00	3.23	2.42	2.44	3.21	3.51	5.33	6.09	6.78

Source: Decision 2011-453, Table 3; Exhibit 48.01, ADC.AML-077 (2007-2012); Exhibit 4, Appendix 2-A.

Table 4. Growth in number of substations

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of substations	258	265	271	275	275	279	281	288	302	315
Substn. index (2005 = 100)	1.00	1.03	1.05	1.07	1.07	1.08	1.09	1.12	1.17	1.22
Annualized growth rate (%)		2.71	2.49	2.15	1.61	1.58	1.43	1.58	1.99	2.24

Source: Decision 2011-453, Table 4; Exhibit 48.01, ADC.AML-21.

60. The Commission raised this issue with AltaLink's witnesses and has taken into consideration their testimony, which requested that the Commission focus on the increased effort required to operate and maintain aging station facilities and the complexity of integrating new and old technologies as they are added into the system as the primary drivers of AltaLink's staffing and other resource requirements.⁴⁴ The Commission accepts that these factors would contribute to some, but not all, of the increase.

61. AltaLink's explanation that O&M FTE growth reflects greatly expanded system complexity, expanded requirements to comply with AESO reliability and other standards, and increased difficulty associated with maintaining and operating aging station facilities has been made in earlier AltaLink GTAs. However, accelerating growth in O&M and overall FTE levels in excess of the rate of substation growth is already reflected in the FTE growth observed in 2011 and 2012. The Commission is not persuaded that this cause can be relied on to fully support the even greater rate of O&M-related and overall FTE growth inherent in AltaLink's 2013 and 2014 forecasts.

62. As well, the growth in AltaLink FTE levels over time has occurred despite significant increases in information technology capital investments over the same period. These investments should have resulted in at least some productivity growth. Yet, the Commission observes continuing acceleration in the rate of FTE level growth compared to the growth in substations.

63. Finally, while the Commission does not rely solely on substation growth as an indicator of the growth required for resource requirements, the Commission likewise does not accept AltaLink's measure of O&M expenses and FTE levels as a ratio of the dollar value to its rate base as demonstrating the reasonableness of AltaLink's FTE forecast. The Commission has consistently rejected the use of ratios of O&M and FTE levels to the dollar value of rate base growth as a valid measure because it is expected that the replacement, over time, of long-term assets valued at historical cost will cause year-to-year increases in the value of gross plant to rise faster than inflation⁴⁵ and finds that these reasons remain valid for these test years. While the Commission has used substation growth only as an order of magnitude, rather than as a direct measure of the reasonableness of AltaLink's staffing level growth, the Commission considers that it has substantial validity for this purpose, and that it is far superior to the dollar or rate base growth measure that AltaLink has consistently used in attempting to support its forecasts.

64. To conclude, the Commission finds that AltaLink has failed to explain or adequately address the widening discrepancy between the physical growth of its system measured by substation growth and the growth of overall FTE and O&M FTE levels.

65. As discussed in Section 2.1 above, the Commission considers that responsibility to scrutinize and revise initial forecasts of costs falls on AltaLink senior management. The failure to address the disproportionate O&M FTE growth casts doubt on AltaLink's assertion in Section 1.8.3.4 of the application that its CEO, CFO and COO actively challenge department level forecasts, and direct adjustments to the forecasts they receive at first instance.

⁴⁴ Transcript, Volume 1, page 150, lines 10 to 22.

⁴⁵ Decision 2009-151, paragraph 734.

3.2 O&M staffing levels

66. In accordance with the MFR, AltaLink provided separate justifications for its 2013 and 2014 staffing levels by USA accounts for direct O&M labour, and corporate administration and general labour in sections 5.2 and 25.2, respectively, of the application.

67. AltaLink explained that almost 40 per cent of the direct O&M labour cost increase that is forecast in the application was derived from escalation assumptions related to the Alberta labour market, and submitted that the actual increase of 18 FTEs in each year of the test period should be considered to be modest and prudent in light of the increasing demands AltaLink is experiencing across its business.

68. AltaLink submitted that while the primary driver of the forecast direct O&M FTE additions related to its requirement to address the operation and maintenance of a significant number of aging assets and the implementation and enforcement of industry standards, the primary drivers for FTEs related to individual USAs were as follows:

- USA 560: supervision and engineering (the span of control requirements has increased)
- USA 561: operation and maintenance of control centre operations
 - aging assets and load growth
 - increased technical sophistication of the transmission system, requiring additional monitoring and control
- USA 562: station equipment maintenance (aging equipment requires more maintenance);
- USA 563: overhead line expense
 - increased effort associated with maintaining the existing transmission facilities
 - costs related to compliance with provincial standards
- USA 566: miscellaneous O&M transactions
 - more complex operating requirements
 - additional costs to ensure compliance with new reliability standards
 - increased external obligations and compliance requirements
- USA 571.1: vegetation management (work tracking and Alberta Reliability Standards (ARS) compliance)
- USA 575: operations and Management IT support (security and ARS compliance)
- USA 920: administrative and general salaries (regulatory tariff issues)⁴⁶

69. AltaLink submitted that, on average, its higher total FTEs (actual plus approved vacancies) over approved FTE levels over the past six years, demonstrate the demands and pressures on its business.⁴⁷ AltaLink also submitted that, despite the fact that it has a larger asset base, operates in a larger geographic region, and serves a greater population, it expects to have 82 and 79.3 fewer FTEs than ATCO Electric in 2013 and 2014, respectively.⁴⁸

70. AltaLink forecast a \$0.7 million increase in its corporate administration and general labour (USA 920) expenses in each year of the test period, due to the impact of inflation and the addition of three corporate operating FTEs as follows:

- a labour relations specialist to assist in recruiting and a tightened labour market

⁴⁶ Exhibit 150.02, page 120, Table 9-1.

⁴⁷ Exhibit 150.02, page 121, paragraph 605, Table 9-3.

⁴⁸ Exhibit 150.02, page 121, paragraph 601, Table 9-2.

- two FTEs in the legal and regulatory department

71. In its argument, the ADC noted that its ADC Meyer evidence commented on the rate of increase of AltaLink's staffing level forecasts. The ADC submitted that certain statements made in AltaLink's evidence demonstrate that AltaLink's labour force additions are driven by its capital program. Given this, the ADC noted that Mr. Meyer expressed concern in his evidence that, if AltaLink were to experience a delay in its capital program, then AltaLink would not need as many O&M employees as it has forecast. The ADC noted that Mr. Meyer provided evidence that AltaLink has historically over-forecast its direct assign capital expenditures.

72. The ADC noted that, in light of Mr. Meyer's concerns, the Commission should adopt a proposal to include only 50 per cent of the forecast increase in labour expense in its revenue requirement for 2013 and 2014, and the establishment of a deferral mechanism that would ensure AltaLink fully recovers this expense and protects customers from labour costs that AltaLink is not incurring. The ADC noted that, if adopted, Mr. Meyer's proposal would require revenue requirement reductions of \$1.6 million and \$2.9 million for 2013 and 2014, respectively.

73. In reply, AltaLink submitted that the ADC's suggestion that AltaLink's forecast increase in operating FTEs during the test period is entirely caused by the increase in capital work is erroneous. AltaLink submitted that the ADC's suggestion is unsupported and intentionally ignores AltaLink's clear evidence and explanations for increases in this category of cost in the application.

74. In its reply, the CCA submitted that AltaLink's comparison of its 2013 and 2014 O&M FTE levels to those of ATCO Electric is tenuous at best because any number of factors could explain both O&M FTE levels and the cost per FTE, as calculated by each of these companies. Accordingly, the CCA submitted that the Commission should not rely on any comparison with ATCO Electric in its assessment of AltaLink's O&M FTEs or costs per FTE.

Commission findings

75. The Commission agrees with the CCA's observation that comparisons of O&M FTE levels between AltaLink and ATCO Electric are not helpful as the utilities have different capitalization policies.

76. Further to the Commission's findings in Section 2.1 above, the Commission agrees directionally with the ADC's submission that O&M FTE levels may be driven in part by AltaLink's efforts to achieve its forecast capital program. However, the Commission agrees with AltaLink that the relationship between AltaLink's forecast O&M requested additions and the forecast capital program is indirect rather than direct.

77. The Commission does not agree with either the ADC's proposal to reduce AltaLink's labour expense forecast to a 50 per cent placeholder level, nor the ADC's proposal to establish a deferral account.

78. Further to the Commission's findings in Section 3.1 above, the Commission has a significant concern about the rate at which AltaLink's O&M FTEs are growing. As a result, the Commission will not accept AltaLink's forecast 2014 O&M FTE levels as filed, without additional information.

79. In making this finding, the Commission considered AltaLink's evidence that it has already hired more FTEs by mid-year, 2013 than its GTA has forecast for all of 2013. Since AltaLink's forecast has not been approved, AltaLink faces the downside risk of not having these positions funded in its approved revenue requirement.

80. In this regard, the Commission notes from AltaLink's evidence that, despite having adopted an uncertainty adjusted approach for the purposes of forecasting its direct assign project capital expenditures and capital additions for the 2013 and 2014 test years, for all other forecasting and resource planning purposes, AltaLink strives to achieve the base plan forecast. And, as noted by AltaLink in its testimony with respect to its 2013 forecast, "we're likely to exceed our uncertainty adjusted forecast by at least \$100 million."⁴⁹ Given this evidence, the Commission is prepared to accept as filed AltaLink's O&M-related FTE forecast for 2013 only. This is because the reasonableness of the forecast is based on an assessment of the reasonableness of AltaLink's expectations regarding its capital program, and because it is this capital program that forms the basis for department level forecasts that drive FTE forecasts for both capital and O&M for the vast majority of AltaLink staff.

81. However, as discussed in Section 6.1.3, it is not clear at this time that the incremental costs associated with AltaLink's efforts to achieve the 2014 base plan forecast are warranted. Accordingly, in Section 6.1.3, the Commission has directed AltaLink to work with the AESO to reassess the in-service dates set out in AltaLink's current base plan.

82. Given all of these considerations, AltaLink is directed to use the updated direct assign capital program arising from the re-assessment of the in-service dates in the refiling of its O&M-related FTE forecast for 2014.

3.3 Capital-related FTEs

83. AltaLink presented its capital FTE forecast as part of its consolidated FTE forecasts in Section 1.3.3 of the application and provided a breakdown of capital and operating FTEs by job classification in Appendix 2-B of the application. After making adjustments for forecast FTE level reductions of 22 FTEs for 2013 and three FTEs for 2014, AltaLink forecast net FTE capital additions of 63.4 FTEs in 2013 and 15 FTEs in 2014.⁵⁰

84. In argument, AltaLink submitted that capital FTEs are not approved and do not form part of the revenue requirement and are instead subject to the direct assign capital deferral account (DACDA) process. However, AltaLink had provided information related to capital FTEs in the application in order to provide context for the overall impact these FTEs will have on AltaLink's other revenue requirements.

85. No parties other than AltaLink addressed capital-related FTEs in argument or reply.⁵¹

⁴⁹ Transcript, Volume 7, page 1360, lines 13 to 15.

⁵⁰ Appendix 2-B indicates that AltaLink forecasts 85.4 and 18 gross FTE additions for 2013 and 2014 respectively prior to applying the External Engagement reductions of 22 and three FTEs for 2013 and 2014 respectively.

⁵¹ The Commission notes that the evidence and argument of the RPG in relation to detailed engineering costs relates, in part, to capital FTE levels. The Commission addresses this matter in sections 6.1.5.4 and 14.3.2 below.

Commission findings

86. AltaLink's capital FTE levels for either 2013 or 2014 are not approved on either a final or preliminary basis in this decision. The Commission tests the prudence of labour expenditures recovered through direct assign projects in the context of future DACDA proceedings. For all other types of capital expenditures undertaken by AltaLink, the Commission tests the prudence of capitalized labour costs at the time final closing balances for 2013 and 2014 capital additions are presented in the context of a future AltaLink GTA.

4 O&M expenses

4.1 Staff compensation

87. AltaLink discussed the basis for its requests for revenue requirement allowances in respect of staff compensation in Section 1.8.5 of the application.

88. In argument, AltaLink noted that, with the exception of a few questions related to base pay increases, staff compensation was not raised as a matter for concern during the oral hearing and submitted that its staff compensation expenses should be approved as filed. AltaLink submitted that it expected the Alberta labour market to further tighten during the GTA test period in light of the following four factors:

- decreasing unemployment levels in Alberta
- general labour shortages in Alberta
- Canada-wide labour shortages in the electric industry
- unprecedented growth in AltaLink's and Alberta's transmission builds

89. AltaLink indicated that as it is experiencing significant increases in staff turnover and does not offer a defined benefit pension plan (DB plan), it is critical that competitive compensation be provided for its employees. AltaLink noted that it discussed individual components of its staff compensation approach in separate subsections of its argument.

4.1.1 Market assessment

90. To supplement the information provided at Section 1.8.5 of the application, AltaLink also provided additional information in Appendix 2 to the application. Appendix 2 contained reports prepared by Mercer Consulting and Align HR Consulting dealing with non-unionized compensation, union rates of pay, salary escalation projections as well as pension and non-pension benefit costs.

91. In argument, AltaLink submitted that current market compensation for both union and non-union employees is now higher than AltaLink previously forecast in its 2013-2014 GTA. In particular, AltaLink submitted its evidence indicated that:

- its total compensation (composed of base pay, short-term incentive plan (STIP) compensation, long-term incentive plan (LTIP) and perquisites, where applicable) is three per cent below market for non-union employees and one per cent above market for executive employees
- union employee base pay is at market
- benefit levels for both non-union and union employees are 2.08 per cent below market

92. In its argument, the CCA noted that, at paragraph 602 of its rebuttal evidence,⁵² AltaLink indicated that, while it was of similar size to ATCO Electric, it had 69.2 fewer FTEs than ATCO Electric, and that trend continued on a forecast basis through 2013-2014.

93. The CCA submitted that it tested AltaLink's propositions during the oral hearing and, as a result, AltaLink filed an undertaking response as Exhibit 178 that illustrated there are underlying differences in costs per FTE as calculated by AltaLink and ATCO Electric. The CCA noted that Exhibit 178 states, in part as follows:

AltaLink is unable to perform further analysis as the schedules do not provide the underlining data. The following amongst other differences or unknown factors regarding ATCOs data make further analysis not possible;

- ATCO uses internal resources to execute the majority of its capital program (thus the mixture of employees compared to AltaLink would have a lower average labour rate)
- ATCO includes temporary employees in its FTE count while AltaLink's definition of temporary (casual employees) are not included in the FTE count, but are included in the labour cost thus driving ATCO's labour over FTE ratio lower, and
- from the filed schedules it is not clear in what category (Labour, Fringe or other) ATCO captures pension costs

94. The CCA submitted that, because one of the purposes of USA/MFR requirements is to facilitate meaningful comparisons between utilities, it is highly desirable for utilities to use consistent methods to calculate FTE counts, corresponding salaries and wages costs, and consistent classification methods for O&M versus capital FTEs. Accordingly, the CCA recommended that the Commission direct AltaLink to expand Exhibit 178 in its next GTA. Specifically, AltaLink should be directed to include a detailed comparison of AltaLink's FTE unit costs, for both O&M and capital, with those of ATCO Electric. In addition, the direction should require AltaLink to identify and quantify each of the factors contributing to any differences in unit costs between the two companies.

Commission findings

95. In considering AltaLink's proposed FTE levels and its proposed per-FTE unit compensation amounts, the Commission acknowledges the concerns raised in the CCA's argument regarding the comparability of AltaLink and ATCO Electric data. Accordingly, when considering the reasonableness of staff compensation levels, as proposed by AltaLink, the Commission has not used comparisons with any ATCO Electric data as the basis for its findings in this decision.

96. The concerns raised by the CCA about comparisons between AltaLink and ATCO Electric data, with respect to O&M related staffing, are also acknowledged in the Commission's findings in Section 3.2. Similarly, concerns raised by the RPG about comparisons between AltaLink and ATCO Electric data, with respect to engineering costs, are acknowledged in the Commission's findings in Section 14.3.2.

⁵² Exhibit 150.02.

97. The Commission considers the matter of enhancing the ability to make inter-utility comparisons to be beyond the scope of AltaLink's GTA and, therefore, the Commission declines the CCA's request to direct AltaLink to expand upon Exhibit 178 as part of its next GTA.

4.1.2 Base pay

98. AltaLink described its proposals for base pay levels in Section 1.8.5.3 of the application. In that section, AltaLink noted that its base pay requests, stated on a blended basis for all employees, amounted to an increase of 4.8 per cent per year, and reflected the following considerations:

- the need to recognize that AltaLink does not offer a DB plan, and thus cannot offer the employee attraction or retention benefits that DB plans provide
- the impact of an increasingly tight general Alberta labour market and Canada-wide tightness in the electric industry on observed staff turnover levels
- the assessment of the relative competitive position of AltaLink executive positions and non-union positions below executive as provided by Mercer Consulting in an appendix to the application⁵³
- the effect of existing collective bargaining agreements
- the need to maintain equity between union and non-union employees
- the adoption of a 3.75 per cent per year market increase, and
- the effect of normal course progression on forecast salary expense

99. In argument, AltaLink noted that GTA forecasts of base pay increases were set with the intention of achieving market-average total direct compensation for all AltaLink employees by the end of the 2013-2014 GTA test period.⁵⁴ However, AltaLink noted that it had recently reached an agreement with the United Utility Workers Association (UUWA), which provided for an increase in the base pay rate higher than the base pay rate increase requested in the application. Given this, and given that the forecast base pay rate increase in the application was not updated to reflect the base pay rate increase agreed upon with the UUWA, AltaLink submitted that it is imperative that the Commission not reduce base pay levels from the amount requested.

100. AltaLink noted that, while it had based its requested base salary increase of 3.75 per cent for non-union employees on a market forecast of 3.75 per cent, Mercer Consulting provided a subsequent update of its base salary forecast to slightly above 4.0 per cent.⁵⁵ As such, AltaLink submitted that, even if the Commission were to approve staff compensation amounts as filed, under current market conditions, AltaLink's requested increases would still leave base pay compensation below market-average for both executive and non-union, non-executive employees.

101. AltaLink submitted that its request for 3.25 per cent per year increases in executive base pay for 2013-2014 is intended to result in executive level employees being paid at the market-average total direct compensation by the end of the test period.⁵⁶

⁵³ Exhibit 4, application, Appendix 2-D.

⁵⁴ Exhibit 3, page 1-20, paragraph 100.

⁵⁵ Transcript, Volume 2, page 331, lines 7 to 12.

⁵⁶ Exhibit 3, page 1-21, paragraph 106.

102. Interveners filed no evidence on base pay levels.

Commission findings

103. The Commission finds AltaLink's forecast base pay adjustments to be reasonable in order to bring base pay to average market levels. Further, the Commission notes that Mercer Consulting has filed an update which indicates that forecast market increases are above those forecast in the application. For these reasons, AltaLink's forecast base pay adjustments are approved as filed.

4.1.3 Pension and benefits

104. AltaLink described its pension and benefits packages in Section 1.8.5.7 of the application. AltaLink noted that its benefits package includes:

- pension
- death benefits
- disability coverage
- life insurance
- medical/dental coverage
- vacation benefits

105. In support of its pension and benefit programs, AltaLink filed a report entitled "2012 Relative Value Study" (Relative Value Study) prepared by Mercer Consulting and included as Appendix 2-K of the application.⁵⁷ According to this report, AltaLink's benefit plan offering is 26.92 per cent of base pay while the average value of this offering in the market is roughly 2.0 per cent higher or 29.0 per cent of base pay. Therefore, AltaLink's pension and benefits are 7.2 per cent below market. AltaLink stated it has included an increase in benefits of 2.08 per cent of base pay in the application to bring AltaLink to market average.

106. AltaLink was assessing the current benefit package to determine which specific benefit areas will be increased for implementation, effective January 1, 2013, to achieve a market average level of benefits. Determination of the specific benefit changes and communication of those changes to AltaLink employees was expected to happen in the third quarter of 2012.

107. There were no other changes proposed to the structure of the pension and benefit plans. All other changes in the benefit expenses will increase commensurate with inflation, FTE additions and compensation increases. Therefore, AltaLink's 2013-2014 employer-provided benefit coverage was forecast to be at market average.

108. In argument, AltaLink noted that the increase in benefits requested by AltaLink would ensure employees receive a market average level of benefits.

109. Interveners filed no evidence.

⁵⁷ Exhibit 4, Appendix 2-K, PDF pages 258 to 279.

Commission findings

110. The Commission finds AltaLink's forecast cost adjustment for pension and benefits to be reasonable in order to bring pension and benefits to average market levels. For this reason, AltaLink's cost adjustment for pension and benefits is approved as filed.

4.1.4 STIP and LTIP

111. AltaLink discussed its forecast costs for its STIP and LTIP in sections 1.8.5.4 and 1.8.5.5, respectively, of the application. STIP is applicable to all employees, including unionized staff, while LTIP is only applicable to senior management and executive level staff. AltaLink stated that, for both plans, the design, goals and payout levels remain unchanged from the last GTA. Year-over-year increases reflected increased staffing and base compensation levels.

112. In argument, AltaLink submitted that its STIP and LTIP programs are a necessary part of competitive total compensation, and are required to attract and retain senior level employees. AltaLink noted that it made no changes to the design of either of its STIP or LTIP programs or to payout percentages in the application.

113. AltaLink noted that, consistent with findings made initially in Decision 2009-151,⁵⁸ AltaLink's funding request for its LTIP program reflects only 50 per cent of its forecasted expenditure on this program and has only included costs related to LTIP goals that are 100 per cent customer focused in its revenue requirement request. As such, AltaLink noted that the remaining costs of funding the LTIP program, which are related to goals that benefit both AltaLink's shareholder and its customers, will be paid by the shareholder.

114. No interveners filed evidence on these programs.

Commission findings

115. The Commission finds AltaLink's forecast of STIP and LTIP benefits to be reasonable because these benefits remain consistent with past approval of these programs and, further, considers that such programs are necessary in order to provide competitive compensation in the market. For these reasons, AltaLink's STIP and LTIP benefits are approved as filed.

4.2 Vegetation management (USA 571.1)

116. AltaLink explained, at Section 5.2.10 of the application, that this account included the cost of labour, materials used and expenses incurred to control trees, brush and general vegetation which may affect the safe and reliable operation of the transmission system, as well as the costs associated with managing the physical aspects of right-of-ways such as access trails, culverts, water crossings, approaches, fences and gates, and erosion control.

117. A key driver of current and future vegetation and right-of-way management expenses was the Alberta Electrical Utility Code (AEUC) and the Alberta Reliability Standards (FAC-003-AB). To comply with these standards and practices, but more importantly, to maintain a safe and reliable transmission system, AltaLink stated it must maintain specified clearances from any vegetation under or alongside the transmission lines. In order to do this, AltaLink patrols and

⁵⁸ Decision 2009-151: AltaLink Management Ltd. and TransAlta Corporation, 2009 and 2010 Transmission Facility Owner Tariffs, Application No. 1587092, Application No. 1594573, Proceeding ID. 102, October 2, 2009.

inspects each line on a scheduled basis, records its findings, and develops a vegetation management (VM) plan. AltaLink then implements completed VM plans, records its findings, and audits the results. Adjustments to the plan are made based on actual vegetation growth throughout the year as well as actual expenditure variations due to terrain and local conditions. AltaLink's goal was to achieve and sustain an optimized cost VM program by employing the most cost-effective vegetation management practices, while complying with all necessary rules and regulations and maintaining relations with all landowners and stakeholders.

118. AltaLink's VM expenses were forecast to be \$6.5 million in 2013 and \$7.0 million in 2014. This is an increase above the 2012 management update of \$6.2 million. The vast majority of AltaLink's forecast VM expenditures are related to contracted manpower, \$6.2 million and \$6.5 million for 2013 and 2014, respectively. The VM workload forecast was based on the same methodology used in the VM report by Ecological Solutions Inc. (ESI) as filed in AltaLink's 2007-2008 GTA and updated in its previous tariff application (2011-2013 GTA). In the 2007-2008 GTA, AltaLink proposed a nine-year VM reinvestment schedule that would achieve a stable and sustainable VM program. This proposed schedule and its required funding was approved by the Alberta Energy and Utilities Board (EUB or board) and has been subsequently implemented by AltaLink.

119. AltaLink reported that the actual investment and work completed was tracking closely to the proposed plan and remained on track to achieve the sustainable VM program by the end of 2015. A change from the previous reports is that the sustainable amount required past 2015 has increased to address the new facilities coming on stream. The latest ESI report, Vegetation Management Program Update Summary, was filed as Appendix 15.2 to the application.

120. AltaLink noted, as stated in the latest ESI report, there was a concern with the appearance of the mountain pine bark beetle in Alberta and the discovery of some affected trees along AltaLink's transmission lines. It was expected that, in as little as five years, infected trees will become a hazard to the transmission lines. AltaLink was identifying the affected areas and collaborating with industry experts and Parks Canada to develop a plan to address this risk. AltaLink has benefited from the fact that Alberta Sustainable Resources Development has been very aggressive in identifying and removing bark beetle-infested trees on provincial crown lands. On federal lands, however, the response has been the opposite: to let nature take its course. There has been some work to coordinate efforts with fire prevention (prescribed burns) and the bark beetle in the green zone on both federal and provincial lands. Depending on the spread of the beetles, AltaLink advised there may be a significant increase in budget requirements to handle this situation in the next GTA test period.

Commission findings

121. The Commission finds the forecast amounts for the test period to be reasonable because they reflect the ongoing investment in VM control previously approved by the board. Subject to any adjustments that may be required as a result of the Commission's findings in Section 3.2 and Section 6.1.3, and any adjustments for changes in contractor escalation rates as directed by the Commission in Section 2.2 of the decision, AltaLink's VM forecast is approved as filed. AltaLink is directed to apply this adjustment in its refiling.

4.3 Contracted manpower

122. AltaLink discussed its direct O&M and corporate administration contracted manpower forecasts in sections 5 and 25 respectively of the application.

4.3.1 USA 561 – control centre operations

123. AltaLink described its forecasted USA 561 contracted manpower expenditures for 2013 and 2014 in Section 5.2.3 of the application. AltaLink indicated that forecast increases to USA 561, contracted manpower expense in 2013 and 2014, related primarily to inflation.⁵⁹

Commission findings

124. The Commission notes that AltaLink's forecast expenditures on contracted manpower attributed to USA 561 for both 2013 and 2014 are at or below levels forecast for 2011 and 2012 as reported in Decision 2011-453:

Table 5. USA 561 contracted manpower – prior vs. current GTA

	2010 mgmt up ¹ / actual	2011 forecast/ actual	2012 forecast/ mgmt up	2013 forecast/ forecast	2014 forecast/ forecast
USA 561 - Control centre operations (last GTA)	0.5	0.5	0.6	-	-
USA 561 - Control centre operations (current GTA)	0.2	0.3	0.4	0.3	0.3

¹ Management update.

Source: Decision 2011-453, Table 12; GTA Table 5.2.3-1.

125. The Commission finds AltaLink's expenditure forecasts to be reasonable, subject to the Commission's finding in Section 2.2 to reduce the escalator applied to contracted manpower expenses from 4.81 per cent to 3.75 per cent. AltaLink is directed to apply this adjustment in its refile.

4.3.2 USA 562 - station equipment maintenance

126. AltaLink described its forecasted USA 562 contracted manpower expenditures for 2013 and 2014 in Section 5.2.4 of the application. AltaLink indicated that forecast increases for this account are related directly to its efforts to operate and maintain aging station facilities. In addition, as new assets are added to the power system, AltaLink incurs higher costs because these additions contain more complex station equipment and facilities.⁶⁰

127. AltaLink indicated that inflation alone contributes \$0.1 million per year to forecast costs for this account.⁶¹ AltaLink also indicated that it used contractors to support the maintenance of the transmission system in the following areas:

- skilled electrical, mechanical, and civil maintenance activities like:
 - battery testing/replacement
 - HVAC adjustments/filter replacements

⁵⁹ Application, paragraph 297.

⁶⁰ Application, paragraph 305.

⁶¹ Application, paragraph 331.

- roof and fence repairs
- hanta virus mitigations
- specialized maintenance, including
 - transformer/breaker/switch maintenance
 - equipment testing/inspection
 - oil reclamation
 - trouble response (if required)
- specialized contractors outside of AltaLink's capability such as fire suppression systems

128. AltaLink explained that increased contracted manpower expenditure is necessary to maintain constrained-work queue target levels.⁶²

129. No interveners addressed AltaLink's forecast in argument or reply.

Commission findings

130. The Commission notes that AltaLink's actual contracted manpower expenses for USA 562 for the years 2011 and 2012 were below the amounts forecast by AltaLink in its prior GTA.

Table 6. USA 562 contracted manpower – prior vs. current GTA

	2010 mgmt up/ actual	2011 forecast/ actual	2012 forecast/ mgmt up	2013 forecast/ forecast	2014 forecast/ forecast
USA 562 - Station equipment maintenance (last GTA)	1.8	2.1	2.6	-	-
USA 562 - Station equipment maintenance (current GTA)	1.7	1.5	2.3	2.6	2.7

Source: Decision 2011-453, Table 12; GTA Table 5.2.4-1.

131. The Commission further notes that AltaLink's forecast increases in contracted manpower expense are in addition to requested increases in staffing levels related to USA 562 in the current GTA.

132. In view of the increased FTEs proposed by AltaLink, the Commission finds that AltaLink has failed to adequately justify the requested increase in contracted manpower expenses beyond the level expected from inflation.

133. Accordingly, the Commission directs AltaLink to use actual 2012 expenditures as a baseline, and apply the contracted manpower escalator of 3.75 per cent per year approved in Section 2.2 above. AltaLink is directed to provide its updated 2013 and 2014 forecasts with its refiling application.

4.3.3 USA 563 - overhead line expense

134. AltaLink discussed contracted manpower requirements associated with USA 563 (overhead line expense) in Section 5.2.5 of the application.⁶³

135. AltaLink explained that contractors' costs in support of overhead line maintenance include the following activities and services:

⁶² Application, paragraph 331.

⁶³ Application, paragraphs 350 to 353.

- helicopter services for aerial patrols
- land agent support
- infrared conductor scanning (for conductor sleeve condition assessments)
- corrective maintenance (occasional)
- support for high load corridor moves
- insulator washing maintenance support
- gate/fence repair
- pole testing and inspection⁶⁴

136. AltaLink indicated that inflation alone contributes \$0.1 million per year to forecast costs for this account,⁶⁵ and explained that the balance of the forecast increase arose from increases in the costs attributable to the re-establishment of an insulator washing program that was triggered by the evaluation of a near-miss safety incident in 2009 and from the increased costs of supporting high load corridor moves.

137. No interveners addressed AltaLink's USA 563 contracted manpower forecast in argument or reply.

Commission findings

138. The Commission has examined AltaLink's current USA 563 contracted manpower forecast in relation to recent expenditures, as summarized below:

Table 7. USA 563 contracted manpower – prior vs. current GTA

	2010 mgmt up/ actual	2011 forecast/ actual	2012 forecast/ mgmt up	2013 forecast/ forecast	2014 forecast/ forecast
USA 563 - Overhead line expense (last GTA)	2.5	3.2	3.1	-	-
USA 563 - Overhead line expense (current GTA)	2.0	3.0	3.1	3.1	3.4

Source: Decision 2011-453, Table 12; GTA Table 5.2.5-2.

139. The Commission finds AltaLink's recent forecast to be reasonably accurate and, therefore, considers that AltaLink's forecasts should only be adjusted to reflect the reduction to the allowed contracted manpower inflation rate directed to be applied by the Commission in Section 2.2 above. AltaLink is directed to update its USA 563 contracted manpower expense forecasts for both 2013 and 2014 in its refiling according to these revised inflation assumptions.

4.3.4 USA 566 – O&M miscellaneous transmission

140. AltaLink discussed its 2013 and 2014 contracted manpower forecasts for USA 566 in Section 5.2.7 of the application.⁶⁶

141. The primary purposes for engaging and charging contracted manpower to USA 566 are to address excess workload for AltaLink staff, or to obtain specialty services that are not available

⁶⁴ Application, paragraph 350.

⁶⁵ Application, paragraph 351.

⁶⁶ Application, paragraphs 420 to 428.

within the group.⁶⁷ A detailed summary of contracted manpower activities described by AltaLink is provided in Table 8 below:

Table 8. USA 566 contracted manpower activities summary

Area	Activities
Safety and environmental qualifications	<ul style="list-style-type: none"> - annual safety and environmental summit - Stars air ambulance service - integration of ISNetworld Contractor Management / instructional design within safety, including: <ul style="list-style-type: none"> - safety and contractor pre-qualifications - performance ratings database
Training delivery	<ul style="list-style-type: none"> - data mining of existing material within organization - reconstruction of material to standard “look and feel” - standardization of record management - succession planning knowledge base
Engineering and technical support	Engineering studies related to: <ul style="list-style-type: none"> - radio and television interference - power quality - electromagnetic fields (EMF) - audible noise - ArcFlash protection - participation in CEA programs - crossing and encroachment studies - fees for annual double testing - power system modelling support - engineering standards development
Other	<ul style="list-style-type: none"> - instructional designers for training programs - safety or environmental audits/inspections - critical incident or complex investigations - GTA application preparation support - business process assistance

Source: Prepared by Commission from application, paragraphs 420 through 427,

142. AltaLink explained that inflation alone contributes \$0.5 million per year to forecast costs for this account. Additional increases in forecast costs are associated with the following activities:

- incremental expenditures on ISNetworld Contractor Management and instructional design work within the safety area
- third-party contractors to facilitate contractor safety and environment program pre-qualifications as well as providing live updates on contractor performance ratings
- instructional design services
- engineering support related to ongoing engineering standards development⁶⁸

⁶⁷ Application, paragraph 420.

143. In argument, AltaLink noted that it is forecasting a decline in contractor expenses as the safety initiatives move into a sustainment phase and a number of the FTE additions described in its USA 566 write-up are already in place.⁶⁹

Commission findings

144. The Commission has compared AltaLink's record of USA 566 contracted manpower forecasts to its actual expenditures, for the period 2010 to 2012, and considers that it has been reasonably accurate.

Table 9. USA 566 contracted manpower – prior vs. current GTA

	2010 mgmt up/ actual	2011 forecast/ actual	2012 forecast/ mgmt up	2013 forecast/ forecast	2014 forecast/ forecast
USA 566 - O&M misc transmission (last GTA)	1.5	4.2	2.6	-	-
USA 566 - O&M misc transmission (current GTA)	1.8	3.9	2.6	3.1	3.1

Source: Decision 2011-453, Table 12; GTA Table 5.2.7-1.

145. In light of the substantial forecast increases in FTEs and labour expense related to USA 566 for both 2013 and 2014, the Commission considers that AltaLink has failed to demonstrate that the full amount of the requested increase is warranted for 2013 and 2014.

146. Accordingly, for its refiling, AltaLink is directed to reduce its forecasts to the level of AltaLink's actual recorded 2012 USA 566 contracted manpower expense, plus an allowance for inflation of 3.75 per cent as authorized by the Commission in Section 2.2.

4.3.5 USA 575 – O&M IT support

147. AltaLink discussed its 2013 and 2014 contracted manpower forecasts for USA 575 in section 5.2.11 of the application.⁷⁰ AltaLink is forecasting less than \$100,000 for USA 575 contracted manpower costs in the test period.

Commission Findings

148. The forecast amounts of contracted manpower expense for 2013 and 2014 are approved as filed.

4.3.6 USA 923 – outside services employed

149. AltaLink discussed contracted manpower expense for USA 923 in Section 25.2.10 of the application.⁷¹ Forecast expenditures attributed to this USA relate to professional consulting services not directly attributable to a particular operating function nor to other uniform system accounts.

⁶⁸ Application, paragraph 427.

⁶⁹ Application pages 5-27, 5-43 and 5-44.

⁷⁰ Application, paragraph 496.

⁷¹ Application, paragraphs 780 to 783.

150. AltaLink indicated that it categorizes contractor costs as either base or cyclical expenses, and indicated that approximately two-thirds of the forecast expenditure related to base functions such as:

- general legal fees
- audit fees
- search firms
- leadership development
- strategy development
- property tax consultants
- labour
- pension and employment consultants
- rating agency fees

151. AltaLink indicated that the remaining one-third of forecast contractor costs attributed to USA 923 for cyclical contractors related to:

- GTA and regulatory issues
- customer surveys
- backfilling for intended full time positions that AltaLink is unable to fill in the competitive labour market

152. AltaLink forecast a \$0.2 million decline in USA 923 contracted manpower expense in 2013 versus 2012 because some of the work that its contractors were performing was now being completed by AltaLink employees. For 2013, AltaLink forecast a year-over-year increase of \$0.2 million as a result of additional work anticipated in its 2015-2016 GTA.

Commission findings

153. AltaLink's USA 923 contracted manpower forecasts for its current GTA compared to its actual expenditures, for the period 2010 to 2012, are described below:

Table 10. USA 923 contracted manpower – prior vs. current GTA

	2010 mgmt up/ actual	2011 forecast/ actual	2012 forecast/ mgmt up	2013 forecast/ forecast	2014 forecast/ forecast
USA 923 - Outside services employed (last GTA)	4.5	4.6	4.0	-	-
USA 923 - Outside services employed (current GTA)	3.7	4.8	4.8	4.6	4.8

Source: Decision 2011-453, Table 13; GTA Table 25.2.10-1.

154. The Commission considers AltaLink's 2013 and 2014 forecasts to be reasonable, and approves them as filed, subject to making any adjustments necessary to reflect the lower contractor inflation escalator approved in Section 2.2. AltaLink is directed to make any required adjustment in its refiling.

4.3.7 USA 934 – IT G&A expenses

155. AltaLink described its forecast contracted manpower expenditures for USA 934 (information technology general and administrative (IT G&A) expenses) in Section 25.2.19 of the application.⁷²

156. AltaLink indicated that, while its prior GTA discussed a strategy to convert contractor positions to FTEs where possible, difficulties experienced in recruiting certain required skills had caused AltaLink to expand its use of managed services for positions that could not be recruited.

Commission findings

157. Contracted manpower forecasts for USA 934 for AltaLink's current GTA and actual expenditures for the 2010 to 2012 period are compared below:

Table 11. USA 934 contracted manpower – prior vs. current GTA

	2010 mgmt up/ actual	2011 forecast/ actual	2012 forecast/ mgmt up	2013 forecast/ forecast	2014 forecast/ forecast
USA 934 - IT G&A expenses (last GTA)	1.1	1.0	1.1	-	-
USA 934 - IT G&A expenses (current GTA)	1.4	1.1	0.9	1.3	1.5

Source: Decision 2011-453, Table 13; GTA Table 25.2.19-1.

158. The Commission considers that AltaLink's forecasting track record is reasonable, and also considers that AltaLink adequately explained activity drivers related to service desk activity drivers such as increased help desk call volumes, increased user accounts, growth in server capacity and requests for business application service requests.

159. Accordingly, AltaLink's forecasts for 2013 and 2014 are approved as filed, except as necessary to adjust for the change in the contractor escalation rate directed by the Commission in Section 2.2 of the decision. AltaLink is directed to make this change in its refiling.

4.3.8 USA 935 – General O&M expenses

160. AltaLink described the basis for its USA 935 contracted manpower expense forecast in Section 25.2.20 of the application.⁷³

161. AltaLink explained that its forecast of contracted manpower expenses for USA 935 primarily related to forecast expenditures on the Alberta Counter Terrorism Crisis Management Plan (ACTCMP) and the Graduated Threat Mitigation Plan (GTMP).

162. AltaLink explained that the development of the ACTCMP was ordered by the Alberta solicitor general and minister of public security in fall 2010 and that recommendations would be delivered in late 2012 or early 2013. AltaLink expected that these would include recommendations to develop, train, test and exercise a crisis management plan.

⁷² Application, paragraphs 845 to 859.

⁷³ Application, paragraphs 870 to 872.

163. AltaLink indicated that the purpose of the GTMP is to allow maintenance of essential services under adverse conditions such as:

- major incidents outside Alberta in western interconnection
- potential tampering with AltaLink’s “transmission service delivery system”
- security requirements specified by ACTCMP and associated AUC regulations developed in 2004
- compliance with NERC reliability standards CIP 002 – 009

164. Interveners filed no evidence on this issue.

Commission findings

165. The Commission has examined the track record of AltaLink’s USA 934 contracted manpower forecasts and expenditures in Table 12 below:

Table 12. USA 935 contracted manpower – prior vs. current GTA

	2010 mgmt up/ actual	2011 forecast/ actual	2012 forecast/ mgmt up	2013 forecast/ forecast	2014 forecast/ forecast
USA 935 - General O&M expenses (last GTA)	0.7	0.9	0.8	-	-
USA 935 - General O&M expenses (current GTA)	0.5	0.6	0.7	0.9	1.0

Source: Decision 2011-453, Table 13; GTA Table 25.2.20-1.

166. The Commission notes that expenditures for contracted manpower related to USA 934 did not materialize to the extent forecast in AltaLink’s last GTA. Given the extent of the forecast error (cumulatively, in the order of \$0.6 million over the 2010 to 2012 period), the Commission considers that AltaLink’s 2013 and 2014 forecasts should be reduced by \$0.2 million in each year. The Commission does not require any additional adjustment related to its findings on the contracted manpower escalator. AltaLink is directed to provide its updated USA 935 contracted manpower forecasts reflecting these findings in its refiling.

4.4 General operating expense (GOE)

4.4.1 USA 560 – supervision and engineering

167. AltaLink discussed forecast 2013-2014 GOE for USA 560 in Section 5.2.2 of the application.⁷⁴ AltaLink explained that the USA 560 GOE increase for 2013 related to the travel and training/seminar requirements arising from the transfer of five FTEs into USA 560 from other USAs.⁷⁵

⁷⁴ Application, paragraph 277.

⁷⁵ This transfer is discussed in paragraph 267 of the application.

Commission findings

168. AltaLink's GOE forecasts for USA 560 in AltaLink's current GTA, and its prior period expenditures, are described in Table 13 below:

Table 13. USA 560 general operating expense – prior vs. current GTA

	2010 mgmt up/ actual	2011 forecast/ actual	2012 forecast/ mgmt up	2013 forecast/ forecast	2014 forecast/ forecast
USA 560 – Supervision and engineering (last GTA)	0.1	0.0	0.0	-	-
USA 560 – Supervision and engineering (current GTA)	0.1	0.1	0.1	0.3	0.3

Source: Decision 2011-453, Table 16; GTA Table 5.2.2-1.

169. The Commission notes from Table 13 that AltaLink's reported expenditures for the 2010 to 2012 period averaged approximately \$0.1 million, and exceeded amounts forecast in the last GTA. The Commission considers this expenditure allowance to be reasonable.

170. Conversely, the Commission notes that AltaLink's primary explanation for the increase is the transfer of five FTEs from another department. AltaLink does not indicate where it has accounted for an offsetting reduction in training, travel and seminar requirements for these employees in its description of GOE for other USA accounts.

171. In any event, the Commission notes that forecast year-end FTEs for USA 560 would total 22 for each of 2013 and 2014 after accounting for the FTE transfers. AltaLink's forecast expenditures of approximately \$300,000 in each year suggests an average travel, training and seminar expense of over \$13,600 per FTE, per year. The Commission is not persuaded by the evidence on the record as to why it is necessary to incur expenditures in this amount per employee. For example, no evidence was provided regarding the subject matter of these courses, the registration costs of the courses, where these courses are being held or for how long these courses run. Absent additional evidence or explanation, the Commission considers these costs to be excessive.

172. For these reasons, the Commission directs AltaLink to reduce its USA 560 GOE forecast to \$0.1 million for each of 2013 and 2014 at the time of its refiling.

4.4.2 USA 561 – control centre operations

173. AltaLink discussed its GOE forecast for USA 561 in Section 5.2.3 of the application.⁷⁶ AltaLink indicated that its forecasts were only projected to increase in 2013 and 2014 from prior period levels due to the impact of inflation.

Commission findings

174. A summary of AltaLink's general operating expense forecasts for USA 561 for AltaLink's current GTA and its prior period expenditures for this account are described in Table 14 below:

⁷⁶ Application, paragraph 298.

Table 14. USA 561 general operating expense – prior vs. current GTA

	2010 mgmt up/ actual	2011 forecast/ actual	2012 forecast/ mgmt up	2013 forecast/ forecast	2014 forecast/ forecast
USA 561 - Control centre operations (last GTA)	0.2	0.3	0.3	-	-
USA 561 - Control centre operations (current GTA)	0.2	0.3	0.5	0.5	0.6

Source: Decision 2011-453, Table 16; GTA Table 5.2.3-1.

175. The table above indicates that, with a single exception, AltaLink spent at the GTA forecast level over the 2010 to 2012 period. For this reason, AltaLink's forecasts are approved as filed.

4.4.3 USA 562 – station equipment maintenance

176. AltaLink discussed its GOE forecast for USA 562 in Section 5.2.4 of the application,⁷⁷ and explained that USA 562 GOE related primarily to the following:⁷⁸

- substation control building repair expenses
- operating parts and supplies such as:
 - equipment spare parts
 - lubricants
 - consumable materials
- transportation expenses for travel to and from substations
- meals, accommodation, and incidental expenses

Commission findings

177. USA 562 general operating expense amounts are summarized in Table 15 below:

Table 15. USA 562 general operating expense – prior vs. current GTA

	2010 mgmt up/ actual	2011 forecast/ actual	2012 forecast/ mgmt up	2013 forecast/ forecast	2014 forecast/ forecast
USA 562 - Station equipment maintenance (last GTA)	1.7	2.0	2.2	-	-
USA 562 - Station equipment maintenance (current GTA)	1.9	2.4	2.6	2.6	2.9

Source: Decision 2011-453, Table 16; GTA Table 5.2.4-1.

178. The Commission notes that AltaLink's USA 562 GOE expenditures exceeded GTA forecasted levels in each of 2010 through 2012.

179. The Commission accepts AltaLink's explanation that forecast increases in 2013 and 2014 reflect the impact of inflation, increased vehicle operating costs, and increased material requirements related to increased maintenance activity. AltaLink's forecasts are approved as filed.

⁷⁷ Application, paragraphs 333 to 338.

⁷⁸ Application, paragraph 333.

4.4.4 USA 563 – overhead line expense

180. AltaLink described its USA 563 GOE forecast in Section 5.2.5 of the application. AltaLink forecast expenditures of \$1.5 million for each of 2013 and 2014.

181. AltaLink explained that the forecast increase in GOE related expenses for USA 563 in 2013 related partially to inflation as well as to:

- increases in staffing costs arising from the 2012 staff additions described in AltaLink's 2011-2012 GTA compliance filing
- increased vehicle related costs for fuel and maintenance expenditures arising from a forecast increase in AltaLink's vehicle fleet

182. AltaLink provided a breakdown of 2011-2012 actual and 2013-2014 forecast vehicle numbers associated with USA 563 in Table 5.2.5-8, reproduced below.

Table 16. USA 563 vehicles breakdown

	2011 actual	2012 mgmt. up	2013 forecast	2014 forecast
On road operating vehicles	9	11	11	11
Off road operating vehicles	6	7	9	9
Operating trailers	8	8	10	10
Total operating vehicles	23	26	30	30

Source: Application Table 5.2.5-8.

Commission findings

183. USA 563 general operating expense amounts are summarized in Table 17 below:

Table 17. USA 563 general operating expense – prior vs. current GTA

	2010 mgmt up/ actual	2011 forecast/ actual	2012 forecast/ mgmt up	2013 forecast/ forecast	2014 forecast/ forecast
USA 563 - Overhead line expense (last GTA)	0.6	1.1	1.2	-	-
USA 563 - Overhead line expense (current GTA)	0.6	0.9	1.1	1.5	1.5

Source: Decision 2011-453, Table 16; GTA table 5.2.5-2

184. The Commission has reviewed the information contained in the application. In particular, the Commission has considered the forecast increase in vehicle fleet size and fuel costs. Given the magnitude of the current capital plan, the Commission considers the increase in vehicle fleet to be reasonable. The Commission finds AltaLink's forecast GOE costs for overhead line expense to be reasonable and they are approved as filed.

4.4.5 USA 566 – O&M miscellaneous transmission

185. AltaLink discussed its forecast of GOE for USA 566 in Section 5.2.7 of the application. AltaLink explained that USA 566 GOE expenses support the following activities:

- transmission map and record work
- transmission office expenses
- other transmission expenses not provided elsewhere

186. In relation to these activities, AltaLink explained that GOE expenses attributed to USA 566 consist of expenses related to:

- staff expenses related to the number of FTEs
- professional dues
- purchases of training manuals, engineering standards, and subscriptions
- inventory write downs and adjustments
- educational partnership costs

187. AltaLink forecast 2012 to 2013 and 2013 to 2014 increases of approximately \$100,000 in each year, inclusive of inflation.

Commission findings

188. USA 566 GOE amounts are summarized in Table 18 below:

Table 18. USA 566 general operating expense – prior vs. current GTA

	2010 mgmt up/ actual	2011 forecast/ actual	2012 forecast/ mgmt up	2013 forecast/ forecast	2014 forecast/ forecast
USA 566 - O&M miscellaneous transmission (last GTA)	0.8	1.7	1.8	-	-
USA 566 - O&M miscellaneous transmission (current GTA)	0.7	0.7	1.6	1.7	1.8

Source: Decision 2011-453, Table 16; GTA Table 5.2.7-1.

189. The Commission notes that, while the forecast increases for 2013 and 2014, when compared to 2012 actuals, are comparatively small, AltaLink's 2012 amount represented a significant increase over 2011 actuals, which was \$1.0 million below the approved forecast for that year. Over the three-year period from 2010 to 2012, the cumulative forecast error, measured as the difference between the GTA forecast amount and AltaLink's actual expenditure, is \$1.3 million.

190. The Commission considers that the approved USA 566 GOE should take into account AltaLink's track record of spending lower than forecast, as captured by the forecast error. Accordingly, AltaLink's forecasts are reduced by \$0.5 million for each year. AltaLink is directed to make this adjustment in its refile.

4.4.6 USA 575 – O&M IT support

191. AltaLink described its 2013 and 2014 GOE forecasts for USA 575 in Section 5.2.11 of the application. AltaLink explained that the forecast 2013 and 2014 increase of approximately \$100,000 per year, when compared to the 2012 management update level, related to:

- vendor software maintenance and emergency support costs as part of AltaLink's Multiprotocol Label Switching (MPLS)
- PC software, government radio licence fees associated with fiber leased to provide service to AltaLink's Lethbridge and Acheson offices
- the leasing of additional dark fiber services in lieu of constructing additional microwave radio equipment at the Janet 74S and ENMAX 65S substations

Commission findings

192. AltaLink's USA 575 general operating expense amounts are summarized in Table 19 below:

Table 19. USA 575 general operating expense – prior vs. current GTA

	2010 mgmt up/ actual	2011 forecast/ actual	2012 forecast/ mgmt up	2013 forecast/ forecast	2014 forecast/ forecast
USA 575 - O&M IT Support (last GTA)	0.8	1.7	1.8	-	-
USA 575 - O&M IT Support (current GTA)	0.7	1.5	1.6	1.7	1.8

Source: Decision 2011-453, Table 16; GTA Table 5.2.11-1.

193. The Commission finds AltaLink's forecast expenditures to be reasonable and they are approved as filed.

4.4.7 USA 921 – administration corporate / office supplies and expenses

194. AltaLink forecast expenditures on USA 921 of \$2.1 million in each of 2013 and 2014. AltaLink explained that USA 921 includes staff, office and other general administration expenses not directly chargeable to other accounts and are primarily related to expenditures in support of corporate and facilities staff, including:⁷⁹

- training/professional development and related travel
- professional dues
- employee events
- printing, stationary postage

Table 20. USA 921 – per FTE costs breakdown

Per FTE cost: (\$'s)	2010 actual	2011 actual	2012 mgmt update	2013 forecast	2014 forecast
Training	212	185	451	386	341
Staff costs	864	967	848	821	882
Professional dues	80	70	160	204	170
Employee events	225	414	343	367	252
Office expenses	673	513	523	483	475
Other	195	345	155	344	314
Total	2,249	2,494	2,480	2,605	2,434

Source: Application, Table 25.2.8-1.

⁷⁹ Application, paragraph 776.

Commission findings

195. General operating expense amounts for USA 921 are summarized in Table 21 below:

Table 21. USA 921 general operating expense – prior vs. current GTA

	2010 mgmt up/ actual	2011 forecast/ actual	2012 forecast/ mgmt up	2013 forecast/ forecast	2014 forecast/ forecast
USA 921 – Admin. corp. / office supplies & exp. (last GTA)	1.6	1.8	2.0	-	-
USA 921 – Admin. corp. / office supplies & exp. (current)	1.3	1.6	1.8	2.1	2.1

Source: Decision 2011-453, Table 17; GTA Table 25.2.8-2,

196. The Commission notes that AltaLink's expenditures on USA 921 were, on average, more than \$200,000 per year less than the approved forecast over the 2010 to 2012 period. The Commission has taken this into account in respect of AltaLink's 2013 and 2014 forecasts and, therefore, reduces these forecasts to \$1.9 million for each year. AltaLink is directed to make this adjustment in its refile.

4.4.8 USA 924 – insurance premiums

197. AltaLink discussed its forecast for USA 924 (insurance premiums) expenditures in Section 25.2.11 of the application. AltaLink forecast expenditures of \$2.2 million and \$2.7 million for 2013 and 2014, respectively, up from management update expenditures of \$1.9 million in 2012.

Commission findings

198. AltaLink's prior year amounts and its test period forecasts are summarized in Table 22 below:

Table 22. USA 924 general operating expense – prior vs. current GTA

	2010 mgmt up/ actual	2011 forecast/ actual	2012 forecast/ mgmt up	2013 forecast/ forecast	2014 forecast/ forecast
USA 924 – Insurance premiums (last GTA)	1.6	1.7	2.0	-	-
USA 924 – Insurance premiums (current)	1.6	1.6	1.9	2.2	2.7

Source: Decision 2011-453, Table 17; GTA Table 25.2.11-1.

199. The Commission considers that AltaLink's recent forecasting track record for USA 924 expenditures is reasonable. The Commission accepts AltaLink's assertion that its 2013 and 2014 forecast reflects both the effects of forecast premium increases applied to a growing base of installed assets and other factors.⁸⁰

200. Therefore, the Commission finds AltaLink's forecasts for USA 924 to be reasonable and they are approved as filed.

⁸⁰ Application, paragraph 786.

4.4.9 USA 925 – injuries and damages

4.4.9.1 Damage claims and reserve funding requirement

201. AltaLink described the GOE component of its forecast expenditures for USA 925 activities in Section 25.2.12 of the application.

202. As described in Table 25.2.12-1 of the application,⁸¹ AltaLink's 2013 and 2014 USA 925 forecast expenditure for 2013 and 2014 is composed primarily of forecast self-insurance reserve (SIR) claim amounts (approximately \$1.1 million per year, based on average SIR claims over the 2002-2011 period), and also includes forecast amounts of approximately \$150,000 per year for allowance of third party, small damage claims (under \$0.1 million per event) for potential property damage or bodily injury arising from AltaLink activities. In addition to factoring in forecast growth and inflation, AltaLink indicated that it had based its forecast small damage claims on its historical experience over the 2004-2011 period, over which small damage claims totaled approximately \$125,000 per year.

203. In Section 29.2 of the application, AltaLink requested SIR funding in the amounts of \$0.1 million for 2013 and \$1.1 million for 2014, targeting SIR losses of \$1.1 million in each year, and a SIR balance of zero in each of 2013 and 2014.

204. AltaLink requested that the Commission approve the true up of actual amounts to the placeholder funding amounts for USA 925.⁸²

Commission findings

205. AltaLink's request for USA 925 placeholder funding, in the amount of \$1.3 million for 2013 and 2014, is approved as filed, as is its request for a future true-up of actual amounts.

4.4.9.2 Reconciliation of SIR

206. AltaLink sought the Commission's approval of its reconciliation and disposition of the SIR.⁸³ AltaLink provided a continuity schedule of its reserve for injuries and damages in GTA Schedule 29-2 of the application.

Commission findings

207. AltaLink's reconciliation of the reserve for injuries and damages set out in application Schedule 29-2⁸⁴ is approved as filed.

4.4.10 USA 928 – Commission expenses (hearing costs)

208. AltaLink discussed its forecast for USA 928 (hearing costs) in Section 25.2.14 of the application. AltaLink requested hearing cost reserve funding of \$0.7 million for 2013 and \$1.2 million for 2014,⁸⁵ and requested that this funding be subject to true-up with respect to its actual results.⁸⁶

⁸¹ Application, paragraph 796.

⁸² Application, paragraph 1051.

⁸³ Application, Section 1.6.2, paragraph 44.

⁸⁴ Exhibit 108.1, Schedule 29-2.

⁸⁵ Application, Table 25.2.14-1.

⁸⁶ Application, paragraph 1051.

Commission findings

209. AltaLink's placeholders for hearing cost reserve funding for 2013 and 2014 are approved as filed. AltaLink's reconciliation of its hearing cost reserve is also approved as filed.⁸⁷

4.4.11 USA 930.1 – general advertising expenses

210. AltaLink described its forecast GOE expenditures for USA 930.1 (general advertising expenses) in Section 25.2.15 of the application.⁸⁸ AltaLink's forecast expenditures are small and relate to the cost of:

- advertising campaigns related to public safety
- advertising of scheduled outages
- maintenance work impacting the public

Commission findings

211. AltaLink's forecasts are approved as filed.

4.4.12 USA 930.2 – miscellaneous general expense

212. AltaLink described its USA 930.2 (miscellaneous general expense) GOE forecast in Section 25.2.16 of the application.⁸⁹ Forecast expenditures relate to:

- credit facility fees
- trustee fees
- board of director fees
- educational partnerships

213. AltaLink explained that about one half of forecast USA 930.2 expenditures relate to credit facility fees, which is driven by the forecast cost of credit. AltaLink also forecast increases related to the naming of a new director to the AltaLink board in mid-2012.

Commission findings

214. AltaLink's forecasts are approved as filed.

4.4.13 USA 931 – rents other than head office

215. AltaLink discussed its USA 931 GOE forecast in Section 25.2.17 of the application.⁹⁰

216. Forecast expenditures relate to rents for non-head office spaces including:

- rent (paid to AESO) for a backup control centre (within AESO facility)
- the Red Deer field office
- the Lethbridge field office

⁸⁷ Exhibit 108.1, Schedule 29-7.

⁸⁸ Application, paragraphs 813 to 817.

⁸⁹ Application, paragraphs 818 to 820.

⁹⁰ Application, paragraphs 821 to 823.

Commission findings

217. AltaLink's forecasts are approved as filed.

4.4.14 USA 931.1 – head office rent

218. AltaLink discussed its 2013-2014 test period GOE forecast for USA 931.1 in Section 25.2.18 of the application.⁹¹

219. AltaLink explained that its forecast expenditures reflect prevailing market rates at the time of its commitment to a lease. At the time of its application (in 2012), AltaLink indicated that it was leasing space at AltaLink Place, the Golder Building, and the DeVry Building. Table 23 below summarizes AltaLink's leasing intentions for each of these buildings by year:

Table 23. Head office leasing intentions

Location	2012 floors	2013 floors
AltaLink Place	3	3
Golder	2	1
DeVry	1	all

Source: Application, paragraph 834.

220. AltaLink submitted that ratepayers benefit from the fact that it uses a suburban location for its head office. AltaLink noted that, whereas rental rates in downtown Calgary are on average \$35.00/square foot, it is currently renting space at \$17.10/square foot in the suburban location.

221. AltaLink noted that, Colliers International suggests that the industry standard is 175 to 225 square feet per person for engineering use and it has based its forecast on a requirement of 200 square feet per individual.

Commission findings

222. AltaLink's forecast is approved as filed.

4.4.15 USA 934 – IT G&A expenses

223. AltaLink discussed its test period forecast for USA 934 GOE expenditures in Section 25.2.19 of the application.⁹² AltaLink indicated that the GOE component of USA 934 represents approximately 44 per cent of total expenditure for this USA.

224. AltaLink explained that the GOE component of USA 934 includes:

- meal/travel/incidental expenses
- annual software maintenance and support
- peripheral hardware

225. AltaLink attributed forecast increases primarily to the cost of PC software licences (\$0.2 million of increase), which reflects both the growth in the number of users (forecast staff increases) and changes in Microsoft's licensing structure.

⁹¹ Application, paragraphs 831 to 838.

⁹² Application, paragraphs 860 to 862.

Commission findings

226. The Commission considers AltaLink's forecasting track record for USA 934 GOE to be reasonable, and approves AltaLink's forecast increases for 2013 and 2014.

4.4.16 USA 935 – general O&M expenses

227. AltaLink discussed its forecast of GOE for USA 935 in Section 25.2.20 of the application.

228. AltaLink explained that forecast expenses in this account include costs assignable to customer accounts, sales and administration used in the maintenance of property, where the book costs are included in Account 390 (structures and improvements), Account 391 (office furniture and equipment), Account 391.1 (computer hardware & voice and data network equipment), Account 397 (communication equipment) and Account 398 (miscellaneous equipment).

229. AltaLink noted that general operating expense costs represent approximately 70 per cent of USA 935 costs and are primarily driven by the operating costs associated with current and/or new office space.⁹³

Commission findings

230. AltaLink's prior year amounts and its test period forecasts are summarized in Table 24 below:

Table 24. USA 924 general operating expense – prior vs. current GTA

	2010 mgmt up/ actual	2011 forecast/ actual	2012 forecast/ mgmt Up	2013 forecast/ forecast	2014 forecast/ forecast
USA 935 – General O&M expenses (last GTA)	2.1	2.6	2.6	-	-
USA 935 – General O&M expenses (current)	1.8	1.9	2.4	2.4	2.4

Source: Decision 2011-453, Table 17; GTA Table 25.2.20-1.

231. The Commission considers that AltaLink's recent track record indicates a tendency to over-forecast expenditure for USA 924 GOE. Accordingly, the Commission has reduced AltaLink's forecasts to \$2.2 million for each of 2013 and 2014. AltaLink is directed to make this change in its refiling.

4.5 Right-of-way payments

4.5.1 Annual structure payments

232. AltaLink discussed its forecast of operating expenses classified as USA 567, right-of-way payments, in Section 5.2.8 of the application. AltaLink requested funding for right-of-way payments in the amount of \$8.8 million for 2013 and \$12.4 million for 2014. A summary of AltaLink right-of-way payments between 2010 and 2014 is provided in Table 25 below:

⁹³ Application paragraphs 853 to 854.

Table 25. Right-of-way payments (USA 567)

	2010 actual	2011 actual	2012 mgmt update	2013 forecast	2014 forecast
	(\$ million)				
ROW payments	4.8	6.0	6.4	8.8	12.4

Source: Exhibit 3, Table 5.2.8-1.

233. AltaLink explained that its forecast 2013 and 2014 increases over 2012 levels, are primarily driven by renewals of expiring agreements at higher per structure compensation rates and additional structures for new direct assign projects. AltaLink provided a summary of per structure compensation rates used to prepare AltaLink's structure payments forecasts for the years 2010 through 2014 in Table 5.2.8-2 of the application:

Table 26. Per-structure compensation rates summary

	2010 rate (\$)	2011 rate (\$)	2012 rate (\$)	2013 rate (\$)	2014 rate (\$)
500-kV double circuit	1,250	1,300	1,350	1,470	1,525
500-kV single circuit or 240-kV high capacity	1,022	1,250	1,300	1,435	1,485
240-kV lattice	568	825	845	1,190	1,230
240-kV / 138-kV 2-pole	390	445	465	605	625
Single poles	243	295	307	425	440

Source: Application, Table 5.2.8-2.

234. In support of the proposed increases in per structure amounts for different types of transmission structures used in AltaLink's 2013 and 2014 structure payments forecast, AltaLink filed a report (Serecon report) titled "Annual Structure Payments for Transmission Lines in Alberta," prepared by Serecon Valuations Inc. (Serecon) included as Appendix 12-A in the application.⁹⁴

235. AltaLink explained that it requested Serecon to develop a more quantitative methodology to determine fair compensation for landowners for the intangible adverse effects that transmission facilities have on landowners' property. The report provided a methodology that demonstrates higher levels of intangible adverse effect compensation are supported, as compared to those compensation levels AltaLink used in establishing its annual structure payments rates in its previous tariff application (2011-2013 GTA). The results also provided support for the rates established by the Surface Rights Board (SRB) in its decision on the SW 240-kilovolt (kV) project for Lloyd Sproule. (Decision 2011/0097-0106) where the SRB awarded \$500 per structure for intangible adverse effects.

236. AltaLink supported the methodology Serecon used to determine intangible adverse effect compensation and considers the compensation level to be the minimum fair compensation for intangible adverse effects due to transmission lines. AltaLink stated it would use Serecon and its methodology in any future SRB cases. AltaLink requested a continued placeholder for annual structure payments revenue requirement within this application.

237. AltaLink stated it was generally able to negotiate satisfactory annual structure payments compensation rates for renewed contracts with landowners. Negotiations with existing

⁹⁴ Exhibit 4, Appendix 12-A, PDF pages 1051 to 1118.

landowners resulted in two landowners challenging the new rates to the SRB. AltaLink and the landowners engaged in SRB pre-hearing conferences that resulted in settled negotiations and no full SRB hearings. For new agreements associated with new facilities on landowners' property, AltaLink has found negotiations with landowners to be much more difficult. New landowners continue to view AltaLink's current annual structure payments rates as below market compensation compared to that received from the oil and gas industry. AltaLink maintained the annual structure payments compensation rates forecast within this GTA have increased and will help to close the gap with what landowners consider to be fair compensation.

238. In argument, the CCA referred to prior EUB and Commission decisions⁹⁵ with respect to annual structure payments, claiming that AltaLink has not always satisfied the regulator as to the appropriateness of the payments it makes to landowners.

239. The CCA also referred to the cross-examination of Mr. Frehlich by Mr. Wachowich during the hearing.⁹⁶ The CCA stated it was not certain if Mr. Frehlich used the terms manage and mitigate interchangeably but it was their expectation that AltaLink would seek to mitigate, or keep these costs low. The CCA submitted there was no real evidence that AltaLink proposes or supports the lowest reasonable compensation with respect to annual payments.

240. The CCA stated that the Commission should continue with the current placeholder treatment in establishing an approved forecast. The CCA further suggested that the Commission direct AltaLink to produce a comprehensive independently verified report describing, in sufficient detail, the whole inventory of structures and associated payments including:

- Historical cost or compensation documented in the style of Exhibit 50.04 at page 75 of 990 in the attachment to AUC.AML-019 (a).
- High- and low-end of the range of payments or compensation for each structure of the annual structure payments to landowners.

The above should also include:

- The average annual payment (mean, median and mid-point) by type of structure for all types of structures for which payments are being made.
- The highest and lowest payment for each class of structure.
- Any and all outliers from the above.

241. In argument, AltaLink maintained that it had struck an appropriate balance between the fair value of right-of-way payments to landowners and ensuring amounts paid remain prudent and fair for rate payers.⁹⁷ What are fair and appropriate right-of-way payments should not be considered in isolation and any decision on what is fair should be balanced.

Commission findings

242. As noted in the last decision,⁹⁸ the Commission's task is to determine reasonable amounts to be included in AltaLink's revenue requirements for the test period. The Commission does not

⁹⁵ CCA argument, paragraphs 117-118.

⁹⁶ Transcript, Volume 1, pages 170-186.

⁹⁷ Transcript, Volume 1, page 174, lines 21 to 24.

⁹⁸ Decision 2011-453, paragraph 365.

address or determine actual landowner compensation as this function would be outside its jurisdiction.

243. Consistent with findings in past AltaLink GTAs, the Commission remains of the view that the cost of annual structure payments is subject to sufficient uncertainty, and is sufficiently beyond AltaLink's ability to control, to warrant the continuation of deferral account treatment for this expense. Continued placeholder treatment was not opposed by any party.

244. The Commission has again reviewed the Sproule decision of the SRB and is concerned that AltaLink may not be sufficiently pro-active in its attempts to mitigate the costs of annual structure payments. As stated in the last decision,⁹⁹ when assessing compensation payments, such as annual structure payments, the SRB may consider rates negotiated by other landowners to establish a "pattern of dealings" which may, in turn, incent other landowners to seek to increase their annual structure payment rates by requesting a review by the SRB. This cycle can place upward pressure on compensation rates. Given this potential, the Commission considers it necessary that utilities be made aware that a failure to recognize and respond to this pressure could expose them to the risk that their offers to landowners may be found to be imprudent.

245. As noted in the last decision,¹⁰⁰ while AltaLink may have to assess the probability and cost of SRB proceedings against the cost of general increases to its offered annual structure payment rates, the Commission must also consider the extent to which higher rates offered by one utility may be an impetus for landowners to challenge lower rates offered by other utilities.

246. As stated in the last decision,¹⁰¹ AltaLink has a duty to ensure that all annual structure payment costs have been incurred prudently. As such, AltaLink's annual structure payment costs may be subject to disallowance if it can be established that AltaLink did not act prudently in either negotiations or in representations before the SRB.

247. The Commission has reviewed the Serecon report and notes that Serecon has recommended an increase of 3.5 per cent for each year of the test period for annual structure payments.¹⁰² The Commission considers that, for purposes of the placeholder amounts used in determining revenue requirement forecasts, it would be more appropriate to use a rate more reflective of general inflation. Therefore, the Commission directs AltaLink to use a forecast increase rate of 2.5 per cent.

248. The Commission does not consider the information requested by the CCA to be necessary. The Commission, however, does consider that information similar to that found in AUC-AML-019 (attachment) would be helpful. Therefore, the Commission directs AltaLink to supply, in its next GTA filing, a table showing, for the last five years and in a format similar to that of the referenced attachment, the annual structure payment rates paid by AltaLink and the other electric transmission utilities in Alberta.

249. AltaLink is further directed to file copies of all SRB decisions issued between the date of this decision and the filing of the next GTA in respect of right-of-way payments involving all electric transmission utilities in Alberta.

⁹⁹ Decision 2011-453, paragraph 368.

¹⁰⁰ Decision 2011-453, paragraph 369.

¹⁰¹ Decision 2011-453, paragraph 376.

¹⁰² Serecon report, page 48, Appendix 12 to the application.

250. AltaLink is directed to provide a revised right-of-way payment forecast reflecting the lower inflationary rate of increase as well as any other adjustments arising from directions elsewhere in this decision.

4.5.2 Easements

251. AltaLink also discussed its practices respecting easement negotiations for direct assign projects in Section 5.2.8 of the application. AltaLink explained that it generally continues to be its practice to commence easement negotiations with landowners following the filing of the facility application with the Commission. AltaLink also explained that landowners affected by the preferred route proposed in a facility application are offered a compensation package that generally consists of the following:¹⁰³

- Easement payments: fair market value paid per acre for the total area of the easement that crosses a landowner's property.
- Entry fee payments: \$250 (minimum) \$5,000 (maximum) per titled property.
- General disturbance payments: \$1,500 minimum.
- Damages: \$2,500 prepaid damages plus post-construction payments (if applicable).
- Early access and survey/routing consent: \$10,000, as applicable.

252. AltaLink submitted that the benefit of offering the easement compensation as described above included:

- avoidance of time consuming and expensive objections to facility applications
- avoidance of SRB proceedings
- mitigation of cost and risk related to project timelines and construction

253. In argument, the CCA noted that the breakdown of easement payments provided in Section 5.2.8 of the application is consistent with a summary of AltaLink easement programs provided in Table 26 of Decision 2011-453.

254. After reproducing other easement related findings from Decision 2011-453, the CCA submitted that there is no real evidence that AltaLink proposes or supports the lowest reasonable compensation in the area of easement payments. The CCA also expressed concern that AltaLink has not adequately broken out the ownership interests of First Nations as landowners.

255. In view of its concerns, the CCA submitted that the Commission should direct AltaLink to produce a comprehensive and independently verified report describing its inventory of structures and associated easement payments. The CCA submitted that such reporting should include:

- high/low range estimates for each structure
- easements to be resolved in deferral accounts
- average easement payments by type of structure for all structure types
- the highest and lowest easement payment for each class of structure
- descriptions of any outliers, including:
 - access payments in the style of easements to First Nations, and

¹⁰³ Application, paragraph 444.

- any compensation paid to municipalities, other local governments, rural electrification associations or utilities

Commission findings

256. In Decision 2011-453, the Commission found that AltaLink bears an obligation to demonstrate the prudence of its easement payments in DACDA applications. Given this finding, the Commission established the following direction:

387. The Commission directs AltaLink to provide a complete schedule showing the amounts of each type of easement program paid with respect to specific projects in its next and all future DACDA applications.¹⁰⁴

257. The Commission continues to believe the above direction to be reasonable. AltaLink is directed to continue to file such information.

258. With respect to the information requested by the CCA in its argument, the Commission does not consider this information to be necessary. The Commission does consider that information with respect to what AltaLink offers would be helpful. AltaLink is therefore directed to file a schedule, at the time of filing its next GTA, showing the easement payment schedule for the past five years.

4.6 Taxes other than income taxes

259. AltaLink discussed its forecast for taxes other than income taxes in Section 5.4 of the application. As in past years, AltaLink engaged municipal property tax assessment consulting firm AEC International to prepare its 2013-2014 property tax forecast. This report was filed as Appendix 9 to the application.

260. AltaLink forecast expenditures on taxes other than income taxes in the amounts of \$24.8 million for 2013 and \$27.9 million for 2014.¹⁰⁵ AltaLink also proposed that its forecast expenditures on taxes other than income taxes should be subject to deferral account treatment, consistent with treatment provided to such expenditures in prior Commission decisions.¹⁰⁶

261. AltaLink's forecasts for property taxes were addressed in the ADC Meyer evidence.¹⁰⁷ Mr. Meyer recommended that AltaLink's property tax expense forecast should be reduced to \$23.1 million and \$23.6 million for 2013 and 2014, respectively, on the basis that:

- analysis of the ratio of property taxes to assessed values for transmission lines and substations for the years 2013 and 2014 using the property tax amounts proposed by AltaLink are higher than historical ratios, and
- AltaLink's proposed property tax expense for substations for 2013 and 2014 is increasing despite a decrease in the assessed value of substations

262. The ADC Meyer evidence indicated that the reductions proposed by Mr. Meyer were derived by applying the 2011 ratio of property taxes to assessed values to the forecast assessed values for 2013 and 2014.

¹⁰⁴ Decision 2011-453, paragraph 387.

¹⁰⁵ Exhibit 3, page 5-62, paragraph 500.

¹⁰⁶ Exhibit 3, page 5-62, paragraph 502.

¹⁰⁷ Exhibit 112.02, pages 11 to 15.

263. Mr. Meyer indicated that he did not oppose the continuation of the deferral account treatment for property taxes and noted that the existence of a deferral account would protect AltaLink in the event that AltaLink's actual property taxes exceeded the levels he recommended.¹⁰⁸

264. In rebuttal evidence, AltaLink submitted that the inherent premise of the request for property tax forecast reductions in the ADC Meyer evidence is that the ratio of 2013 and 2014 assessed values for transmission lines and substations to property taxes is out of line with prior levels. However, AltaLink submitted that the ADC Meyer evidence relied on incorrect evidence of assessment values for 2013 and 2014. AltaLink indicated that when it recalculated these ratios using corrected assessed values, the resulting ratios were more consistent with ratios observed in prior years.

265. AltaLink also submitted in its rebuttal evidence that Mr. Meyer's approach of examining the relationship between property taxes and assessed value against historical trends represented a gross oversimplification of the work used to derive AltaLink's forecasts of property taxes for 2013 and 2014.

Commission findings

266. The Commission has reviewed the Meyer evidence filed by the ADC as well as the AEC evidence filed by AltaLink at Appendix 9 of the application. In particular, the Commission has reviewed the discussions around forecast increases to assessment year modifiers (AYM) and inflation in the evidence of AEC. The Commission considers these forecast increases to be reasonable. The Commission also accepts the "Ratio of Property Taxes to Assessed Values" derived from the use of these inflationary increases.

267. The Commission notes that both Mr. Meyer in his errata evidence¹⁰⁹ and AltaLink in its rebuttal evidence¹¹⁰ have used the same ratios in the calculation of their respective forecasts for property taxes. However, the parties have used considerably different assessment values. Given the size of the current capital plan, the Commission finds the assessment values used by AltaLink to be reasonable in that they yield more accurate property tax forecasts. The Commission approves AltaLink's forecasts for taxes other than income taxes, as filed.

268. The Commission also notes that both parties have recommended continued deferral account treatment for these forecast expenses. Given the materiality of the amounts and that determination of these tax levels is largely beyond the control of AltaLink, the Commission considers this treatment reasonable and AltaLink's request for deferral account treatment is granted.

5 Revenue offsets

269. AltaLink discussed its revenue offset forecasts in Section 8 of the application. Revenue offsets are obtained from two main revenue streams: fixed contracts and variable labour contracts for services provided to affiliates. In the application, AltaLink noted that, in accordance

¹⁰⁸ Exhibit 112.02, page 15, lines 5 to 11.

¹⁰⁹ Exhibit 260, Schedule GRM-3.

¹¹⁰ Exhibit 150, page 145.

with Decision 2010-292,¹¹¹ it had not increased its forecast contracted manpower to reflect anticipated increases in third party capital revenues.¹¹²

270. AltaLink's transmission revenue offsets predominantly comprise revenue obtained from fixed contracts relating to infrastructure services. As this infrastructure will not materially change over the test period, the associated revenue remains constant.¹¹³ Services provided to affiliates are charged at two times AltaLink's actual salary which is in compliance with Decision 2005-019.^{114 115}

271. A breakdown of AltaLink's test period revenue offset forecast and prior-year amounts is shown in Table 27 below:

Table 27. Revenue offsets¹¹⁶

	2010 actual	2011 actual	2012 update	2013 forecast	2014 forecast
Affiliates & inter-affiliates					
- AltaLink Investments, L.P. (AILP)					
- AltaLink Holdings, L.P. (AHLP)	0.4	0.6	0.7	0.8	0.8
FortisAlberta services/agreements					
- Telecommunication system services					
- Joint pole use					
- Miscellaneous services	3.8	3.8	3.8	3.8	3.8
TransAlta services/agreements					
- First Nation transmission services					
- Telecommunication services					
- General business services					
- System control services					
- Meter data services	1.0	1.0	1.0	0.8	0.8
Lease and other revenue					
- Land leases					
- Tower leases					
- Other:					
- Maintenance and high load moves					
- Amortization of customer contribution to operating exp.					
- 2010-2011 ROW billings	1.9	1.8	1.5	1.5	1.6
Total non-affiliate revenues	6.7	6.6	6.3	6.2	6.1
Total revenue offsets	7.1	7.3	7.0	7.0	7.0

Source: Prepared from GTA, Schedule 8-1 and application tables 8.1.1-1, 8.1.1-2, 8.1.2-1 and 8.1.3-1.

¹¹¹ Decision 2010-292: AltaLink Management Ltd., Refiling Pursuant to Decision 2009-151 and Decision 2009-216, Application No. 1605764, Proceeding ID. 439, June 23, 2010, pages 5 and 6.

¹¹² Exhibit 3, Section 8.

¹¹³ Exhibit 3, page 8-2, paragraph 543.

¹¹⁴ Decision 2005-019: AltaLink Management Ltd. and TransAlta Utilities Corporation, 2004-2007 General Tariff Application, Application No. 1336421, March 12, 2005.

¹¹⁵ Exhibit 3, page 8-4, paragraph 548.

¹¹⁶ Note: certain figures in Table 27 do not add due to rounding.

272. This forecast was revised in its March 15, 2013 update as follows:

Table 28. March 15, 2013 updated revenue offsets

	2010 actual	2011 actual	2012 update	2013 forecast	2014 forecast
Revenue - affiliates & inter-affiliates	0.4	0.6	1.8	0.8	0.8
Miscellaneous revenue – other	6.7	6.6	7.8	6.3	6.4
Total revenue offsets	7.1	7.3	9.6	7.1	7.3

Source: Exhibit 108.02, Schedule 8-1.

5.1 Revenues from affiliates and inter-affiliates

273. The CCA contended that AltaLink's initial actual and forecast revenues from affiliates and inter-affiliates for the test years only reflected an increase of \$0.1 million over its 2012 update.¹¹⁷ The CCA was concerned about the sufficiency of the 2013-2014 test period forecasts particularly as AltaLink had advised that there is now an additional affiliate, AltaLink Ontario Limited Partnership (AOLP) to which it provides services.¹¹⁸ AltaLink has indicated that these services are the same types of services that it provides to AILP and AHLP (e.g., treasury services, accounting, IT, legal).¹¹⁹ However, the CCA argued that there is no evidence to indicate the quantum of revenues anticipated from AOLP incorporated in the test years. Even if one were to assume that the \$0.7 million in the 2012 update was received in equal parts from each of the AILP and AHLP (i.e., \$0.35 million each), it would seem reasonable that a similar amount should be forecast in the test years for AOLP. That is, at a minimum, the 2013-2014 forecast should be increased by \$0.35 million each year.¹²⁰

274. Further, the CCA submitted that AltaLink had demonstrated a consistent and significant under-forecasting of revenues from affiliates and inter-affiliates. As demonstrated in AltaLink's response to an undertaking,¹²¹ AltaLink has under-forecast by an average of some \$0.6 million per year¹²² in affiliate and inter-affiliates revenues:

¹¹⁷ Exhibit 3, paragraph 549, Table 8.1.2-1.

¹¹⁸ Transcript, Volume 2, page 270, lines 19-21.

¹¹⁹ Transcript, Volume 2, page 271, lines 5-8.

¹²⁰ Exhibit 302.01, paragraph 23.

¹²¹ Exhibit 174.01, response to undertaking.

¹²² The CCA stated that excluding 2010, the two most recent years 2011 to 2012 reflect an average under-forecast of \$0.9 million per year in affiliate revenues.

Table 29. AltaLink response to undertaking – affiliate revenue comparison¹²³

AltaLink's forecast for 2011-2012 was based on reviewing historical actual results and incorporating any known additional affiliate services that were forecast for 2011-2012. The significant amount of services provided by Business Development in 2012 to other affiliates related to a new opportunity in Ontario pursued by AOLP that arose in 2012. As such, the 2012 forecast could not have anticipated the significant increase in services to affiliates provided by Business Development.

The charge-out rate used for both forecast and actuals is based on the 2x multiplier, as approved in EUB Decision 2005-019.

	2010		2011		2012		2013	2014
	Actual	GTA	Actual	GTA	MU*	GTA	Fcst	Fcst
Treasury	0.1	0.0	0.2	0.0	0.2	0.0	0.2	0.2
Accounting	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Business Development	0.1	0.0	0.1	0.0	1.1	0.0	0.3	0.3
IT, Legal & Other	0.1	0.2	0.2	0.2	0.4	0.2	0.2	0.2
Total	0.4	0.3	0.6	0.3	1.8	0.3	0.8	0.8

*These amounts are from the March 15/13 Updated 2013-14 GTA Schedules

275. In addition, the CCA noted that AltaLink's original 2013-2014 GTA affiliate and inter-affiliates revenue for the 2012 update was \$0.7 million.¹²⁴ As a result, the forecast was updated March 15, 2013 and increased by \$1.1 million to \$1.8 million.¹²⁵ However, all of the change appears to be in the business development area only. But notwithstanding this significant increase, no change was made to the test period forecasts for business development.¹²⁶

276. The CCA submitted that the test period forecast for affiliate and inter-affiliates should continue to reflect the significant amount of services provided by business development in 2012 to other affiliates. As such, the CCA recommended that the forecast for revenues from affiliates and inter-affiliates be increased by \$1.1 million in each of 2013 and 2014. In addition, the CCA submitted that the services provided by IT, legal and other for the test years should reflect the most recent forecast of services in the 2012 update of \$0.4 million and as such, the CCA recommended the test years forecast be increased from \$0.2 million per year to \$0.4 million per year, an increase of \$0.2 million for each test year.¹²⁷

277. The CCA recommended that at minimum, the 2013-2014 forecast for revenues from affiliates and inter-affiliates should be increased by \$0.35 million each year. Alternatively, the CCA recommended that the business development forecast be increased by \$1.1 million in each of 2013 and 2014 and that the IT, legal and other forecast be increased by \$0.2 million in each of 2013 and 2014.

¹²³ Exhibit 174.01, response to undertaking.

¹²⁴ Exhibit 5, Schedule 8-1, line 2.

¹²⁵ Exhibit 108.02, Schedule 8-1, line 2.

¹²⁶ Exhibit 302.01, paragraph 25.

¹²⁷ Exhibit 302.01, paragraph 26 and 27.

Commission findings

278. The Commission has considered the fact that AltaLink has a new affiliate, AOLP,¹²⁸ and that AltaLink is providing AOLP with the same types of services it provides to AILP and AHLPLP (i.e., treasury services, accounting, IT, and legal). The Commission finds it is reasonable to expect that some portion of the revenues anticipated from AOLP would be incorporated into the test years.

279. The Commission has considered the CCA's position that most of the additional revenues from the March 15, 2013 update are in the business development category. However, there is no evidence on the record to indicate that the entire increase in 2012 can be attributed directly to revenues from AOLP. The Commission finds that, since AltaLink is now providing services to an additional affiliate, there should be additional revenues incorporated into the test years to account for the services provided to AOLP. The Commission finds it reasonable to assume that, if the \$0.7 million in the 2012 update was received in equal parts from each of AILP and AHLPLP (i.e., \$0.35 million each) it likewise would seem reasonable that a similar amount should be forecast in the test years for AOLP. For these reasons, the Commission approves this recommendation from the CCA and directs AltaLink, in its refiling, to include \$0.35 million in each of 2013 and 2014 for services to AOLP.

5.2 Services to TransAlta

280. Table 8.1.1-2 of the application shows¹²⁹ revenue offsets from TransAlta of \$1.0 million in each of 2010, 2011 and 2012 followed by a reduction to \$0.8 million in each of 2013 and 2014. AltaLink explained the reason for this decrease as follows:

The decrease in revenue offset (for TransAlta services) for the test period is a result of lower First Nation O&M fees (as shown in Table 8.1.1-2). *The O&M fees are based on a ratio of rate bases between AltaLink and TransAlta First Nations assets. Because AltaLink's rate base forecast in the test period is higher than in the previous periods, and TransAlta's rate base is forecast to be relatively unchanged, the O&M fee is forecast to decrease.*¹³⁰ [Emphasis added]

281. The CCA submitted that the cost of services, including the development and execution of an annual maintenance program for TransAlta's withheld assets located on First Nations lands, should reflect the reality of escalating costs experienced by AltaLink. The agreement with TransAlta, which requires fees to be based on the ratio of AltaLink assets to TransAlta's First Nations assets, appears to prevent AltaLink from charging a fair value for the services rendered to First Nations assets in respect of annual maintenance costs noted above.¹³¹

282. Considering the continuing growth in AltaLink's transmission system, it would appear that the ratio of AltaLink's rate base to TransAlta's First Nations rate base, will continue to increase in future years, leading to further reductions in fees for the development and execution of an annual maintenance program for TransAlta's withheld assets located on First Nations lands.¹³² At the hearing, AltaLink noted that, if it increased its fees to TransAlta, the increased

¹²⁸ Transcript, Volume 2, page 270, lines 19-21.

¹²⁹ Exhibit 3, paragraph 547.

¹³⁰ Exhibit 49.01, CCA.AML-24(a).

¹³¹ Exhibit 302.01, paragraph 32.

¹³² Exhibit 302.01, paragraph 33.

costs to TransAlta would simply be reflected in its transmission costs paid by the AESO and therefore, there would really be no benefit to the customer.¹³³

283. The CCA submitted it is important for each transmission facility owner (TFO) to reflect the fair value of services provided. The CCA recommended that AltaLink be directed to address, in its next GTA, whether there is any way to renegotiate the O&M agreement with TransAlta, in respect of fees for the development and execution of an annual maintenance program for TransAlta's withheld assets, such that it reflects AltaLink's actual costs of providing this service.

Commission findings

284. In the hearing, AltaLink discussed the O&M arrangement it has with TransAlta with regard to TransAlta's withheld assets on First Nations lands:

Q. Given the significant rate base growth for AML, is it appropriate to continue to use the respective rate bases to allocate O&M fees to TransAlta?

A. MR. BARTEL: To me this is based on the O&M agreement that we have with TransAlta that lays out the calculation based on rate base as part of that obligation and arrangement.

Q. So we touched on it yesterday, Mr. Frehlich and I, and those assets are -- I'm going to say -- sort of suspended in a historical ownership, and there's no clear resolution to the ownership. So this is going to carry forward for as long as those assets on First Nations' lands continue to be held by TransAlta.

Is there an opportunity to reopen that agreement if you found that there was a disproportionate O&M allocation versus what was actually?

A. MR. BARTEL: It's a TFO-to-TFO regulated-asset-to-regulated-asset arrangement. So unless TransAlta changes something on their side, there's really no impetus for AltaLink to make any changes. There's really no benefit to the customer.

Q. You say that because if you didn't bill it under your O&M, TAU would? Is that what I'm taking from that?

A. MR. BARTEL: Yeah. Whatever we bill, they have as cost. So it's a net -- net the same.¹³⁴

285. In Decision 2011-453, the Commission stated:

413. AltaLink's contract for services provided to TransAlta is based on a pro-rating formula that reflects the comparative sizes of TransAlta's and AltaLink's rate bases. The Commission has considered the CCA's concern that the revenue offset allowance for AltaLink's GTA will decline because AltaLink's rate base is growing faster than TransAlta's rate base. However, the Commission accepts AltaLink's evidence that because revenues earned by AltaLink become a cost to TransAlta, there is no need to direct a change in the formula so long as the forecast revenue offset in AltaLink's GTA is directly mirrored in TransAlta's GTA for the same test years.

286. The Commission finds that there has been no change in AltaLink's contract for services provided to TransAlta and reiterates its findings above from Decision 2011-453 that revenues earned by AltaLink continue to net out as a cost to TransAlta. Further, the Commission agrees with AltaLink that this arrangement is a TFO-to-TFO, regulated asset-to-regulated asset arrangement. The Commission does not find that there would be any benefit to consumers in

¹³³ Transcript, Volume 2, page 277, lines 17-21.

¹³⁴ Transcript, Volume 2, page 277, lines 1-25.

having AltaLink renegotiate its O&M agreement with TransAlta. Further, the Commission considers that the time and resources required in this endeavour would create unnecessary costs. The Commission approves AltaLink's forecast as filed.

5.3 Lease revenue and other

287. AltaLink forecast lease and other revenue in the amount of \$1.5 million and \$1.6 million, for 2013 and 2014 respectively. AltaLink stated:

As shown in Table 8.1.3-1, AltaLink is forecasting approximately \$1.0M per year over the test period related to cell tower and land lease. Other revenue comprises \$0.2M per year of beyond –the-meter maintenance activities and high load moves, and approximately \$0.3M annual amortization of customer contribution towards operating expenses related to customer contributed portion of AltaLink's assets. AltaLink's 2010-2011 Other revenues included onetime right-of-way billings that are not forecast expected to recur in 2012 or 2013-2014.¹³⁵

288. The CCA stated that a review of AltaLink's five years history of forecast to actuals for this category of revenue offsets indicates that it has had a consistent history of under-forecasting lease revenue and other. The CCA provided the following table based on forecasts and actual data provided in prior GTAs and the current GTA. The CCA submitted that, on average, AltaLink had under-forecast lease and other revenues by about \$0.80 million per annum.

Table 30. Lease revenue and other average over five years¹³⁶

Lease Revenue and Other											
	2007		2008		2009		2010		2011		
	Actual	FC	Actual	FC	Actual	FC	Actual	FC	Actual	FC	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Land Lease	0.3	0.2	0.3	0.2	0.2	0.3	0.4	0.3	0.4	0.3	
Tower Lease	0.5	0.5	0.6	0.5	0.7	0.6	0.4	0.6	0.5	0.6	
Other	1.1	0.2	0.7	0.2	1.2	0.2	1.1	0.2	0.9	0.4	
Total Lease Revenues	1.9	0.9	1.6	0.9	2.1	1.1	1.9	1.1	1.8	1.3	
Actuals > FC	1.00		0.70		1.00		0.80		0.50		
Average over 5 years									0.80		

289. In the application, AltaLink explained that its 2010 and 2011 other revenues included onetime right-of-way billings that it did not forecast or expect to recur in 2012 or 2013-2014.¹³⁷ Further, at the hearing, AltaLink testified about the variability that it experienced for this category, due to the variability of work requested by Alberta Infrastructure, and the timing of third-party activities, which are not easy to forecast.¹³⁸

290. The CCA argued that, while there may be many reasons for AltaLink's forecasts to vary from actuals, the one constant that stands out is that AltaLink had under-forecast its revenues

¹³⁵ Exhibit 3, paragraph 551.

¹³⁶ Exhibit 302.01, paragraph 38.

¹³⁷ Exhibit 302.01, paragraph 39.

¹³⁸ Transcript, Volume 2, page 280, lines 22-25 and page 281, lines 1-2.

from lease and other revenues. This trend has continued into 2012,¹³⁹ and there is no reason to believe this trend will not continue into the test years. The CCA recommended, based on the review of the actuals to forecast variance over the last five years, 2007-2011, that the lease and other revenue forecast be increased by \$0.8 million in each of 2013 and 2014.¹⁴⁰

Commission findings

291. The Commission has reviewed AltaLink's forecast and actuals for lease revenue and other and considers that most of the variances are attributed to the "other" aspect of this category. It was AltaLink's testimony that the variability in the other category was mainly due to Alberta Infrastructure and the timing of third-party activities that are hard to forecast.¹⁴¹ Further, AltaLink testified that it did not expect the same volume of work from Alberta Infrastructure over the test period and, therefore, had forecast a more moderate amount:

Q. Now, again, going back to the previous GTA -- that is, the '11/'13 -- we noticed in the table that the other revenues cell for 2009 actual was about 1.2 million and the 2010 management update was about \$1 million. So we note you continue to forecast this at about a half a million dollars, but we seem to be seeing historical experiences of amounts over and above the forecast amounts closer to about a million as opposed to the half million. Have you taken that into account when you're preparing your forecasts for the 2013/'14 test years?

A. MR. BARTEL: Yes. We've certainly taken into account the one-time nature of those revenues and their unpredictability. We're certainly not aware of any upcoming requests in this regard, and hence the forecast has decreased.

Q. Okay. And in saying that you're not aware of any upcoming requests, you look at the type of historical requests that you get that you have to put into that category and sort of turn your mind to going forward and saying that's not likely to happen again, or it's just an unknown amount that's going to happen again?

A. MR. BARTEL: Yeah, it's strictly driven off of Alberta Infrastructure and their plans and activities. So we know there was a fair volume of road work that happened to be over the '09, '10 period. We have no indication that that would continue, and so we've forecast a more moderate amount over the test period.¹⁴²

292. The Commission acknowledges that the timing of third-party activities can be difficult to forecast. However, the Commission is concerned that there appears to be a consistent trend of under-forecasting in this category. The Commission directs AltaLink to explain in detail any future variances in this category.

¹³⁹ The CCA submitted, per AML's 2011-2013 GTA, Exhibit 1, Table 8.1.3-1 shows a 2012 forecast of \$1.3 million, whereas its actuals (per 2013-2014 GTA, Exhibit 3, Table 8.1.3-1) shows \$1.5 million, a variance of \$0.2 million. AltaLink's 2012 actuals may also vary from its 2012 update estimate; hence, the \$0.2 million variance is not the final variance figure for 2012.

¹⁴⁰ Exhibit 302.01, paragraph 40.

¹⁴¹ Transcript, Volume 7, page 280, line 22 to page 281, line 2.

¹⁴² Transcript, Volume 2, page 281, lines 9-25 and page 282, lines 1-11.

6 Capital costs

6.1 Direct assign (DA) projects (forecasting issues)

6.1.1 Scope of GTA proceeding

293. In argument, AltaLink expressed concern that the 2013-2104 GTA proceeding was unduly complicated and lengthened by two primary factors:

- the assertion of matters that are not relevant to a GTA proceeding
- the pursuit of a level of detail of information that is inappropriate for a GTA proceeding

294. On the issue of relevance to a GTA proceeding, AltaLink submitted that certain interveners:

- ignored the legislative division of responsibilities among the AUC, AESO and TFOs in presenting their views regarding tower design, benchmarking, and audits
- complicated the existing GTA process with matters that belong in and are being determined in other more appropriate forums
- are seeking to introduce duplicative layers of cost control which lack any cost/benefit analysis and will likely result in additional costs to ratepayers

295. AltaLink requested that the Commission adhere to its historical practice as to the appropriate scope of the issues to be examined in a GTA, continue to allow ongoing processes to be completed in more appropriate regulatory forums, and refrain from adopting the sweeping recommendations proposed by some interveners. In AltaLink's view, the question before the Commission in the GTA proceeding is whether the tariff requested is just and reasonable. AltaLink provided all the information necessary to this question and other issues raised by interveners do not assist the Commission. The suggestion from witnesses for the RPG that a revenue forecast should be constructed using a capital projects forecast built from the bottom up on a component by component basis is unwarranted, unrealistic, and inefficient.¹⁴³

296. In reply argument, the RPG contended that issues related to tower design, line optimization, benchmarking and audit processes, all of which AltaLink suggests be dealt elsewhere by the Commission, is based on a false premise. That is, AltaLink does not really want these issues to be addressed elsewhere.

297. In this regard, the RPG indicated that:

- AltaLink says that tower designs are debated in facility applications, but it opposes ratepayer participation in facility applications.¹⁴⁴
- AltaLink says that ratepayers can comment on costs in a needs identification document (NID) application, but knows that NID applications deal with planning concepts and not project specific details.¹⁴⁵
- AltaLink says that costs should be dealt with in a DACDA proceeding, but refuses to provide support for those costs when asked.¹⁴⁶

¹⁴³ Transcript Volume 12, page 2651, line 19 to page 2652, line 11.

¹⁴⁴ Exhibit 200, AltaLink letter opposing intervenor standing (Proceeding ID No. 2001), pages 3-4.

¹⁴⁵ Transcript, Volume 6, page 1080, line 20 to page 1082, line 12.

¹⁴⁶ See Section 14.1 of Ratepayer Group argument, especially paragraphs 36 to 45.

298. The RPG submitted that AltaLink is playing a shell game in the hopes that proper review can be put off indefinitely and submitted that GTA proceedings are the only venue in which the Commission can consider all the factors relevant to carrying out its dual mandate of setting just and reasonable rates and maintaining the integrity and safety of the electric system. Accordingly, the RPG submitted that the Commission should not foreclose on the opportunity to consider all factors that ensure it balances the public interest.

Commission findings

299. An overview of the legislative provisions governing the approval of electric transmission capital costs and the division of responsibilities among the AUC, AESO and TFOs in that process was provided by the Commission in Section 11.1.2 of Decision 2013-358.¹⁴⁷ The Commission considers the overview provided in Decision 2013-358 also to be broadly applicable to this proceeding and adopts the Commission's legislative overview for the purposes of this decision.

300. AltaLink's objection to providing, in a GTA proceeding, the level of detail for its ongoing direct assign projects requested by the interveners is premised on its position that a review of forecast direct assign projects should be limited to the extent necessary to determine the amounts of forecast capital expenditures and forecast capital additions, at an aggregate level, for each GTA test year.

301. In Section 6.1.2 of this decision, the Commission determined that AltaLink's uncertainty adjusted forecasting approach has provided sufficient information to allow the Commission to determine the amount of AltaLink's aggregate direct assign project capital expenditure and capital additions forecasts for 2013 and 2014.

302. However, the approach taken by certain interveners in this proceeding to assess AltaLink's GTA forecasts from the bottom-up was not inappropriate and the Commission will not restrict the manner in which interveners choose to test the forecasts of capital in future GTAs. As it is the rate payers who will be responsible for the costs of these capital projects, given the magnitude of the capital forecast both in this test period and going forward, it would not serve the public interest or be procedurally fair to adopt general restrictions regarding the testing of these forecasts for future proceedings. AltaLink is also free to seek relief from the Commission, as it has done throughout this proceeding respecting certain information requests, should it consider that requests for information are outside the scope of the proceeding.

303. The broad scope of matters addressed within AltaLink's 2013-2014 GTA also reflects AltaLink's decision to simultaneously include, for the first time, a DACDA application. In particular, the discussion of the variances against initial GTA forecast amounts for the SW project consumed substantial amounts of oral hearing time. However, because the current proceeding included AltaLink's DACDA application for 2010-2011, extensive insight into the process carried out between AltaLink and the AESO in the normal course of the execution of direct assign projects was provided to the Commission. The Commission considers such insight to have been helpful, since it has brought into focus some limitations of relying primarily on those processes as the basis for certain decisions within the Commission's mandate.

¹⁴⁷ Decision 2013-358: ATCO Electric Ltd., 2013-2014 Transmission General Tariff Application, Application No. 1608610, Proceeding ID No. 1989, September 24, 2013.

304. For example, as discussed more extensively in Section 6.1.3 below, evidence was introduced regarding the extent to which new AESO information about system load and generation forecasts is taken into account in the determination of in-service dates. Based on this evidence, the Commission has determined that it is necessary to request AltaLink to seek additional information from the AESO, recognizing that the establishment of in-service dates falls within the AESO's jurisdiction.

305. The Commission notes that it is AltaLink's position that AltaLink must respond to directions issued to it by the AESO and that AltaLink is building to functional specifications that the AESO has approved. However, the evidence brought forward in the GTA proceeding calls into question the extent to which the Commission can rely on these functional specifications in determining the prudence of the costs for capital projects. In this regard, the Commission takes note of Section 25(2) of the *Transmission Regulation*, AR 86/2007, reproduced below:

Transmission facility project cost reporting

25(1) For those transmission facility projects that the ISO directs or may direct a TFO under section 35(1)(a) of the Act or a person under section 41.3 of the Act to submit for Commission approval, the ISO must make rules or establish practices respecting the preparation of cost estimates, project scope documents and schedule documents for projects to ensure that

.....

(2) The ISO may satisfy itself that the cost estimates prepared by a TFO or other person under this section are reasonable, but in doing so may only examine issues that are relevant to the intended use of the cost estimates.

306. Section 25(2) of the *Transmission Regulation* restricts the purposes for which the AESO may scrutinize TFO cost estimates related to direct assign projects. The evidence brought forward during the current proceeding has demonstrated that decisions early in the life cycle of a project can have a very large impact on the final cost of a project. The Commission finds that, consistent with this observation, much of the evidence of interveners and, in particular, that of the RPG, was brought forward to alert the Commission to their concerns about the design and project execution choices being made for forecast capital projects. Such decisions are often irreversible.

307. The decision of interveners to pursue a detailed examination of direct assign project expenditures in the context of this proceeding reflected the fact they could not achieve standing to present this evidence in the respective facility applications for these capital projects. This circumstance supports the Commission's finding that the extensive review of direct assign projects in the current proceeding was warranted.

6.1.2 Uncertainty adjusted approach

308. Prior to this GTA, AltaLink had filed its direct assign forecast for capital expenditures and capital additions based on individual project plans, where the projects plans were aligned with the AESO's forecast in-service dates (ISD) for each project. The total direct assign project forecast was, in turn, a simple aggregation of the individual project plans.

309. In Decision 2012-221,¹⁴⁸ the Commission made a number of findings with respect to AltaLink's previous direct assign project forecasts:

- **Importance of forecast accuracy** – “Accurate forecasts are also important because capital expenditure forecasts are closely related to capital additions forecasts, which in turn, directly drive certain operating expenses such as structure payments and property taxes expense. Most importantly, however, the Commission is concerned that AltaLink's large capital program has been, and is expected to continue to be, a major driver of its internal resource planning. It is for this reason that the significantly lower direct assign projects capital expenditure forecast presented during the current proceeding raises concerns for the Commission.”¹⁴⁹
- **AltaLink's forecasting track record** – “In light of the magnitude of the discrepancy between the capital expenditure forecasts provided in its May 17, 2011 undertaking response and the forecast provided in the refiling application, the Commission questions whether it is able to rely on AltaLink direct assign project capital expenditure forecasts as AltaLink has urged it to do.” ... “The Commission's review of AltaLink's forecast history for direct assign capital projects suggests a systematic tendency on the part of AltaLink to put forward in-service dates for its capital expenditure forecasts that are either unrealistic or that have not been updated to reflect changed circumstances.”¹⁵⁰
- **In-service date projections** – “It is AltaLink's responsibility to accurately represent expected in-service dates to the Commission for GTA purposes at all times based on its assessment of all pertinent information available to it. AltaLink cannot fulfill its duty in this regard if it simply relies on the AESO's letter representations without performing its own analysis in this regard. For greater certainty, this expectation applies even if the AESO has not formally updated an in-service target date from the date set out in the last PPS estimate or if the AESO has not yet approved a change request that sets out a new in-service date that AltaLink has requested. For future GTAs, AltaLink is directed to provide evidence that forecast direct assign project capital expenditures are reasonable and, in particular, that projected in-service dates are based on reasonable targets that reflect AltaLink's historical experience in executing direct assign projects. To assist AltaLink in complying with this direction, the Commission has set out directions for revised minimum filing requirements to accompany future AltaLink direct assign capital expenditure forecasts in future GTAs in the next section as an initial step to address this concern. The Commission may consider directing additional measures during the course of AltaLink's next GTA proceeding should these directions be insufficient.”¹⁵¹

310. In this application, AltaLink has proposed an alternative forecasting methodology aimed at better addressing the uncertainties that are outside of AltaLink's control and to improve the overall predictability of the GTA revenue forecast. To assist in this effort, AltaLink engaged PricewaterhouseCoopers LLP (PwC) to provide an analysis that considered the uncertainties associated with the timing of expenditures through a probabilistic assessment of potential project

¹⁴⁸ Decision 2012-221: AltaLink Management Ltd., Refiling Pursuant to Decision 2011-453 and Decision 2011-474, Application No. 1608178, Proceeding ID No. 1734, August 17, 2012.

¹⁴⁹ Decision 2012-221, paragraphs 145-146, page 26.

¹⁵⁰ Decision 2012-221, paragraphs 153-154, pages 29-30.

¹⁵¹ Decision 2012-221, paragraphs 163-164, pages 33-34.

delays on AltaLink's 2013-2014 portfolio of capital projects and the resultant impact on capital expenditures and capital additions.¹⁵²

311. AltaLink explained that forecasting capital expenditures and capital additions of a diverse project portfolio is challenging given the unpredictable nature of various risks and uncertainties that affect project execution both at an individual project and at an aggregate project portfolio level. It further acknowledged that as "the experience gained over the last few years of unprecedented growth in capital expenditures, it has become apparent that prior DA expenditure and additions forecasts did not account for external factors (or uncertainties), beyond AltaLink's reasonable ability to predict or control, that could cause significant schedule delays and shift expenditures into future years. Since the external factors manifested themselves at an individual project level it was difficult to ascertain the trend and the broader impact on the overall project portfolio."¹⁵³

312. The new forecasting approach uses statistical probabilistic modeling techniques to incorporate potential external factors which generate schedule uncertainty. The approach defines and models the uncertainties that a project can experience at three specific stages of the project lifecycle: pre-facilities application filing (pre-FA), post facilities application but pre-permits and licences receipt (pre-P&L) and post-permits and licences receipt (post-P&L).

313. Under the proposed approach, a base plan forecast of annual direct assign capital expenditures and direct assign additions is prepared on an individual project level and is the basis for the uncertainty adjusted forecast. The approach then uses scenario models to consider probabilities and consequences of uncertainties manifesting across the project life cycle that can generate schedule uncertainty. AltaLink submitted that the methodology, when applied consistently across all projects reflects the impact on project timing due to the potential for delay as a result of identified uncertainties that are outside of AltaLink's control and provides a forecast of capital expenditures and additions that is the most probable of various possible outcomes.

314. AltaLink pointed out that the uncertainty adjusted forecast does not contemplate the potential for specific project cost changes, other than inflation, as a result of the delay.

315. AltaLink submitted that its proposed approach removes the bias inherent in the aggregation of individual projects and therefore yields a lower revenue requirement within the test period. The portfolio forecasting approach results in an expenditure forecast that is 28 per cent lower than the base plan in 2013 and 26 per cent lower than the base plan in 2014. AltaLink submitted that its direct assign capital forecast of \$1,464 million for 2013 and \$1,672 million for 2014 and forecast additions of \$561 million for 2013 and \$1,409 million for 2014 are reasonable for the GTA test period. AltaLink argued that the reduced forecast amounts demonstrate that:¹⁵⁴

- AltaLink's revenue requirement filed with the AUC is as of July 30, 2012 is representative of best available information at the time of filing; the uncertainty forecast and its underlying base plan remains a sound basis from which to draw conclusions.

¹⁵² Exhibit 4, application, Appendix 19-A.

¹⁵³ Exhibit 3, application, paragraph 572, page 10-3.

¹⁵⁴ Exhibit 150.02, rebuttal evidence, paragraph 23, page 6.

- AltaLink's statistical modeling approach results in capital expenditure and additions forecasts that are appropriately adjusted for external factors that could cause schedule delays and shift expenditures into future years. This consistently applied approach is preferable to one which selectively makes discrete adjustments to individual projects.
- AltaLink took a balanced perspective in its modeling approach applying reasonable assumptions as opposed to overly pessimistic or optimistic views, to better forecast expenditure and additions in 2013 and 2014.

316. In its rebuttal evidence, AltaLink indicated that its direct assign capital expenditures for the first four months of 2013 were just under \$480 million.¹⁵⁵ In testimony at the hearing, AltaLink indicated that this amount was expected to increase to about \$800 million by the end of June 2013. AltaLink also pointed out that about \$750 million worth of projects had advanced from the pre-FA stage to the post-P&L stage since it had prepared its uncertainty adjusted forecast.¹⁵⁶

317. During the hearing, AltaLink submitted that there is a reasonable expectation that it will exceed the uncertainty adjusted forecast amounts:

23 A. MR. FREHLICH: Just to add on to that,
 24 Ms. Wall. As we've forecasted our revenue requirement based
 25 on the uncertainty adjusted capital forecast, if we exceed
 01360
 1 that forecast by \$100 million, that would result in a
 2 FFO-to-debt impact of about .15 percent because we wouldn't
 3 be getting the revenue in -- associated with that
 4 expenditure.
 5 So that is also part of the uncertainty we
 6 would be concerned about in relation to sustaining our
 7 A rating.
 8 Q. Is there a concern right now that you will be exceeding
 9 your forecast by \$100 million?
 10 A. MR. BRONNEBERG: The uncertainty adjusted
 11 capital forecast?
 12 A. MR. FREHLICH: So, yes, currently, we would be
 13 looking at -- for the 2013 forecast that we're likely to
 14 exceed our uncertainty adjusted forecast by probably at least
 15 100 million.¹⁵⁷

318. AltaLink explained that it is currently working to proactively address schedule delay risks for all projects in its portfolio and that it will apply resources as necessary to meet the base plan direct assign forecast. To the extent that any of the uncertainties identified arise, AltaLink indicated that it will continue to take prudent action to minimize any potential schedule delays. AltaLink submitted that its efforts to achieve the base plan is consistent with the mandatory directions received from the AESO.

¹⁵⁵ Exhibit 150.02, rebuttal evidence, paragraph 22, page 6.

¹⁵⁶ Transcript, Volume 8, page 1699, line 20 to page 1700, line 7.

¹⁵⁷ Transcript, Volume7, page 1359, line 23 to page 1360, line 15.

6.1.2.1 Application of the uncertainty adjusted approach

319. AltaLink's portfolio of capital projects for the test years 2013 and 2014 comprises 104 projects with estimated individual project life costs ranging from \$2 million to \$1.4 billion. The base plan additions for the test period, as well as 2012, include 13 projects anticipated to achieve ISDs in 2012, 43 in 2013 and 31 in 2014. Although part of AltaLink's base plan direct assign capital expenditures, those projects AltaLink is forecasting to place in service in 2012 were excluded from consideration of potential project delays as any costs in 2013 would be regarded as trailing costs.¹⁵⁸

320. AltaLink explained that there are four key steps in the application of the uncertainty adjusted approach:¹⁵⁹

1. Identify the key uncertainties for each stage – pre-FA, pre-P&L and post-P&L – of a project's life cycle.
2. Assess the potential outcomes of each uncertainty on the project's timeline (such as manageable delay, moderate delay, or significant delay) as well as the impact (length of delay) of each outcome.
3. Assess the probability of each outcome occurring, with the sum of the probabilities of the outcomes under each uncertainty adding up to 100 per cent.
4. Using accepted probability theory based on the above inputs and the base plan direct assign capital expenditure forecast, estimate the expected timing of expenditures for each project for each year.

321. The following uncertainties were identified for each project stage:

- pre-FA stage:
 - procedural delays (scope definition/NID approval)
 - stakeholder engagement
 - land access
- pre-P&L stage:
 - procedural delays (government agencies)
 - AESO NID challenge
- post-P&L stage:
 - safety
 - engineering labour
 - construction labour
 - outage availability
 - materials
 - weather
 - environmental/historical
 - land access/AUC decision on route selection
 - project execution
 - judicial review or appeal

¹⁵⁸ Exhibit 4, Appendix 19-A, paragraph 16, page 4.

¹⁵⁹ Exhibit 3, application, paragraph 590, page 10-9.

322. AltaLink grouped projects that were subject to similar outcomes and impacts of outcomes for all of the identified uncertainties and probabilities of outcomes. AltaLink grouped its projects into two size categories: small to medium projects and large projects.

323. Small to medium projects were grouped as they were considered to be relatively homogeneous based on size, complexity and scale. Given that these projects are subject to similar outcome probabilities and impacts, they can be reasonably assessed using three standard models, one for each project stage. Larger or more unique projects were each modeled separately. These projects based on their size, complexity and timing of progression through each of the project stages, were determined to have their own unique probabilities of outcomes and unique impacts (delays) associated with those outcomes.

324. The grouping of the projects into these two classes, homogeneous and unique, combined with the three stages of a project life, pre-FA, pre-P&L and post-P&L, results in 18 modeling requirements:

		Model		
		Pre-FA	Pre-P&L	Post-P&L
Project Class	Grouped projects (3 models)	Pre-FA small to medium projects - 1 model	Pre-P&L small to medium projects - 1 model	Post P&L small to medium projects - 1 model
	Unique projects (15 models)	Pre-FA unique individual projects - 12 models	Pre-P&L unique individual projects - 1 model	Post P&L unique individual projects - 2 models

325. To assess the probability of each outcome occurring, discussions were held between PwC and individuals from AltaLink with experience and familiarity with transmission projects. An assessment of the uncertainties was made by these individuals utilizing their past experience in similar projects. The individuals provided specific probability outcomes and the resulting impact (delay) for each outcome identified. The identified outcomes, probabilities and impacts formed the basis of the model.

326. PwC explained that in order to reduce and balance potential biases (unreasonably optimistic or overly pessimistic) from being introduced when people close to the projects are making the assessments, the assessments that were provided by AltaLink personnel were subsequently reviewed by different project management experts within AltaLink to get a different perspective. In PwC's view, this scenario planning exercise reduced the optimism bias that often results in forecasts that mainly reflect the best case – no delays or unexpected events. Also, by focusing the experts on sometimes extreme outcomes, reasonable confidence bounds are established that make for a more reliable expected value for the predictions of expenditures. PwC employed this approach to revise the view of probabilities of outcomes and impacts (delays) that were used in the model.¹⁶⁰

¹⁶⁰ Exhibit 4, application, Appendix 19-A, paragraphs 56-58, page 17.

327. PwC outlined the uncertainties, outcomes, probabilities of those outcomes, and the impacts of the outcomes (delays) for the small to medium (homogeneous) projects for all three project stages in its report.¹⁶¹ An example is also provided at Figure 10.2.7-1 in the application.¹⁶²

328. AltaLink explained that, with the help of PwC, it assessed each model based on the uncertainties and outcomes. Some of the models had over 11,000 possible scenarios, each of which can indicate the possibility of expenditure delays for any project in any year. All of the scenarios were aggregated into expected expenditures for each year, given the estimated probability of these scenarios actually occurring to determine the uncertainty adjusted forecast.¹⁶³

329. A number of conventions were used in the modeling, including:

- (i) **Two longest delays rule** – Post-P&L projects are subject to construction delays from up to 10 external uncertainties. Where delays occur from several uncertainties, a rule was needed to determine the total delay. It would not be reasonable to treat all delays consecutively and add them together for a total delay, particularly when they include delays from a variety of uncertainties. Informed by past experience, AltaLink assumed, what it considered a moderate view, by choosing the two longest delays in each scenario along with the assumption that additional delays would occur concurrently with this timeline.¹⁶⁴
- (ii) **Addition shifting rule** – As additions are the sum total of lifetime expenditures for any project, delays in additions due to uncertainties must reflect expected delays in expenditures. However, since additions are considered as being fully operational at the ISD or not at all, rules were established as to how they are counted and by exactly how much to shift those to a later date.¹⁶⁵
- (iii) **Half impact rule** – Where projects are susceptible to delays from a number of external uncertainties that could occur in later project development stages, an assumption about the extent to which AltaLink management can mitigate the impacts of these future uncertainties is needed. AltaLink argued that it would not be reasonable to assume that, under no circumstances will AltaLink take mitigating action for some outcomes of uncertainty as a project progresses. To account for this, AltaLink used a mitigation assumption of 50 per cent to reduce potential delays in later stages.¹⁶⁶

330. The expenditures that were delayed as a result of the probabilistic modeling were adjusted for expected annual inflation using a 4.0 per cent construction inflation factor per year.

331. The tables below summarize the results of the modeling by comparing the uncertainty adjusted forecast of capital expenditures and capital additions to the base plan forecast:

¹⁶¹ Exhibit 4, application, Appendix 19-A, pages 18-20.

¹⁶² Exhibit 3, application, paragraph 594, Figure 10.2.7-1 – Probability Outcomes Example, page 10-10.

¹⁶³ Exhibit 3, application, paragraph 596, page 10-10.

¹⁶⁴ Exhibit 150.02, PwC rebuttal, paragraphs 15-16, page 4.

¹⁶⁵ Exhibit 3, application, paragraph 598, page 10-11.

¹⁶⁶ Exhibit 150.02, PwC rebuttal, paragraphs 35-36, page 9.

Table 31. Capital expenditures and capital additions: base plan forecast versus uncertainty adjusted forecast

	2013	2013
	(\$ million)	
Base plan direct assign capital expenditures	2,023	2,249
Uncertainty adjusted direct assign capital forecast	1,464	1,672
Difference	(559)	(577)
Base plan direct assign capital additions	1,297	1,528
Uncertainty adjusted direct assign capital additions	561	1,409
Difference	(736)	(119)

Source: Exhibit 3, Application, paragraphs 602-603, pages 10-11 to 10-12, tables 10.2.9-1 and 10.2.9-2.

332. AltaLink submitted that an update to the base plan forecast and, in turn, the uncertainty adjusted forecast is not needed. Further, it explained that an update would not simply involve an update to the base plan:

20 Q. So what about going forward into the future. Let's say,
 21 you use it this time, and you want to use it in the next test
 22 period. Do you just adjust your base case, or do you do this
 23 all over again and adjust the probabilities and the
 24 identification of the outcomes? Do you have to do this all
 25 over again each time or just change your base-case forecast?
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1 A. MR. FEDORCHUK: So since we have to do both
 2 because you're redefining your new base plan because time has
 3 shifted, the projects have advanced, they're in a new state,
 4 as of, let's say, it's today.
 5 As a result of that new state, they've had --
 6 advanced in some form through the lifecycle, and they've
 7 advanced from a pre-FA and perhaps now they're into a
 8 post-P&L.
 9 By and large, I would suggest potentially the
 10 uncertainties may not change, the probabilities may or may
 11 not depending on -- remembering how we built it, we also
 12 built it around a homogenous group of projects we generally
 13 said are the same. And then we had a unique set of projects
 14 where they were unique enough that we needed to build an
 15 independent uncertainty probably and delay.
 16 That's more likely in those that you have to
 17 make changes as they've advanced. So those projects that are
 18 large today -- or a year ago that were in the pre-FA and now
 19 they are in the post-P&L, as an example, they may have to be
 20 recalibrated on the uncertainty, the probability, and
 21 resultant delay.

22 A. MR. WHITE: The way I would summarize it is
 23 that you would start with the work that you've already done.
 24 You wouldn't throw it away. You'd retain it because there's
 25 significant learning that has been obtained from doing that
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1 work, but you would have to update it for new circumstances,
 2 for new events, new things that are in the environment. And
 3 the fact is you have new projects. So the circumstances for

- 4 those may be different. So you'd have to take what you
- 5 already know and add to it by what you've learned in the
- 6 intervening period.¹⁶⁷

333. The RPG indicated that it had set out to test the reasonableness of AltaLink's proposed uncertainty adjusted approach by investigating the modeling methodology as well as examining the appropriateness of the methodology to the circumstances of individual projects, especially the large costly system projects that will have a significant impact on AltaLink's expenditure profile.

334. The RPG concluded that AltaLink's uncertainty adjusted approach is flawed due to a failure by AltaLink to validate empirically the key inputs, the generalized use of assumptions across all projects and the failure to account for project specific considerations.

335. The RPG submitted that AltaLink bears the burden to demonstrate that the capital forecast is just and reasonable, which includes the burden to demonstrate the reasonableness of the methods and means of forecasting, the reasonableness of the underlying information used to prepare the forecast, including project specific information, and the reasonableness of the results. Each of these is discussed in turn.

Reasonableness of the methods and means of forecasting

336. The RPG suggested that the probabilistic scenario approach is prone to various shortcomings, including a singular focus on timing, a lack of empirical validation, and the generalized application of assumptions without regard to project specific considerations. The RPG concluded:¹⁶⁸

- For projects in the pre-FA group the uncertainty adjusted forecast has significantly over-predicted or under predicted the changes in the ISD forecast for a number of large costly projects, AltaLink should be directed to explain the over/under prediction.
- For projects in the pre-P&L group, the RPG recommended that the Commission direct AltaLink to provide in its refiling up-to-date and detailed information with respect to the spending profile of the Western Alberta Transmission Line (WATL) in the test period.
- For projects placed in the post-P&L group, the uncertainty adjusted forecast generally over-predicted the delay in the ISD forecast, especially for large costly projects, AltaLink should be required to update the capital expenditure forecast for those projects in its compliance filing and explain the reason for the over-prediction.

337. The RPG argued that AltaLink's uncertainty adjusted forecasting approach is contrary to the Commission's direction to provide sufficient information to facilitate the scrutiny of the capital expenditure forecast. Presenting project information at a portfolio level does not allow for in-depth consideration of the details of individual projects; and, without an examination of the project specific details, AltaLink disregards the factors that gave rise to historical forecasting variances at the individual project level. The RPG submitted that in order for a forecast to be reasonable, both the forecast, and the underlying factors that drive the forecast, must be reasonable.

¹⁶⁷ Transcript, Volume 8, page 1688, line 20 to page 1690, line 6.

¹⁶⁸ RPG argument, paragraph 87, pages 33-34.

338. The RPG expressed concern that the uncertainty adjusted forecasting approach only adjusts the timing of the expenditures and additions and disregards the interaction and trade-off between cost and schedule. The RPG argued that without consideration of the trade-off, it is not possible to assess the reasonableness of the expenditures.

339. The RPG submitted that the base plan is the fundamental building block of the uncertainty adjusted forecast yet, in its view, there was insufficient examination of the project specific forecast that makes up the base plan. If the underlying project costs in the base plan are forecast to be unreasonably high, then using a shifting adjustment to reduce expenditures in the test period will also be high.

Reasonableness of the underlying information

340. The RPG expressed concern that the assumptions used in the modeling related to specific probability outcomes, the resulting impact (delay), and the mitigation of future delays were established based on the past experience of AltaLink's personnel and were ultimately included in the modeling through an iterative process. It argued that there is no validation that the judgmental probabilities and delay assumptions are applied judiciously.

341. The RPG submitted that the costs and schedule of large costly individual projects are significant and will have a significant influence on the capital expenditure forecast. In its evidence, the RPG examined historical spending profiles of past projects, which showed that spending profiles are not uniform and can take on different shapes depending on the circumstances.¹⁶⁹ The RPG suggested that how the base plan spending profile is positioned relative to the test period will affect the magnitude of the expenditure shift for any given amount of predicted schedule delay, especially for large system projects.

Reasonableness of the results

342. The RPG suggested that AltaLink's only empirical validation of the new approach appears to be how the percentage reduction relative to the base plan forecast of 28 per cent and 26 per cent for 2013 and 2014, respectively, compares to historical performance. The percentage difference between actuals and forecasts for the 2009 to 2012 period, corresponding to the last two GTAs averaged 33 per cent (simple) and 34 per cent (cost-weighted).¹⁷⁰ The RPG argued that if the goal of the new approach was simply intended to be more in line with history, AltaLink could have simply adjusted the base plan expenditures by the historical variances and avoided the complexity associated with the uncertainty adjusted forecasting approach.

343. While the RPG did acknowledge that utilizing the uncertainty adjusted forecast is a step in the right direction, as it makes provisions for project delays, the approach falls short as the forecast is significantly outdated and requires substantial revisions.

344. The RPG recommended that the Commission:

- (1) Reject the use of the probabilistic scenario modeling approach for direct assign projects, especially for large costly system projects.

¹⁶⁹ RPG evidence, Appendix 6-8, Exhibit 115.02, Exhibit 115.09 (Excel).

¹⁷⁰ RPG argument, paragraph 56, page 21.

- (2) Direct AltaLink to revise its capital forecast for large costly system projects and to provide the spending profiles for projects over \$30 million when it does in order to determine whether the test period expenditures are reasonable.
- (3) Direct AltaLink to support the capital forecast for large and unique DA projects by providing information to demonstrate that the cost, schedule and quality of base plan for large costly projects is just and reasonable.
- (4) Direct AltaLink to conduct an analysis to explain the reasons for the over-prediction or under-prediction of the ISD forecast predicted by the uncertainty adjusted forecast.

Commission findings

345. The Commission agrees that the uncertainty adjusted forecast is a step in the right direction. It also considers that the base plan forecast, as a fundamental building block of the uncertainty adjusted forecast, should be as accurate as possible. This is especially true when the base plan forecast is relied upon by AltaLink for aspects of its GTA other than revenue requirement.

346. The RPG recommended that the Commission reject the probabilistic scenario modeling approach and that a more open and transparent method should be required and fully tested. The RPG has argued that the uncertainty adjusted forecasting approach prevents a comprehensive examination of the detailed project assumptions and underlying costs, which is contrary to the Commission's directions in Decision 2012-221.

347. The Commission is prepared to accept the uncertainty adjusted forecast as reasonable for the purposes of revenue requirement and setting rates for the 2013-2014 test period. The Commission recognizes that the base plan forecast is out of date given that the application was filed at the end of July 2012, and that the development of the base plan forecast dates back to the end of May 2012.¹⁷¹ However, the Commission has weighed the RPG's recommendation to direct AltaLink to update the capital expenditure and capital additions forecast against the time it would take to prepare an updated base plan forecast and, in turn, an updated uncertainty adjusted forecast. PwC testified as follows:

22 A. MR. WHITE: The way I would summarize it is
23 that you would start with the work that you've already done.
24 You wouldn't throw it away. You'd retain it because there's
25 significant learning that has been obtained from doing that
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1 work, but you would have to update it for new circumstances,
2 for new events, new things that are in the environment. And
3 the fact is you have new projects. So the circumstances for
4 those may be different. So you'd have to take what you
5 already know and add to it by what you've learned in the
6 intervening period.

¹⁷¹ Transcript, Volume 8, page 1699, lines 5-8.

348. In considering whether an update to the forecast is needed, the Commission has taken the following considerations into account:

- (i) The first half of the 2013-2014 test period will have expired by the time a compliance filing is completed.
- (ii) AltaLink has provided evidence on its actual expenditures and has indicated that it is on track to exceed the forecast for 2013, as filed.

349. For these reasons, the Commission will not direct AltaLink to update its direct assign capital expenditure forecast and its direct assign capital additions forecast. The Commission considers that AltaLink, in developing and proposing the uncertainty adjusted forecast approach, has complied with the Commission's findings and directions in Decision 2012-221 with respect to taking steps to improve its direct assign project forecasts.

350. The Commission considers that the uncertainty adjusted forecast approach is an improvement over the method used in previous tariff applications, where the forecasts were solely based on individual project plans. However the Commission does acknowledge the concerns expressed by the RPG that AltaLink has the burden to demonstrate the reasonableness of the methods and means of forecasting, the reasonableness of the underlying information used to prepare the forecast, including project specific information, and the reasonableness of the results. In this proceeding, the RPG has recommended a number of steps that AltaLink could take to improve the uncertainty adjusted forecast. The Commission encourages AltaLink to consider the RPG's recommendations as it gains more experience with the uncertainty adjusted forecasting approach and works to make improvements thereto for use in future GTAs.

351. The Commission approves the uncertainty adjusted direct assign capital expenditure forecast and direct assign capital additions for 2013 and 2014 as filed.

6.1.3 DA project prioritization and in-service dates

352. Mr. Cline of Grid Power Development and Design Inc. (Grid Power) submitted evidence on behalf of the RPG titled "Evaluation and Recommended Project Prioritization AltaLink GTA" (RPG Grid Power 1 evidence). In its executive summary, the RPG Grid Power 1 evidence indicates that Grid Power was retained by the RPG to evaluate what, if any, changes could be made to the timing of transmission development over the next five to 10 years to avoid a boom bust cycle in transmission construction. This evidence concluded that, as a result of reductions in growth predicted by the AESO's latest load and generation forecast as set out in the AESO's 2012 Long Term Outlook (LTO), significant workload smoothing would be possible.

353. The RPG Grid Power 1 evidence revealed that the majority of projects assigned to AltaLink were planned using either 2007 or 2008 load forecasts. However, because each successive forecast has seen a reduction in expected load, wind generation, and northern generation, significant delays in project in-service dates (ISDs) could be carried out. In particular, Mr. Cline submitted that:

- load growth driven projects could be delayed by three to four years
- bulk system projects required for wind development could be delayed by as much as 14 years

- bulk system projects associated with north-to-south transfers can be delayed by more than 10 years

354. Mr. Cline indicated that, after carrying out an in-depth examination of specific bulk and regional projects, a preliminary update of project ISDs was developed. Such changed ISDs were then used to estimate a new smoothed capital spending profile represented as Figure 1 of the RPG Grid Power 1 evidence. This profile is reproduced below:

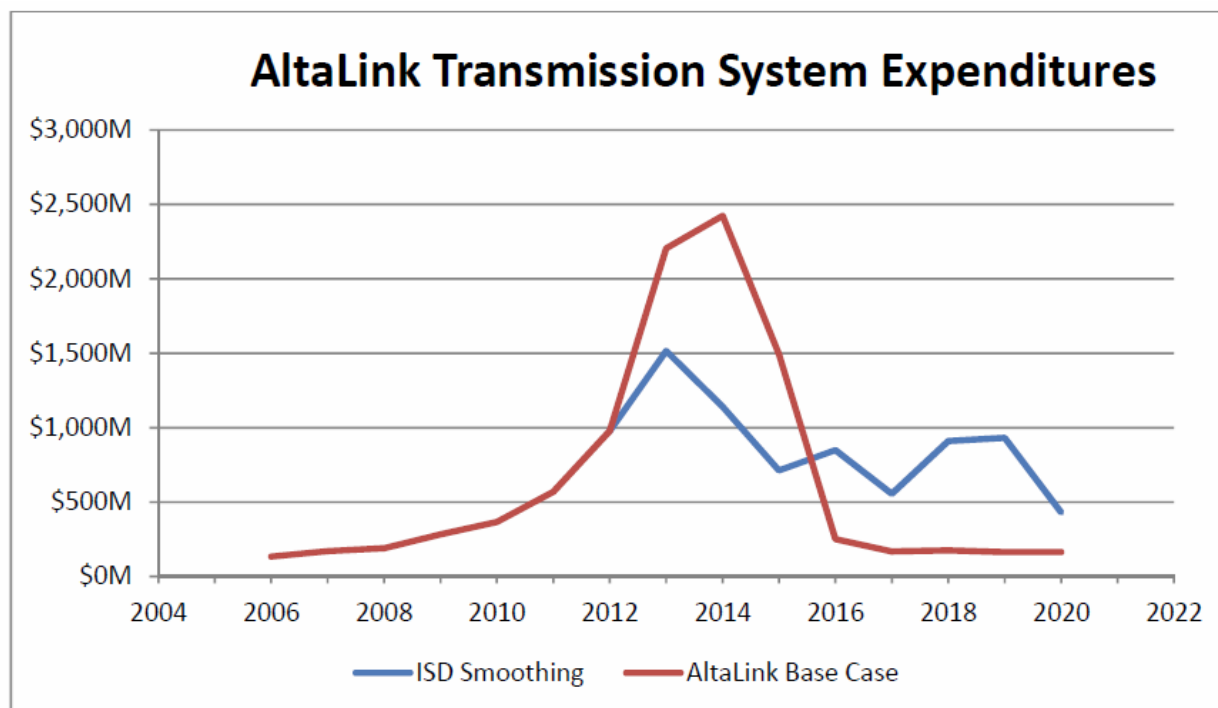


Figure 1 AltaLink Ten Year Capital Expenditures before and after Workload Smoothing

Source: Exhibit 114.01, Figure 1.

355. Mr. Cline submitted that AltaLink's capital expenditures have increased by an average of over 54 per cent per year since 2008, and if the capital plan included in the GTA proceeds, AltaLink expenditures will reach a level over nine times the 2008 level, spike to fourteen times the 2008 level and then rapidly decline to a level below the pre-2008 level.

356. With respect to load growth forecasts, Section 2.1 of the RPG Grid Power 1 evidence noted that load supply projects now in or approaching construction were planned using the AESO load and generation forecasts from 2007, 2008 or 2009. The RPG compared these forecasts to the 2012 LTO which provided an indication of the potential for projects to be rescheduled. The RPG prepared the following table illustrating the degree of changes in load forecasts over time:

Table 32. Years of delay for forecasted peak load – AESO forecasts 2008, 2009 & 2012

	2012	2017	2018	2021		2022	2024	2029
2008 Forecast	10,976	13,554				15,625		
2012 Long Term Plan (FC2009)	10,408	1 Year>	13,560			2 Year>	15,791	
2012 Long Term Outlook (Updated)	9,857		3 Year>	13,545			5 Year>	15,623
Total 4 year delay >>>>						Total 7 year delay >>>>		

Source: Exhibit 114.01, Table 1.

357. The RPG submitted that, based on the latest AESO forecast, regional system improvements being constructed over the next three years could be delayed by at least four years.

358. Section 2.2 of the RPG Grid Power 1 evidence discussed conditions supporting its view that significant changes have taken place which will have the effect of reducing the amount of wind generation that should be expected. The RPG made several observations, including the following:

- The Southern Alberta Transmission Reinforcement (SATR) project, for which NID was approved in 2009 was designed to accommodate a forecast of connected wind generation of 3,400 MW, at a forecast total cost of \$1.83 billion, to be built over three project stages.
- Several market conditions highly favourable to wind generation were assumed when the SATR plan was devised, including:
 - natural gas prices above \$9/GJ, forecast to remain above \$8/GJ for at least 10 years
 - a view that coal generation faced significant risks of regulations related to carbon dioxide emissions
 - a significant potential for wind generation developers to benefit from tradable renewable energy credits offered in California
 - a view that the levelized cost of wind generation was significantly lower than the cost for a combined cycle gas plant

359. However, the RPG Grid Power 1 evidence submitted that two significant changes, occurring since the conception of the SATR project, dramatically reduced the profitability of wind generation development:

- The widespread North American adoption of fracking techniques has led to significant oversupply of natural gas, and significantly reduced prices, such that at the time of its evidence, the winter peak AECO C delivery price was \$3.25/GJ and the 10-year forward price was \$3.72/GJ in 2013 dollars.
- The combination of natural gas price declines and improvements in combined cycle plant performance had dropped the levelized cost per megawatt (MW) hour of a combined cycle plant to less than half of the cost of wind generation.
- Changes to California regulations have virtually eliminated the development of out-of-state renewable projects targeted for the California market.

360. The RPG submitted that the AESO's 2012 LTO reflects the changing market conditions for wind generation development, and is now forecasting only 1,694 MW of wind generation in Alberta by 2017, and 2,544 MW by 2022, representing a 50 per cent reduction from the forecast basis for the SATR plan. Based on the revised forecasts, the RPG submitted that the completion

of the SATR project could be delayed by at least fourteen years without changing the generation output it was designed to transfer.

361. Section 2.3 of the RPG Grid Power 1 evidence suggested that analysis of the AESO's 2012 LTO indicates that the both of the north-south WATL and the Eastern Alberta Transmission Line (EATL) high voltage direct current (HVDC) lines can be delayed beyond 2017 without risk of congestion. In support of this conclusion, the Grid Power 1 evidence took note of the following from the AESO's 2012 LTO:

- The AESO is forecasting a 100 MW decrease in net generation north of the SOK-240 transmission path by 2017 as compared to current levels, and only a 110 MW increase by 2022.
- Declines in net generation north of the SOK-240 transmission path range from 197 MW in a low oil sands scenario to a high of 1065 MW for a high co-generation scenario.
- Net generation in the north is higher than the current level by 2022 in only three of six scenarios evaluated in the AESO's 2012 LTO.

362. Section 3 of the RPG Grid Power 1 evidence proposes categorizing direct assign projects to determine those having the least impact on system reliability and congestion if delayed. Based on this assessment, the RPG determined that:

- customer connection projects
- distribution point of delivery projects
- reactive power supply projects
- capital replacement and upgrade project
- facilities and information technology projects

are not good candidates for workload smoothing. Conversely, the RPG Grid Power 1 evidence concluded that regional projects and bulk transmission expansion projects provided excellent opportunities for workload smoothing.

363. The RPG noted that the majority of the projects in AltaLink's 2013 through 2015 capital expenditure forecast are either regional or bulk developments. Using the approach discussed in Section 3.3 of the Grid Power 1 evidence, the RPG identified several bulk or regional projects with ISDs currently set from 2014 to 2017 that could be delayed by some number of years. Conversely, the RPG submitted that, with the exception of the Heartland project, the majority of AltaLink's projects with 2013 ISDs are already so advanced that a delay would be counter-productive.

364. In conclusion, the RPG Grid Power 1 evidence recommended significant opportunities for project delay that would achieve a 40 per cent reduction in the expenditure bulge currently forecast for 2013 through 2015.

365. AltaLink responded to this evidence and the recommendation of the RPG to defer projects by noting that the AESO is the transmission system planner for the Province of Alberta. As such, it is the AESO that has the authority to assess current and future needs and to make arrangements for the expansion of and enhancement to the transmission system. AltaLink noted that, pursuant to Section 11(3) of the *Transmission Regulation*, the AESO must specify the

project timing in a needs identification document (NID). Additionally, AltaLink noted that Section 10(2) of the *Transmission Regulation* specifies that a transmission system plan must:

- (a) identify the transmission facility projects the ISO proposes to initiate by a needs identification document or a recommendation under section 10.1(1) within 5 years of the date of the plan and within 5 years of each update of the plan, and
- (b) provide an anticipated implementation schedule for each transmission facility project identified.

366. AltaLink noted that Appendix 11 of its 2013-2014 GTA includes a letter from the AESO dated July 4, 2012, in which the AESO agreed with the list of capital projects presented by AltaLink, and also deemed the respective costs and ISDs to be reasonable at that time.

367. AltaLink noted that each project specific direction letter from the AESO included the expected ISD. For the WATL and Heartland projects, which are both critical transmission infrastructure (CTI) projects, the AESO noted that the direction letters issued in respect of those projects set out applicable ISDs in accordance with Section 41.3 of the *Electric Utilities Act*. AltaLink noted that the ISDs set by the AESO for the CTI projects are consistent with statements in the 2012 long-term transmission plan in which the AESO specifically indicated that the development of both lines with 2014 ISDs is prudent, and also specifically indicated that having both lines proceed at the same time would provide advantages through “current market conditions for procuring materials and synergies that can be achieved in engineering, procurement and construction.”¹⁷²

368. AltaLink noted that the February 2012 report of the Critical Transmission Review Committee concluded that “Transmission infrastructure is a public good that must be available in advance of need, enable addition of new generation and be capable of meeting long-term load growth throughout the province,” and also found it reasonable for the Alberta government to proceed with the development of two 500-kV HVDC transmission lines as soon as possible.¹⁷³

369. At a more practical level, AltaLink submitted that several major projects including WATL, Heartland, Hanna, Cassils-Bowmantown-Whitla, and 30 other projects, are in full execution mode. These projects represent 47 per cent and 31 per cent of its capital forecast base plan for 2013 and 2014, respectively. AltaLink submitted that projects in execution cannot be stopped without costly disruption, including potential significant commercial and legal implications related to thousands of binding commercial contracts and purchase orders that have been executed.

370. In summary, AltaLink submitted that the AESO has the statutory authority to determine the need and timing of transmission projects in Alberta, and AltaLink has discussed project timing with the AESO in light of the overall industry workload. Conversely, the suspension of ongoing projects suggested by the RPG will result in significant adverse consequences and no cost savings for ratepayers.

¹⁷² Alberta Electrical Systems Operator, Long Term Transmission Plan 2012, online: Alberta Electrical Systems Operator <www.aeso.ca/downloads/AESO_2012_LTP_Sections_1.0_to_5.0.pdf>, at page 80.

¹⁷³ Critical Transmission Review Committee, *Powering Our Economy*, online: Critical Review Transmissions Committee <<http://www.energy.alberta.ca/Electricity/pdfs/CTRCPoweringOurEconomy.pdf>>, at page 2.

371. In argument, the RPG maintained that the current transmission planning framework in Alberta does not provide just and reasonable rates if the TFO is burdened, or allows itself to be burdened, with requirements to build facilities prematurely or to build facilities in such haste that it leads to excessive costs. Whereas it is a long standing practice that a utility's recovery of asset costs is contingent on the asset being used and useful in the service of ratepayers, this requirement is not satisfied merely through a NID approval. If circumstances have changed such that the requirement for a new asset no longer exists, the RPG submitted that the usefulness of the asset must be reconsidered.

372. In this regard, the RPG submitted that the Bowmanton-Whitla (BW) project raises concerns about the usefulness of this asset, since

- there is no generation or load customer seeking to connect at the Whitla substation
- the Wild Rose wind generation project is now expected to connect in July 2015
- the proposed project to provide service to the Medicine Hat area will be served from the 244S substation and does not make use of the 240-kV BW line

373. The RPG submitted that under present ratemaking arrangements where AltaLink is afforded CWIP in rate base and taxation allowance using the future income tax method, ratepayers are burdened by the BW project despite the fact it will not be used and useful when commissioned in March 2014. The RPG submitted that this would not be the case under traditional rate making, since AltaLink would bear the burden of an asset that is not used and useful.

374. In light of the experience with the BW project, the RPG submitted that if the Commission continues to provide credit metric support to AltaLink, there must be a safeguard against the undue and premature development of projects.

375. The RPG submitted that AltaLink did not refute the RPG Grid Power 1 evidence analysis that there is a significant potential to achieve a significant reduction in the expenditure bulge forecasted for the 2013 to 2015 period, even if CTI expenditures are removed from the prioritization equation. Instead, the RPG submitted that AltaLink only appealed to the AESO's determination of timing and the suggestion that any action on AltaLink's part would compromise the legislative framework and the AESO's authority as system planner.

376. The RPG noted that in Decision 2011-453 in respect of AltaLink's 2011-2013 GTA, the Commission expressed concerns related to differing evidence on the matter of in-service dates and whether there was any flexibility with respect to meeting those dates and also took note of the Commission's power to compel witnesses, including the AESO, to respond to information requests related to AltaLink's direct assign project forecasts. The RPG submitted that its request that AltaLink be directed to work with the AESO on project prioritization in the preparation of its refiling is consistent with the Commission's option to compel the AESO as a witness to test the reasonableness of direct assign in-service dates.

377. The RPG submitted that the adoption of its prioritization proposals would give rise to the following benefits:

- improvement of FFO/debt credit metrics through delay of capital expenditures
- reduced pressure on both external and internal resource requirements

- prioritization of early stage projects can provide for more efficient project execution
- avoidance of premium wages during “boom” periods
- greater visibility of the AESO’s views with respect to AltaLink’s flexibility to achieve in-service dates

378. The RPG submitted that AltaLink’s criticisms of the RPG’s recommendations are not credible, since all the RPG is asking is that the Commission direct AltaLink to engage with the AESO so that the scheduling of transmission development can be properly balanced with the interests of ratepayers. As only the Commission has the dual mandate to set just and reasonable rates and maintain the integrity of the system, the RPG submitted that it is therefore reasonable for the Commission to oversee project prioritization.

379. The RPG does not dispute AltaLink’s references to the AESO’s legislative role to provide for the safe, reliable and economic operation of the interconnected electric system; the AESO’s obligation to identify project timing in each NID; or the AESO’s obligation to update the NID, if required. However, whether the AESO acts on these obligations in a timely manner, and whether it receives important feedback from AltaLink as to schedule and resource constraints, is a different matter that may require the Commission’s oversight.

380. In its reply, AltaLink noted that notwithstanding Mr. Cline’s claimed experience or expertise, he is not employed by the AESO, does not speak for the AESO, and is not responsible for planning the Alberta interconnected electric system. As such, AltaLink submitted that Mr. Cline’s opinions are irrelevant. AltaLink submitted that the testimony of its witnesses has established that AltaLink is in continuous conversation with the AESO to ensure that ISDs remain reasonable.¹⁷⁴ The fact remains that the AESO is the system planner responsible for setting ISDs, such that AltaLink cannot unilaterally re-prioritize its DA projects.

Commission findings

381. The Commission finds, from its consideration and review of the evidence on the record of this proceeding, that the pace at which AltaLink is pursuing the completion of direct assign projects is contributing to significant incremental costs that potentially could be avoided if the target in-service dates for certain of AltaLink’s direct assign projects could be adjusted to a later date. Many aspects of AltaLink’s GTA emphasize extent to which the current test period bulge in AltaLink’s extensive multi-year capital expenditure program has contributed to cost pressures which AltaLink is requesting the Commission to recognize in its revenue requirement determinations.

382. As well, as discussed in Section 6.1.5.1, the Commission determined that the RPG’s evidence on certain project execution practices demonstrated that AltaLink, in the effort to achieve presently targeted in-service dates, may be routinely making decisions that may generate significant incremental project costs.

383. The Commission also accepts the RPG’s submission that the relaxation of some in-service targets should have a positive impact on key credit metrics such as the FFO/debt ratio.

384. Notwithstanding these findings, the Commission also must consider the effect of the legislative provisions which govern system planning and, as acknowledged by the interveners

¹⁷⁴ Transcript Volume 8, page 1719, lines 13 to 24.

and AltaLink alike, confer the responsibility for system planning on the AESO. In this regard, the Commission has considered AltaLink's evidence that:

- The determination of in-service dates is exclusively within the AESO's jurisdiction.
- There is ongoing interaction between AltaLink and the AESO on in-service dates for all projects.
- In-service dates for AltaLink direct assign projects included in the current GTA as set out in Appendix 11 of the application reflect these ongoing interactions and all other information available to the AESO, including updated information on load and generation forecasts.

385. As stated by the Commission in Decision 2013-358, Section 17 of the *Electric Utilities Act* and Part 2 of the *Transmission Regulation*, confer the responsibility for system planning on the AESO. Nonetheless, the Commission considers the updated information on Alberta electric system load and generation forecasts presented in the RPG Grid Power 1 evidence shows that important assumptions underpinning the AESO's initial determinations as to in-service dates for the purposes of its NIDs have changed substantially.

386. The RPG Grid Power 1 evidence relies on an assessment of the AESO 2012 LTO. This document, by definition, reflects more current information than would have been available to the AESO in setting in-service target dates using information available in 2008 or 2009. Since there are continuous changes to the factors underlying in-service target dates, the Commission would have expected to see the impact of the AESO 2012 LTO reflected to a greater extent in the in-service target dates outlined in Appendix 11 of the application.

387. The Commission also finds persuasive the RPG Grid Power 1 evidence regarding whether optimal decisions with respect to in-service targets were made for the BW project. In this regard, the Commission notes that, apart from indicating that its actions reflect directions given by the AESO, AltaLink did not rebut the RPG's submission that the BW project will be brought into service more than a year in advance of the date on which the first customer expecting to require service from this project will be connected.

388. While Section 11(3) of the *Transmission Regulation* requires the AESO to specify the project timing in a NID, Section 11(3)(h) of the *Transmission Regulation* requires that the AESO's recommendation of a preferred option for a NID include (i) the AESO's rationale for selecting the preferred option and (ii) the implementation schedule for the option.

389. In addition, Section 11(4) of the *Transmission Regulation* reads as follows:

- (4) If the ISO's preferred option under subsection (3)(h) is to construct a transmission facility at a future date, the ISO must
- (a) **be reasonably certain that, in the future, a transmission facility is needed, and for the purpose of determining the certainty of the need, the ISO may specify milestones, including**
 - (i) load growth,
 - (ii) generation addition,
 - (iii) commitments by the prospective owners of generating units to construct a unit,
 - (iv) the receipt of payment of local interconnection costs under Part 5,

- (v) the issue of permits or approvals, or meeting other legal requirements, for the construction of a generating unit, and
 - (vi) any other indicators prescribed by the ISO determining the certainty of the need for the construction of a transmission facility,
- and

- (b) identify the process by which the ISO will monitor and determine whether the milestones identified under clause (a) are met. (emphasis added)

390. While Section 11(4) of the *Transmission Regulation* is usually applied to projects that the AESO proposes to implement in stages rather than fully bringing into service on a single date, the Commission considers it reasonable that the considerations for determining need at particular milestones should also apply whenever updated information of a similar nature that might call into question the original determination of an in-service date set out in a NID becomes available.

391. As the AESO did not participate directly in AltaLink's GTA, there was no opportunity to test the certainty of the projects and the in-service targets for those projects, as set out in Appendix 11. In view of the Commission's finding that there is a significant potential for cost savings, the Commission considers that this evidence should be provided. Accordingly, the Commission directs AltaLink specifically to request the AESO to review the current in-service dates for direct assign projects included in the 2013-2014 test year forecasts to determine whether the in-service dates for some or all of these projects can be moved to a later date using the 2012 LTO as the basis for such review. AltaLink is further directed to provide the results of such consultations at the time of its refiling.

392. Further to the Commission's comments at paragraph 447 of Decision 2011-453, the Commission anticipates that the AESO may be asked by the Commission to file its own evidence in respect of in-service dates after this information is filed by AltaLink, or otherwise participate in future AltaLink tariff proceedings.

6.1.4 Treatment of contingency allowances in DA capital forecasts

393. The ADC filed intervenor evidence prepared by Mr. Dauphinais (ADC Dauphinais Evidence)¹⁷⁵ which recommended that the Commission not allow AltaLink to include contingency allowances within its capital expenditures forecast for direct assign projects. If granted, Mr. Dauphinais indicated that his proposal would reduce AltaLink's CWIP in rate base balance by \$72.2 million and \$93.3 million for the years 2011 and 2012 respectively. In addition, Mr. Dauphinais indicated that his proposal would reduce the forecast amounts of gross plant in-service in rate base by \$44.9 million in 2013 and by \$157.6 million in 2014.¹⁷⁶

394. Mr. Dauphinais submitted that contingency allowances are amounts typically included in a forecast to cover for the uncertainty in the development of cost estimates, and represents an amount that may or may not need to be spent as a result of development cost uncertainties. He submitted that because there is rarely complete certainty when cost estimates are developed, it is appropriate to develop a contingency amount and include that contingency amount in any capital budget used to evaluate the reasonableness of a project in relation to alternatives.

¹⁷⁵ Exhibit 112.03.

¹⁷⁶ Exhibit 112.03, page 3.

395. However, Mr. Dauphinais submitted that it is not appropriate to include contingency allowance amounts in the capital forecast used to set AltaLink's GTA revenue requirement because contingency amounts only reflect funds that AltaLink may need to spend prior to the conclusion of final expenditures. Mr. Dauphinais further submitted that because the Commission has historically allowed deferral accounting on direct assign capital expenditures, AltaLink has the opportunity to recover any actual direct assign project contingency allowance amounts that were prudently incurred.

396. The ADC Dauphinais evidence proposed that making contingency amounts only recoverable in the true-up of AltaLink's deferral accounts would provide additional incentive for AltaLink to minimize its actual direct assign project contingency spending and also benefits rate payers by delaying the charging of uncertain project costs until they have actually been incurred.

397. Mr. Dauphinais submitted that as AltaLink's actual 2011 and 2012 capital expenditures on direct assign projects were 31 to 35 per cent lower than the original AltaLink forecasts filed in its 2011-2013 GTA, the adoption of his proposal to reduce AltaLink's uncertainty adjusted direct assign capital expenditure forecast by eight per cent should understate AltaLink's likely actual rate base for 2013 and 2014. In any event, Mr. Dauphinais submitted that due to the Commission's historical approval of deferral accounting to track forecast versus actual differences for direct assign projects, AltaLink is assured of cost recovery.

398. In Section 2, Part 4 of the RPG general evidence, the RPG discussed concerns with contingency reporting and usage. The RPG submitted that a lack of visibility, understanding, and governance around the usage of contingency accounts for transmission projects impedes the AESO's ability to review change orders and to assess whether they are driven by scope changes or by risks that should have been accounted for under contingency.

399. The RPG submitted that contingency allowance determination should start with risk identification, followed by quantification of the probable costs of risks identified. Based on analysis presented in Table 2-4 of its evidence, the RPG performed an analysis of the weighted averages of contingencies for both ATCO Electric and AltaLink, and concluded that contingency allowances as a percentage of total cost for both companies appeared to be close to 10 per cent. The RPG submitted that while a 10 per cent contingency may appear reasonable, it represents a component of the forecast of capital costs to be added to rate base.

400. The RPG expressed concern regarding the limited visibility as to how contingency dollars are being utilized. In this regard, the RPG noted that the usage of contingency was discussed in the context of the AESO's ISO Rule 9.1 review process, during which discussions took place with respect to:

- the treatment of contingency within project baseline estimates
- a lack of consistency as to how contingencies are quantified
- the potential for cross subsidization (i.e. a contingency established for one type of risk is used to subsidize a different type of risk)
- the tendency of contingency to be used up by the date of project completion
- potential inconsistencies as to whether contingencies are drawn down first prior to updating project costs estimates

401. The RPG submitted that it had specific concerns with:

- the tendency for most TFO projects to fully exhaust the contingency allowance
- a potential the reporting of project contingencies on an aggregated basis to facilitate double dipping as between risks accounted for in contingencies and supplementary budget requests
- the relationship between contingency allowances and change orders

402. In consideration of the relative absence of recovery risk related to forecast error, the RPG submitted that minimal contingency percentages need to be included in TFO project budgets. Accordingly, the RPG recommended that the Commission adjust AltaLink's forecasts for direct assign projects expected to incur any capital expenditures in the GTA test period to allow for a contingency amount of no more than five per cent of total project cost.¹⁷⁷

403. Additionally, in light of its transparency concerns, the RPG recommended that the Commission direct AltaLink to:

- separately report contingency amounts in both initial cost estimates prepared pursuant to ISO Rule 9.1.2 (PPS estimates) and in monthly reports prepared pursuant to ISO Rule 9.1.3
- provide more detailed accounting and explanations of risks as contingency amounts are used in the course of project execution¹⁷⁸

404. In rebuttal, AltaLink noted that the ADC Dauphinais evidence does not challenge the requirement for contingency and concedes that it should be included in any capital budget.

405. AltaLink noted that the American Association of Cost Engineers¹⁷⁹ defines contingency as follows:

CONTINGENCY – An amount added to an estimate to allow for items, conditions, or events for which the state, occurrence, or effect is uncertain and that experience shows will likely result, in aggregate, in additional costs. Typically estimated using statistical analysis or judgment based on past asset or project experience. Contingency usually excludes: 1) Major scope changes such as changes in end product specification, capacities, building sizes, and location of the asset or project; 2) Extraordinary events such as major strikes and natural disasters; 3) Management reserves; and 4) Escalation and currency effects. Some of the items, conditions, or events for which the state, occurrence, and/or effect is uncertain include, but are not limited to, planning and estimating errors and omissions, minor price fluctuations (other than general escalation), design developments and changes within the scope, and variations in market and environmental conditions. **Contingency is generally included in most estimates, and is expected to be expended.**¹⁸⁰ [Emphasis added by AltaLink]

406. AltaLink submitted that the contingency forecast is similar to any other line item making up a cost estimate, and is fully expected to be expended. Therefore, the inclusion of contingency

¹⁷⁷ Exhibit 122.05, page 2-16.

¹⁷⁸ Exhibit 122.05, page 2-17, lines 3 to 16.

¹⁷⁹ The RPG evidence refers to "AACE International" as short for "The Association for the Advancement of Cost Engineering" and AltaLink refers to the American Association of Cost Engineers"

¹⁸⁰ AACE International Recommended Practice No. 10S-90, Cost Engineering Terminology, TCM Framework: General Reference, Rev. April 25, 2013.

allowances is consistent with forecasting on the basis of the best available information, and must be included in a forecast for consistency with the requirements for a just and reasonable tariff set out in Section 121(1) of the *Electric Utilities Act*.

407. Responding to the evidence of the RPG, AltaLink submitted that a math error in the RPG's calculation of weighted average contributions led the RPG to erroneously state that ATCO Electric's average contribution was 9.2 per cent rather than 13.4 per cent. AltaLink submitted that the correction of this math error supports AltaLink's response in ADC.AML-020(b) that contingencies have historically fallen in a range between eight per cent and 12 per cent of total project cost.

408. AltaLink submitted that an AACE publication¹⁸¹ dealing with contingency estimation practices address the RPG's concern with the use of inconsistent methods to determine contingencies. AltaLink also submitted that the AACE definition also supports its view that the drawdown of contingencies is not analogous to the cross subsidization of one risk by another risk, as suggested by the RPG. AltaLink submitted that the RPG claims that contingencies facilitate double counting or double dipping are unfounded and unsupported by the evidence.

409. AltaLink submitted that its general practice of including contingency amounts in the range of eight to 12 per cent of total project costs follows industry practices and AACE guidelines. Conversely, AltaLink submitted that the RPG's proposal to limit contingency amounts to no more than five per cent of total project costs has no foundation because it is arbitrary and does not represent expected project risks and expected project costs.

410. AltaLink submitted that the RPG request that the Commission direct it to provide greater detail with respect to contingencies in project budgets is unnecessary, and in any event should not be determined in the GTA proceeding of an individual TFO. To the extent that the RPG is recommending changes to ISO Rule 9.1, such changes must be implemented by the AESO in conjunction with the applicable AESO rule review industry working committee.

411. In argument, AltaLink submitted that the ADC's view that contingencies can be eliminated because they are addressed in a DACDA proceeding does not address AltaLink's evidence that contingency allowance amounts represented dollars, on a forecast basis, that are expected to be spent. Given the forward test year regulation of utilities, AltaLink submitted that there is no rational basis to single out a specific type of expenditure from the forecast capital expenditure.

412. AltaLink submitted that the exclusion of contingency amounts from GTA forecasts would represent an unwarranted and dangerous break from historical practice that could impact credit metrics and the heighten the risk of a downgrade.

413. The ADC responded that AltaLink had misstated the evidence of Mr. Dauphinais to suggest that he admitted that there is a reasonable expectation that contingency amounts will be spent. In reality, the ADC submitted that Mr. Dauphinais only agreed that there is a reasonable expectation that contingencies may be spent. The ADC submitted that the distinction between "will" and "may" is significant in this case. The ADC also submitted that testimony by

¹⁸¹ AACE, Recommended Practice No. 40R-08, Contingency Estimating – General Principles, TCM Framework: 7.6 – Risk Management, June 25, 2008, referenced at page 25 of AltaLink rebuttal (Exhibit 150.02).

Ms. Picard-Thompson during the oral hearing contradicted AltaLink's evidence that the entire amount of contingency will be spent.

414. The ADC noted that Section 122(1) of the *Electric Utilities Act* specifically identifies the costs, expenses and amounts that the owner of a utility must be provided a reasonable opportunity to recover but does not include any reference to the contingency. As such, the ADC submitted Section 122(1) does not require that contingencies be included in forecasts. Conversely, the ADC noted that if a contingency amount is incurred, expenditures accounted for under contingencies would be eligible for recovery pursuant to Section 122(1).

415. The RPG submitted in argument that the use of excessive contingency allowances in project forecasts has the potential to mask prudence issues and may thus hamper the ability of the AESO to detect problems that would otherwise be brought to light through monthly project reporting.

416. In reply, the RPG submitted that AltaLink's suggestion in argument that excluding or reducing contingency allowances would break from historical practices and elevate credit metric risks should be disregarded because:

- the Commission is not bound by historical practice when determining just and reasonable rates
- as it is not without precedent for the Commission to limit allowable expenditures for ratemaking purposes, doing so again would not be a "dangerous break from historical practice," as suggested by AltaLink
- any cash flow differences arising from the RPG's proposed five per cent limit on contingency and actual final costs approved as prudent are only temporary

Commission findings

417. Section 121(4) of the *Electric Utilities Act* provides that the burden of proof to demonstrate that a tariff is just and reasonable lies with the utility.

418. Section 122 of the *Electric Utilities Act* requires the Commission, when considering a tariff application, to have regard for the principle that the tariff that it approves must provide the owner of the utility with a reasonable opportunity to recover its costs and expenses if the Commission finds the costs and expenses to be prudent (Section 122(1)(a)) and appropriate (Section 122(1)(h)).

419. As confirmed by the Alberta Court of Appeal in *ATCO Gas and Pipelines Ltd. v. Alberta (Energy and Utilities Board)* 2005 ABCA 122, prudent expenditures must reflect the interests of customers and avoid needless expenditures. As stated by the court in paragraph 72 of the decision:

The Board's broad discretion to set just and reasonable utilities rates must be exercised in the public interest, which requires consideration of both sides of the rate paying equation: ATCO Electric, *supra* at 132. That process implicitly entails scrutiny of management decisions. With respect to negotiated settlements Fraser C.J.A. held in ATCO Electric at para. 145 that the Board "is entitled to assume that what the utility has negotiated and agreed to is in fact in the utility's best interests." However, in the context of rate setting, the starting point for scrutinizing management decisions is the presumption that it is in the utility's interest to make prudent decisions which also reflect the interests of its

customers, by avoiding needless expenditure. That presumption will matter only when the scales are evenly balanced. [emphasis added]

420. The forecast of direct assign project expenditures and additions the Commission approves in the context of AltaLink's GTA should reflect the Commission's determination of the reasonableness of these expenditures at the time of the Commission's GTA decision. In this context, the Commission considers that it is unreasonable to reduce the contingency component of the GTA direct assign forecast to zero as recommended in the ADC Dauphinais evidence simply on the basis that AltaLink will ultimately be held whole through the DACDA process.

421. The Commission notes, as has the RPG, that the majority of projects are completed with all contingency dollars spent.¹⁸² This suggests that AltaLink's forecasts for contingencies have, on balance, been reasonably accurate.

422. As well, the Commission agrees with AltaLink that eliminating or restricting contingency allowances for the purposes of its GTA revenue requirement, as proposed by the ADC and the RPG, respectively, would put unnecessary pressure on AltaLink's cash flow, and could unnecessarily harm customers through an adverse impact on credit metrics. The Commission holds this view, in particular, because of AltaLink's adoption of the uncertainty adjusted capital forecasting approach, and the inherent reductions in revenue requirement forecasts that the uncertainty adjusted approach implies. Furthermore, given that any excess revenue that may be generated if the full amount of contingency forecast at the GTA stage is not spent will be refunded to ratepayers as part of the DACDA reconciliation, the Commission considers that it is not in the public interest at this time to direct AltaLink to either eliminate or reduce contingencies that form part of its direct assign capital forecasts.

423. Finally, the Commission shares some of the concerns of the RPG with respect to the need to refine the details of how contingency amounts for specific projects are determined, as well as how project cost estimate changes occurring during project execution interact with certain contingency accounting practices. These matters are discussed in greater detail in Section 6.1.7 below.

6.1.5 DA project cost and design matters

6.1.5.1 Project execution efficiency matters

424. Section 4, Part 1¹⁸³ of the RPG general evidence discussed several aspects of direct assign project execution practices that the RPG believes are contributing to higher than necessary DA project costs.

425. As a background to its assessment, the RPG presented its example of a well-executed transmission construction project. To this end, the RPG general evidence set out a typical sequence for carrying out the construction of a transmission project. The RPG also submitted that in an efficient process, the identified steps are carried out sequentially with minimal delay so that man-hours are used efficiently.

426. The RPG general evidence indicated that while the RPG members did not hold themselves out to be experts in project execution practices, RPG members hold a view based on

¹⁸² Exhibit 122.05, page 2-15.

¹⁸³ Exhibit 122.05, pages 4-1 to 4-26.

field visits that certain observed practices may be demonstrably representative of inefficient project execution practices by AltaLink and other TFOs. Based on such review, the RPG submitted that there is a need for a qualified team of professionals to conduct a comprehensive cost and performance audit of AltaLink's project execution practices.

427. The RPG identified the following specific concerns:

- foundation issues including concerns related to:¹⁸⁴
 - the completion of foundations significantly in advance of the delivery of towers
 - insufficient or untimely collection of geotechnical data
 - the use of dead-end structures and preferences for un-guyed structures
 - the use of R-series double circuit lattice towers
 - the capability of foundation suppliers to adapt to material changes in foundation requirements
- standby changes and mobilization/demobilization costs
- delays on the Heartland transmission project
- the adequacy of the transmission-related experience of certain construction contractors
- transmission tower assembly techniques, including:
 - costs relate to the use of lattice boom cranes
 - the use of helicopters for tower erection
- insulator installation issues, including
 - issues related to the timing of insulator delivery relative to tower erection
 - the potential for incremental costs from installation after tower erection rather than while towers are laying on the ground
- the extent of AltaLink's use of protective rig-mats
- conductor stringing practices

428. In its conclusions to Section 4, Part 1 of its evidence, the RPG submitted that while its analysis of AltaLink's transmission project execution practices was limited, it had provided sufficient evidence to demonstrate that AltaLink had incurred unnecessary and imprudent costs. Given this evidence, the RPG submitted that cost and performance audits should be undertaken on all major AltaLink projects.

429. AltaLink responded to the RPG evidence related to project execution in Section 5 of its rebuttal evidence. AltaLink submitted that the RPG evidence on project execution was unsubstantiated, ill-founded, and relied on limited observations that were highly isolated from actual project interdependencies. AltaLink submitted that the RPG presented this project execution evidence in an out of context manner that, in some instances, did not even refer to the appropriate TFO.

430. AltaLink submitted that prudence should be determined through the assessment of reasonable judgments made on the basis of facts known at the time of project execution decisions. However, AltaLink submitted that the RPG's project execution evidence extrapolates imprudence from narrow and isolated observations. AltaLink noted that as TFOs have a statutory obligation to balance many factors such as safety, environmental compliance, landowner impacts, reliability, scope, schedule and cost, TFOs cannot optimize projects purely on cost alone as the RPG would propose be done.

¹⁸⁴ Exhibit 122.05, pages 4-4 to 4-7.

431. AltaLink opposed the RPG's evidence and responded to the specific issues raised by the RPG in their rebuttal evidence as footnoted below:

- RPG statements that well executed transmission projects should be executed in a “sequential, repetitive and linear manner”¹⁸⁵
- the probative value of the periodic field visits conducted by the RPG used as the basis of its project execution efficiency evidence¹⁸⁶
- specific RPG claims in respect of AltaLink's execution of the Heartland project¹⁸⁷
- a specific RPG claim respecting the adequacy of its geotechnical assessment¹⁸⁸
- RPG comments on AltaLink's decision to use an un-guyed free standing dead-end structure on a specific project¹⁸⁹
- a suggestion in the RPG evidence that a foundation issue on an ATCO Electric project supports a generalized statement that ATCO Electric had a “very negative experience” arising from the used of the RC22 tower design¹⁹⁰
- various RPG claims with respect to foundation costs¹⁹¹
- RPG requests for a cost and performance audit of the Heartland project¹⁹²
- RPG claims with respect to insulator installation on the Edmonton area 240-kV project¹⁹³
- RPG comparisons of AltaLink's use of rig mats to ATCO Electric¹⁹⁴
- RPG claims that AltaLink incurred substantial mobilization/demobilization costs as a result of its reliance on the same conductor stringing crew¹⁹⁵

432. In its argument, AltaLink submitted that it has designed its business processes, systems and tools to ensure that prudent business decisions are made by AltaLink employees and contractors throughout the project lifecycle.

433. In reply, the RPG submitted that AltaLink's defense of the efficiency of its project execution is based on its assertion that it has processes, policies and procedures in place to achieve this outcome. However, the RPG submitted that having processes in place does not provide assurance that the processes are working, that people are following these processes, and, most importantly, whether decisions made within these processes are prudent.

Commission findings

434. During the oral hearing, the RPG sought to introduce into evidence, as aids to cross-examination, a number of photographs of field sites which, it contended, demonstrated the failure of AltaLink to effectively manage its capital projects. AltaLink opposed the introduction of these photographs as evidence. The Commission issued a ruling regarding these photographs which allowed the RPG to present them to the AltaLink witnesses but restricted the evidence in respect of the photographs to the testimony of the witnesses. That is, the photographs were not

¹⁸⁵ Exhibit 150.02, pages 33 and 34.

¹⁸⁶ Exhibit 150.02, page 34.

¹⁸⁷ Exhibit 150.02, page 34.

¹⁸⁸ Exhibit 150.02, page 35.

¹⁸⁹ Exhibit 150.02, page 35.

¹⁹⁰ Exhibit 150.02, page 36.

¹⁹¹ Exhibit 150.02, pages 37 and 38.

¹⁹² Exhibit 150.02, page 39.

¹⁹³ Exhibit 150.02, page 40.

¹⁹⁴ Exhibit 150.02, pages 40-42.

¹⁹⁵ Exhibit 150.02, page 42.

considered evidence on the record of this proceeding; only the testimony of the witnesses in relation to the photographs was accepted as evidence.

435. AltaLink submitted that these photographs lacked context, verification, relevance to matters under discussion in the GTA proceeding, and had no probative value. The RPG responded that the evidence adduced from AltaLink witnesses was relevant and probative.

436. The Commission has considered the testimony provided by AltaLink's witnesses in response to the photographs submitted. Generally, the witnesses made few, if any comments, on the specific subject matter of the photographs or how they may have related to any particular AltaLink project. For the most part, the testimony that was provided in response to the photographs was generic in nature. For example, when presented with photographs of certain transmission infrastructure, AltaLink's witness indicated as follows:

00904

22 I want to turn to a new area, and this
23 will explore the cross-examination aids, which are the
24 photographs. I think copies of those were circulated in the
25 room this morning, and I believe they are ordered with

00905

1 numbers starting at RG Cross Aid 001. Do you have those?
2 A. MS. PICARD-THOMPSON: Yes, sir, I do.
3 Q. Okay. Now, on 1 we on the face page have Pictures 1 to
4 4. Would you agree firstly that dead-end structures are
5 generally more expensive than what are described as tangent
6 towers?
7 A. MS. PICARD-THOMPSON: Yes, sir.
8 Q. And that's because they have more load on them and have
9 to have a larger foundation and more structural strength;
10 fair?
11 A. MS. PICARD-THOMPSON: They do have to have more
12 structural strength, that's correct.
13 Q. And then angle structures are more expensive than
14 tangent towers, although not so much as dead ends?
15 A. MS. PICARD-THOMPSON: For the same reason, sir.
16 Q. Yes. The tower type shown in Picture 1, is that a
17 dead-end structure?
18 A. MS. PICARD-THOMPSON: Sorry. I can't tell. These
19 are just -- sir, you've provided us random pictures. I can't
20 specify or verify these pictures.¹⁹⁶

437. As such, the Commission finds there to be little probative value from the testimonial evidence provided in relation to the photographs.

438. The Commission's review of the evidence regarding project execution practices presented in Section 4, Part 1¹⁹⁷ of the RPG general evidence reveals that much of this evidence is anecdotal.

¹⁹⁶ Transcript, Volume 5, pages 904, line 24 to page 905, line 20.

¹⁹⁷ Exhibit 122.05, pages 4-1 to 4-26.

439. Given the above limitations, the Commission is not persuaded that the project execution efficiency evidence set out in the RPG general evidence provides a basis to find AltaLink, for the purposes of this proceeding, to have acted imprudently on ongoing projects. However, the Commission considers that the project execution evidence of the RPG does provide a basis for the Commission to express some concern that certain types of project execution decisions illustrated in Section 4, Part 1 of the RPG general evidence may be being made, in part, to achieve in-service target dates.

440. As noted in Section 6.1.3 above the Commission has determined that AltaLink should work with the AESO to assess the need to achieve in-service dates that reflect the AESO's 2012 LTO and has relied, in part, on the RPG's project execution efficiency evidence to support the Commission's finding that a re-examination is warranted of the need to achieve targeted in-service dates at virtually any cost.

441. Finally, as further discussed in Section 6.1.6 below, the Commission is not persuaded by the RPG's project execution efficiency evidence that cost or performance audits should be directed in relation to projects that have not yet been completed.

6.1.5.2 WATL project HVDC converter station costs

Overview

442. The Western Alberta Transmission Line (WATL) is a HVDC transmission line project that was designated as a CTI by the government of Alberta. The project was assigned to AltaLink by the AESO. The project was granted facilities approval by the Commission in Decision 2012-327.

Evidence of TransGrid Solutions

443. The RPG filed evidence prepared by Dr. Rashwan of TransGrid Solutions (TGS) with respect to the cost of the converter stations associated with HVDC equipment purchased by AltaLink for the WATL project. TGS described WATL as a conventional HVDC project. As such, TGS maintained the converter station costs should follow the market price of HVDC converter stations. The AltaLink converter stations cost is stated as \$497.9 million.¹⁹⁸ TGS estimated the converter station costs should be between \$319 and \$355 million.

444. TGS stated that the AltaLink project involved the use of LCC (line commutated converter) HVDC equipment. TGS described LCC HVDC as a mature technology that has established itself over the past 60 years. TGS submitted it was possible to get an estimate of the world market price of LCC HVDC based on actual awarded projects. TGS referred to a CIGRE brochure that, while concentrating on the cost of the HVDC lines, also provided information with respect to the price of converter stations. This information was based on several HVDC projects ranging between 700 MW and 6,000 MW, all based on an EPC (engineering-procurement-construction) contract. TGS stated that CIGRE calculated the cost of converter stations for different projects based only on the LCC technology and compared it to actual project costs. The calculations were based on bipolar schemes.

445. TGS claimed the HVDC market was well-established and one could derive the price of HVDC converter stations based on recently awarded projects. TGS stated it has been involved in

¹⁹⁸ AltaLink January 2013 Monthly Progress Report.

several recently awarded projects with ratings ranging between 400 MW and 6,000 MW. For LCC projects, which were the majority, the price per kilowatt (kW) is between \$145 and \$180. TGS explained the majority of the HVDC projects were awarded as an EPC contract. The process of award in the majority of the cases was through competitive bidding against technical functional specifications. In some cases direct negotiation with a certain supplier was adopted. However, these cases were not typical. TGS stated there were only three major suppliers of HVDC converter stations (ABB, Alstom Grid, and Siemens) and all three are based in Europe. TGS provided at Table 6 of its evidence, a price schedule breakdown that it claimed was indicative of an HVDC project. TGS claimed this table would be completed by the suppliers as part of their bid. In some projects the buyer would ask for an even more detailed breakdown, down to the component level.

446. TGS stated that based upon the AESO's specifications, there were no unusual requirements and there was no need for dynamic reactive support. Therefore the converter station costs should be within the norm of the HVDC industry. The only unique factor to be considered was the staging of the 1,000 MW monopole to be expanded to a 2,000 MW bipole. Such staging would have an impact on Stage 1. Based on the above noted market price for HVDC converter stations, TGS estimated that the cost of the WATL HVDC converter stations for the 1,000 MW Stage 1 should be between \$180 million and \$216 million. To arrive at this estimate, TGS adopted a price range of \$150/kW to \$180/kW that was appropriate for a 2,000 MW bipole design, for a total cost of \$300 million to \$360 million. This cost was then scaled to 60 per cent of this estimate to reflect that Stage 1 will be constructed only as a monopole of a 1,000 MW capacity. In other words, the cost of the 1,000 MW design will be more than 50 per cent of the total cost for a 2000 MW bipole design. Consequently, TGS estimated that the cost of the WATL converter stations using market prices should range between \$180 million and \$216 million for a two-terminal system.

447. In addition to the above cost for the converter stations, TGS also estimated costs for additional equipment at the Sunnybrook station, the Crossings substation, the Langdon substation and the Bennett substation. The estimated cost for the additional facilities was \$139 million. Together with the estimate for the converter stations, the total TGS estimate supported the \$319 to \$360 million range proposed.

448. In argument, the RPG stated that the gap between AltaLink's proposed cost for the HVDC converter station of \$497.9 million and the TGS estimate of \$319.0 million to \$355 million resulted in a discrepancy of \$143 to \$179 million. The RPG submitted this gap in costs was significant, unexplained and unwarranted. As such, all costs over \$355 million remained unexplained and should be denied as unreasonable.

449. The RPG outlined how TGS prepared its estimate¹⁹⁹ and stated that AltaLink had argued that since SNC-ATP solicited and received comprehensive and competitive bids from the three major HVDC suppliers, that this competitive bid process established the market price at the time that the bids were submitted.²⁰⁰ The RPG maintained this position was fundamentally flawed because it assumed that if AltaLink, or SNC-ATP, obtains three bids and chooses the lowest compliant bid, that automatically means it is a competitive price that reflects fair market value.

¹⁹⁹ RPG argument, page 66, refers to Transcript, Volume 9, page 2096.

²⁰⁰ Exhibit 150.02, paragraph 232, page 50.

To the contrary, the RPG submitted a fair market price was the price established by HVDC projects awarded world-wide.²⁰¹

450. The RPG disputed AltaLink's assertion that Dr. Rashwan's evidence relied on estimates, not actual prices, ignored specific relevant caveats and consisted of out-of-date information.²⁰² The RPG stated that Dr. Rashwan relied on actual awarded prices, was involved in the specific projects, was in a position to ensure the costs were truly comparable (apples-to-apples), and used current information over a 2009 to 2012 period. Dr. Rashwan, although unable to review the confidential evidence filed on the record, was nonetheless able to provide a sensitivity analysis of all of the prices he reviewed, which ranged between \$136.8/kW to \$184/kW.²⁰³

451. For example, in response to the claim that Alberta has high labour costs, which could account for the differences in costs, Dr. Rashwan adjusted the costs so that the civil works were calculated at three times the rest of the world. Allowing for this adjustment, the difference was still \$118.8 million between the WATL price of \$497 million and the most expensive other project reviewed.²⁰⁴ The RPG submitted that, given world markets and three suppliers, no matter where the project is located, the price of the station equipment should be more or less the same except for local labour and Alberta labour should not be an issue in the project price except for the civil works.

452. AltaLink filed the rebuttal evidence of ATCO Electric from the ATCO Electric GTA in this proceeding. That evidence referred to the Manitoba, Newfoundland and New Zealand projects all of which AltaLink argued demonstrated higher project costs. Dr. Rashwan and TGS were involved in all three of these projects and provided the following clarifications:

- (a) There is a big difference between an estimate and a market price. TGS often prepares estimates and because the in-service date is in the future, amounts are included for the uncertainty of exchange rates, price of metal, the price of oil which will affect transportation, manufacturing, etc. and the supplier will not hedge until they get the contract.²⁰⁵ Estimates will build in contingency, recognizing there is no specification yet and system studies are not complete; and in HVDC there is a desire to stay away from change orders as they are very expensive since HVDC equipment is specialized.²⁰⁶
- (b) Dr. Rashwan prepared the estimates for Manitoba Hydro Bipole III. Bipole III has additional, very expensive synchronous condensers; the figure of \$3.2 billion includes the DC transmission line; and Bipole III has a station that is located 1,500 kilometres north of Winnipeg requiring major work.²⁰⁷ The cost estimate from Manitoba Hydro of \$3.9 billion, which AltaLink submitted, was never approved by Manitoba Hydro or the board.²⁰⁸ The approved number for the project was \$3.28 billion as shown in the PUB hearings in 2011 based on the TGS report.²⁰⁹
- (c) The New Zealand project is exceptional due to very strict seismic requirements. Locations like New Zealand, San Francisco and Los Angeles have seismic requirements

²⁰¹ Transcript, Volume 9, page 2096, lines 3 to 7.

²⁰² Exhibit 150.02, paragraph 234, page 50.

²⁰³ Exhibit 145.04.

²⁰⁴ Exhibit 145.04.

²⁰⁵ Transcript, Volume 9, page 2125, line 18 to page 2127, line 4.

²⁰⁶ Transcript, Volume 9, page 2127, line 11-25.

²⁰⁷ Transcript, Volume 9, page 2128, line 4-17.

²⁰⁸ Transcript, Volume 9, page 2128, line 18 to page 2129, line 4.

²⁰⁹ Transcript, Volume 9, page 2120, line 1-3.

that definitely affect the price because the building and equipment have to withstand seismic requirements.²¹⁰

- (d) The Nalcor Lower Churchill (Muskrat Falls) project, has an overload requirement. It is sized at 900 MW but it can run at a higher overload continuously. WATL does not have this requirement.²¹¹ Also, the project has transition yards since the project has a submarine cable that requires a special yard.²¹²

453. The RPG also noted that AltaLink had attempted to use the very high cost of the EATL converter station at \$481.77 per kW to justify its own costs at \$497 per kW. The RPG had also challenged ATCO Electric's cost. The RPG submitted that both of these converter stations have excessive, out-of-market prices from the same supplier, Siemens.

454. The RPG also expressed concern with the lack of information disclosed. The ATCO response on the EATL converter station costs also suffered from lack of disclosure on the scope of work.²¹³ In particular, the RPG noted that AltaLink declined to provide the term sheet for the converter station that would set out "the specific breakdown of costs between the converters themselves and other components that may have been included in the bid package (such as AC facilities)," claiming this was commercially sensitive.²¹⁴ The RPG stated this level of information was not the detailed components of a term sheet, but was a high level breakdown of possibly three (or four) amounts, (1) HVDC converter station costs, (2) dynamic reactive support and (3) AC facilities beyond those required for (1) and (2) and recommended these amounts be publicly disclosed. The RPG noted that AltaLink claimed to have obtained market information, and yet it failed to provide the information. Also, AltaLink has refused to provide any further breakdown of the costs or other comparative information to support the reasonableness of the converter station costs.²¹⁵ This non-disclosure was inconsistent with Dr. Rashwan's evidence that even for merchant transmission, the contract value is released publicly during rate applications and the majority of HVDC projects worldwide issue a press release disclosing the approximate project price.²¹⁶

455. In summary, the RPG maintained that AltaLink's overall reliance on its compliance with ISO Rule 9.1.5 to determine the costs of the WATL converter station was fundamentally flawed because it presumed that if AltaLink obtains three bids and chooses the lowest compliant bid, it automatically means the price is competitive and reflects fair market value.²¹⁷ The RPG stated deviating from the "three-bids and a buy" procurement process when the offered prices do not look reasonable is not prohibited by ISO Rule 9.1.5 and AltaLink agreed under cross-examination that they would consider it if circumstances warranted. Moreover, AltaLink's witnesses confirmed that WATL has no unique cost drivers such as seismic requirements, pollution requirements, availability requirements, the need to operate in a weak AC system, and

²¹⁰ Transcript, Volume 9, page 2129, line 9-22.

²¹¹ Transcript, Volume 9, page 2130, line 2-6.

²¹² Transcript, Volume 9, page 2130, line 7-11.

²¹³ Transcript, Volume 9, page 2114, line 9-20.

²¹⁴ Exhibit 52.01, IPCAA.AML-059(j), PDF page 618.

²¹⁵ Exhibit 300.02, Ratepayer Group Argument, paragraph 200-205.

²¹⁶ Exhibit 145.01, AML.RG-013, PDF page 3.

²¹⁷ In addition, packaging the converter stations with the standard AC facilities can reduce competitive forces and lead to a higher overall cost. See Exhibit 300.02, Ratepayer Group argument, paragraph 199b, Transcript Volume 7, page 1554, line 8 to page 1555, line 1.

the maximum size of reactive support.²¹⁸ Dr. Rashwan was therefore correct to apply the core converter station costs and then to add in the unique costs identifiable for the WATL project.

456. In its rebuttal evidence, AltaLink stated that in compliance with ISO Rule 9.1.5, AltaLink, through SNC-ATP, solicited and received comprehensive and competitive bids from the three major HVDC suppliers. AltaLink maintained that the range of the prices resulting from this competitive bid process established the market price at the point in time that the bids were submitted. Estimates by TGS or any other party, including any differences in the estimates were irrelevant to the establishment of the market price for the WATL converter stations in Alberta at this relevant point in time.

457. AltaLink stated the TGS estimate was significantly flawed. Specifically, TGS based its estimate in Table 5 of the Report on Technical Brochure 388 of the International Council on Large Electric Systems titled *Impacts of HVDC Lines on Economics of HVDC Projects* (the CIGRE Brochure). The CIGRE Brochure was published in August 2009 and relies on commodity costs from 2007 which cannot be considered as reflecting the market price at time the market price was set in the contract signed with Siemens in 2012.

458. AltaLink also noted that TGS provided no details of the projects it was involved in, including recently awarded projects and, more specifically, LCC projects, or the circumstances relevant to determining if the projects are comparable, to support its statements at page 17 of the report. In contrast, at pages 33-34 of its GTA 2013-2014 rebuttal evidence,²¹⁹ ATCO Electric listed other HVDC projects, including EATL, and provided a much different comparison as set forth below:

This evidence shows that publicly available information indicates very different costs for HVDC projects, which AltaLink has included as Appendix E-3:

1. Bipole III - \$914.25 to \$1,138.50 per kW based on 200 MW capacity.
2. Labrador-Island Transmission Link - \$517.78 per kW based on a 900 MW capacity.
3. HVDC Pole 3 in New Zealand - 784.29 per kW based on a 700 MW capacity.

459. In summary, AltaLink stated it sought three openly competitive bids to construct the specific WATL converter stations in Alberta to meet the AESO-defined functional requirements and selected the lowest bid that met those requirements. The comparisons with projects in other jurisdictions presented by TGS were irrelevant as there was a specific price established by the competitive market. Further, the data for HVDC converter stations, properly considered, shows significant cost variations demonstrating that actual competitively procured market results for the specific WATL converter stations provide actual market results. Finally, the closest HVDC project comparison, ATCO Electric's EATL project, reveals costs that were similar to those of WATL. Accordingly, AltaLink submitted the range and estimates provided by TGS were flawed and irrelevant when compared to actual market competitively procured prices.

²¹⁸ Transcript, Volume 7, page 1560, line 16 to page, 1561 line 3.

²¹⁹ ATCO Electric 2013-2014 Transmission General Tariff Application, Application No. 1608610, Proceeding ID No. 1989, ATCO Electric rebuttal evidence, Exhibit 0116.01.AE-1989, at pages 33-34.

Commission findings

460. The WATL project, which legislatively prescribes the use of DC transmission lines, must be incorporated into Alberta's existing transmission grid which consists of AC transmission lines. This integration is achieved through converter stations. AltaLink has no experience with this type of project. Indeed, no utility in Alberta has this experience. Consequently, when assessing the reasonableness of the costs of this project, the Commission will take into consideration costs of similar projects in jurisdictions outside of Alberta.

461. The qualifications of Dr. Rashwan, the TGS witness, were presented during the oral hearing and Dr. Rashwan was accepted as an expert witness in HVDC power systems by the Commission.²²⁰ As Dr. Rashwan did not sign the confidentiality undertaking however, he was unable to provide his expert opinion respecting the confidential evidence provided on the record of this proceeding as it related to the procurement process conducted by AltaLink to secure a provider of converter stations and the actual contract and prices agreed to with the supplier.

462. The evidence of TGS contains a price range within which TGS considers the price of the converter stations for the WATL project should fall. It is clear from the evidence that this range is an estimate, as indicated at Section 7.5, page 21 of the evidence. TGS has also stated the following in their evidence:²²¹

TGS has been involved in several recently awarded projects with ratings ranging between 400 MW and 6000 MW. Some of the projects are based on the Voltage Source Converter (VSC) technology where the price per kW is on the high end of the scale of the HVDC business and ranges between \$210 and \$270. However, for LCC projects, which are the majority, the price per kW is between \$145 and \$180. Obviously, as WATL is an LCC we are here only concerned with the LCC business.

463. In its rebuttal evidence, AltaLink supplied information from the ATCO Electric hearing²²² respecting three other HVDC projects, those being the Bipole III project in Manitoba, the Labrador Island link and the Pole 3 project in New Zealand. This evidence shows that the \$/per kW price of these projects is considerably higher than the WATL project. The RPG disputed the validity of AltaLink's comparison noting that TGS was involved in all three projects and all had unique construction requirements, such as the seismic requirements in New Zealand, which increased the costs of the projects. The Commission agrees and finds that the projects referenced in the ATCO Electric evidence are not reasonable comparators due to their construction requirements. The Commission does find it reasonable to conclude, however, that many HVDC projects are unique in nature and, as such, it may not be possible to develop a precise range within which costs should fall.

464. The Commission notes that the procurement process undertaken by AltaLink complied with ISO rules. The actual Siemens contract has been filed in the confidential module of the hearing. The Commission has reviewed the contract and finds it to be reasonable and to be representative of market value at this time. The Commission also notes that the contract price in question is part of a direct assign project. As such, the Commission expects that the actual cost will be reviewed as part of a future DACDA hearing and that more details regarding the actual

²²⁰ Transcript, Volume 9 at page 2092.

²²¹ Exhibit 113.01, TGS evidence, page 17.

²²² ATCO Electric 2013-2014 Transmission General Tariff Application, Application No. 1608610, Proceeding ID No. 1989, ATCO Electric rebuttal evidence, Exhibit 0116.01.AE-1989, at pages 33-34.

cost will be available in the public realm at that time. The Commission finds AltaLink's forecast cost for the WATL HVDC converter stations to be reasonable for the purposes of its capital expenditure forecast.

6.1.5.3 Transmission line/tower design and selection matters

465. Matters related to the design and selection of transmission lines and towers were raised in three parts of the intervenor evidence of the RPG.

466. Mr. Cline prepared evidence on behalf of the RPG²²³ titled "Evaluation and Recommendations on Transmission Line Design Practices" (RPG Grid Power 2) which posited, among other things, that the AESO's adoption of ISO Rule 502.2 has significant implications for conductor and tower design and selection decisions. In consideration of this evidence, Mr. Cline submitted that the Commission should:

- direct AltaLink to release publicly engineering and meteorological studies used by AltaLink to support line and tower decisions in light of ISO Rule 502.2
- direct AltaLink to conduct comprehensive line optimization studies in respect of each direct assign project that that AltaLink expects to begin construction on for the 2013-2014 test period
- direct AltaLink to develop additional standard structure designs
- direct AltaLink to engage proactively the AESO in an iterative planning process aimed at avoiding the building of sub-optimal (i.e. not least cost) transmission facilities
- retain a transmission line design expert to prepare an independent report on matters such as line optimization, structure type selection and transmission line structure design

467. The RPG filed related evidence in Section 4, Part 4 of the RPG general evidence under the heading "Tower Selection."²²⁴ In that section, the RPG noted that AltaLink has recently used a tower design that is significantly wider, taller, and heavier than the L-tower design generally used prior to the coming into effect of ISO Rule 502.2. The RPG expressed concern that the cost increases arising from the adoption of the new tower design (the R-series tower family) had not been justified by the benefits of the new design. In particular, the RPG expressed concern that:

- The R-series tower design was developed by a five-member AESO technical committee that included AltaLink and ATCO Electric, but which did not include any ratepayer representatives.
- No cost-benefit analysis justifying the selection of the R-series tower design has ever been published by the AESO.

468. In addition to concerns over the adoption of the higher standard R-series towers, the RPG expressed concern that tower designs selected for certain specific AltaLink direct assign projects exceeded design requirements applicable to projects located in one of four Alberta weather zones associated with different levels of wind and ice loading conditions.²²⁵

469. The RPG general evidence also expressed concern that AltaLink had advanced the use of R-series towers for certain projects for which the functional specification required compliance

²²³ Exhibit 117.01.

²²⁴ Exhibit 122.05, Section 4, Part 4, pages 4-33 to 4-40.

²²⁵ Exhibit 122.05, Section 4, Part 4, page 4-37.

with technical standards pre-dating ISO Rule 502.2. If AltaLink advanced the use of R-series towers prior to being required to do so, the RPG submitted that AltaLink, rather than ratepayers, should be required to bear the cost of such decisions unless it can demonstrate through cost-benefit studies that its tower selection decisions represented the most economic choice.²²⁶

470. In consideration of the concerns outlined in Section 4, Part 4 of the RPG general evidence, the RPG general evidence reiterated several of the recommendations in the RPG Grid Power 2 evidence and also recommended that the Commission direct AltaLink to:

- conduct and publicly release a study of the historical failure rate of L-series transmission structures
- conduct a full line optimization study as required by Section 12 of ISO Rule 502.2 considering a broad range of tower types as part of the project business case submission of its next GTA
- provide the cost-benefit study used to select the R-series towers for the Hanna area and Cassils-Bowmanton-Whitla transmission projects as part of its GTA compliance filing

471. In Section 4, Part 1 of the RPG general evidence, the RPG suggested that RC22 double circuit 240-kV lattice structures may not be suitable for certain locations due the potential for excessive foundation costs. The RPG submitted that, depending on geotechnical information regarding ground conditions, the high values of footing loads associated with R-series towers may require more robust and expensive foundation designs than required for other types of tower structures.²²⁷ Given such concerns, the RPG submitted that the Commission should direct that cost and performance audits be undertaken to investigate whether the use of newer standard tower designs has contributed to excessive foundation costs.²²⁸

472. AltaLink addressed the RPG's evidence regarding transmission line and tower design and selection matters in several parts of its rebuttal evidence as footnoted below:

- the RPG's request to produce studies and business cases related to tower design and selection matters in light of its authority and responsibilities under ISO Rule 502.2²²⁹
- its rebuttal to Mr. Cline's evidence regarding the impact design requirements for the SATR 240-kV on project material and labour costs, including in particular:
 - a critique of Mr. Cline's proposition that single conductors are less expensive than bundled conductors on lines with very high capacities²³⁰
 - a critique of Mr. Cline's methodology for calculating the potential for tower weight reductions possible by choosing large single conductors over bundled conductors²³¹
- inherent differences between the goals of transmission line optimization and least cost design, including the importance of taking into account siting, land, and environmental considerations²³²

²²⁶ Exhibit 122.05, Section 4, Part 4, page 4-38.

²²⁷ Exhibit 122.05, Section 4, Part 1, pages 4-8 to 4-9.

²²⁸ Exhibit 122.05, Section 4, Part 1, pages 4-8 to 4-9.

²²⁹ Exhibit 150.02, paragraphs 196 through 199.

²³⁰ Exhibit 150.02, paragraph 202.

²³¹ Exhibit 150.02, paragraph 203.

²³² Exhibit 150.02, paragraphs 204 through 206.

- its full compliance with conductor and/or line optimization studies required by ISO Rule 502.2²³³
- the prudence of conducting line optimization studies on all projects in light of the cost of such studies²³⁴
- its response to the RPG evidence's suggestions that it should be directed to develop additional structure designs beyond the RC22 series, including the need to take into account:
 - the efforts to develop optimized standard tower designs within the Tower Development Project initiated by the AESO²³⁵
 - evidence that non-standard structures are considered where appropriate (e.g. the Christina Lake project)²³⁶
 - the importance of sparing/standardization considerations²³⁷
- the limited value of the RPG's direction to proactively engage with the AESO in light of ongoing interactions between AltaLink and the AESO²³⁸
- the need/appropriateness of the RPG's request that the AUC retain a transmission line design expert in light of:
 - the AESO's responsibility to produce independent reports on tower design matters²³⁹
 - the fact that the AESO has already retained a recognized transmission design expert for its initiative to develop optimal standard transmission towers²⁴⁰
 - the broad consultations supporting the development of ISO Rule 502.2²⁴¹
- its response to Mr. Cline's suggestion that a switch to H-Frame structures on the SATR project could result in significant savings, including discussions of:
 - the importance of the length of the span between structures as a selection criteria²⁴²
 - Mr. Cline's qualifications to comment on agricultural practices and land use considerations²⁴³
 - landowners preferences for line configurations that minimize the number of structures²⁴⁴
- its ability to provide requested meteorological and engineering studies used by the tower development committee in light of the AESO's ownership and control of such information²⁴⁵
- RPG claims that tower selections for AltaLink projects in the Hanna region and in southeast Alberta do not reflect the proper matching of towers to climatic zones²⁴⁶

²³³ Exhibit 150.02, paragraph 207.

²³⁴ Exhibit 150.02, paragraph 208.

²³⁵ Exhibit 150.02, paragraph 212.

²³⁶ Exhibit 150.02, paragraph 211.

²³⁷ Exhibit 150.02, paragraph 213.

²³⁸ Exhibit 150.02, paragraphs 214 through 217.

²³⁹ Exhibit 150.02, paragraph 219.

²⁴⁰ Exhibit 150.02, paragraph 220.

²⁴¹ Exhibit 150.02, paragraph 221.

²⁴² Exhibit 150.02, paragraphs 223 and 224.

²⁴³ Exhibit 150.02, paragraph 224.

²⁴⁴ Exhibit 150.02, paragraph 224.

²⁴⁵ Exhibit 150.02, paragraphs 226 and 227.

²⁴⁶ Exhibit 150.02, paragraphs 228 through 230.

473. As part of its response to Section 4, Part 1 of the RPG evidence, AltaLink provided several comments on the relationship between tower design and selection and tower foundation costs, including:

- a response to the RPG general evidence proposition that experience with the use of the RC22 tower on an ATCO Electric project led to the selection of H-Frame structures for the Christina Lake project²⁴⁷
- considerations taken into account to determine the foundation type used for specific towers and projects²⁴⁸
- AltaLink's response to the RPG's suggestions that it delegates foundation selection decisions to suppliers²⁴⁹

474. In argument, AltaLink submitted that its transmission line and tower designs were created to comply with AESO requirements established after broad industry consultation. As such, AltaLink submitted that the RPG's suggestions that its lines and towers were over-designed²⁵⁰ were without merit.

475. AltaLink noted that ISO Rule 502.2 was developed after three rounds of consultations conducted by the AESO and was filed with, and adopted by, the Commission after a process held in accordance with AUC [Rule 017](#).²⁵¹ AltaLink further noted that under cross-examination from Commission counsel, the RPG acknowledged their awareness of the consultation process on ISO Rule 502.2,²⁵² but indicated that IPCAA (part of the RPG coalition) failed to participate in the technical committee process or to provide written comments in any of the three rounds conducted by the AESO.²⁵³

476. AltaLink submitted that the RPG's attempt to suggest flexibility in ISO Rule 502.2 to fit its transmission line design arguments was not supported by any reliable and convincing evidence. Further, AltaLink submitted that the RPG was unable to articulate what ruling or direction they expected the Commission to make regarding ISO Rule 502.2, and did not explain why the Commission should not rely on the AESO to make optimal tower design decisions. AltaLink noted that the AESO has both the statutory responsibility and necessary expertise to determine tower design and line optimization, and TFOs must comply with standards and practices established by the AESO.

477. AltaLink submitted that it provided detailed responses to the RPG's transmission line design claims in its rebuttal evidence, and submitted in particular its evidence demonstrated that:

- it determines the best tower family for its projects after assessing all relevant project specific requirements
- the Christina Lake line optimization study is a good example of the detail that goes into such assessments

²⁴⁷ Exhibit 150.02, paragraphs 147 through 149.

²⁴⁸ Exhibit 150.02, paragraphs 152 and 153.

²⁴⁹ Exhibit 150.02, paragraphs 154 through 157.

²⁵⁰ Exhibit 119.01, page 2.

²⁵¹ AUC Rule 017: *Procedures and Process for Development of ISO Rules and Filing of ISO Rules with the Alberta Utilities Commission*, (Rule 017).

²⁵² Transcript, Volume 12, pages 2670-2671, and 2675-2676.

²⁵³ Transcript, Volume 12, page 2670.

- evidence prepared by Mr. Cline regarding tower design was rejected by the Commission in the WATL and EATL proceeding, and was contested on a similar basis in the FATD proceeding
- allowing tower design and line optimization issues to clutter multiple regulatory forums goes against the principle of regulatory efficiency

478. AltaLink submitted that the detailed information requested by the RPG is not relevant to the current proceeding, and noted that irrespective of what the historical information may show, it is required to comply with ISO Rule 502.2. In conclusion, AltaLink submitted that the RPG's assertions in its evidence that its towers and lines are over-designed are without merit. As such, there is no compelling reason for the Commission to endorse the RPG's recommendations on tower design and line optimization studies.

Commission findings

479. The issues raised in respect of tower design and selection matters are complex and numerous, therefore, the Commission has arranged its findings under separate subheadings pertaining to the following distinct matters:

- the impact of ISO Rule 502.2 on the design and selection of AltaLink transmission lines and towers
- the impact of the Tower Development Project on the design and selection of transmission lines and towers for AltaLink direct assign projects
- the reasonableness of line/tower optimization decisions for projects where the functional specification was set out prior to the implementation of Rule 502.2
- conductor selection issues
- suggestions that AltaLink has made sub-optimal transmission line and tower selection decisions on specific projects
- linkages between tower design and selection issues and foundation costs
- the merits of a Commission-sponsored review of transmission line and tower design and selection issues

ISO Rule 502.2

480. Portions of AltaLink's evidence and argument on transmission design and selection matters relied extensively on the following facts:

- that the development of ISO Rule 502.2 followed the AESO's standard consultation processes for its rules
- that a key participant in the RPG coalition (i.e., IPCAA) was given adequate notice of the consultation process for ISO Rule 502.2, but failed to participate
- ISO Rule 502.2 came into effect on January 1, 2012, and AltaLink is obliged to follow it

481. There is no question that the AESO has broad statutory authority to create rules, including rules intended to establish the criteria and standards for the reliability and adequacy of the transmission system. The AESO filed its proposed ISO Rule 502.2 with the Commission on June 27, 2011, following a consultation process. The AESO requested that the ISO rule come into effect January 1, 2012.

482. No objections to the filing were received by the Commission. Accordingly, Section 20.3 of the *Electric Utilities Act* states that the ISO rule takes effect on the later of the day specified in the ISO rule and the 10th day after the day on which notice of the ISO rule is published. In this instance, the ISO rule took effect January 1, 2012 as that was the date requested by the AESO in its rule.

483. Section 20.8 of the *Electric Utilities Act* requires a market participant to comply with the ISO rules that are in effect. A market participant is defined in Section 1(ee) of the *Electric Utilities Act* as any person that supplies, generates, transmits, distributes, trades, exchanges, purchases or sells electricity, electric energy, electricity services or ancillary services. Accordingly, as of January 1, 2012, AltaLink was required by statute to comply with ISO Rule 502.2.

484. While the RPG may regret the fact that it did not participate sooner in the processes leading to the formal adoption of ISO Rule 502.2, it is clear to the Commission that the RPG's evidence fully accepts that ISO Rule 502.2 is in effect, but, in the RPG's view, has not been correctly taken into account in certain AltaLink transmission design and selection decision making.

485. In this regard, in the event that AltaLink is not complying with ISO Rule 502.2 and is required to do so for any particular capital project, it is at risk of having costs determined to be imprudent and subsequently disallowed from its rate base. Similarly, if it is determined that AltaLink applied ISO Rule 502.2 to projects prematurely or improperly, AltaLink will have to demonstrate the prudence of its actions before those project costs will be permitted to be included in its rate base.

Tower Development Project

486. The Commission notes that AltaLink reported cumulative CWIP expenditures of \$6.2 million on the Tower Development Project up to the end of 2012 in its prior GTA,²⁵⁴ but did not provide any subsequent follow up to these expenditures in the current GTA. As the Commission will be required to assess the prudence of expenditures on this initiative at a future date, the Commission requires additional information regarding the amount, if any, of AltaLink expenditures subsequent to December 31, 2012 on the Tower Development Project, as well as a full explanation of the current accounting treatment of all cumulative expenditures on this project. AltaLink is directed to provide this information as part of its GTA refiling.

487. As neither the initiation nor the conclusions of the Tower Development Project have been tested by the Commission, the Commission does not consider that TFO decisions based on Tower Development Project findings are prudent solely because they are consistent with conclusions reached in that process.

Projects commenced prior to ISO Rule 502.2 coming into effect

488. The RPG general evidence discusses the RPG's concern that certain projects, such as the Hanna area projects, advanced the use of R-series towers prior to the implementation of ISO Rule 502.2.

²⁵⁴ Decision 2013-023, Appendix 3, Schedule 3.2.2012(iii).

489. The Commission has provided its views regarding the legislative requirements of TFOs to comply with ISO rules that are in effect and the Commission reminds AltaLink that it bears the onus of demonstrating the prudence of its actions when the final project costs are assessed, prior to these costs being added to its rate base. With respect to AltaLink projects in which the use of R-series towers appears to have been advanced prior to the final adoption of ISO Rule 502.2 and conclusion of the AESO sponsored Tower Development Project consultations, the Commission will, when determining the final project costs to be included in rate base for these projects, assess whether it was prudent for AltaLink to base the functional requirements for these projects on ISO Rule 502.2. That is, there is no presumption that the use of R-series towers was mandated for those projects for which the functional specifications were set prior to January 1, 2012.

The RC22 tower series

490. Further to the Commission's finding above, the Commission makes no general application findings in this proceeding that AltaLink's decision to utilize R-series towers in direct assign projects was either unreasonable or imprudent. However, the nature of the issues raised in the evidence of the RPG is of concern to the Commission and, as such, the Commission considers it to be beneficial to provide its response to the issues raised at this time.

491. The RPG filed evidence that R-series towers are significantly more expensive on a per kilometre (km) basis than H-Frame structures, and that this cost difference amounts to hundreds of millions of dollars when applied to large projects and/or to AltaLink's capital program as a whole.²⁵⁵

492. AltaLink's explanation as to why the higher cost of R-series towers should be considered prudent in spite of their higher cost generally relies on three principal arguments, namely:

- the fact that the R-series tower was adopted as a standard design after significant consideration by participants in the Tower Development Project
- the potential savings in the cost of maintaining spare transmission components arising from greater tower design standardization, and
- the proposition that because of the greater spacing between towers, the R-series provides substantial benefits to landowners compared to alternatives such as the H-Frame configuration proposed by the RPG

493. The Commission notes that ratepayers were not among the participants in the Tower Development Project or the process that led to the creation of ISO Rule 502.2. As such, the Commission does not consider the Tower Development Project recommendations, in and of themselves, to provide sufficient justification for the higher cost of R-series towers.

494. While the Commission acknowledges the potential benefits of tower design standardization on sparing requirements, the Commission accepts the evidence of the RPG that sparing benefits could still be obtained even if multiple standard tower designs were adopted.

495. Lastly, the Commission has considered AltaLink's concern for landowner impacts as justification for the adoption of larger towers and cannot conclude at this time that the landowner benefits suggested by AltaLink warrant the significantly higher cost of R-series towers over

²⁵⁵ Exhibit 117.01, page 20.

other potential structure designs such as H-Frames. First, the Commission considers the evidence that R-Series towers are less disruptive to landowners than H-Frame structures to be equivocal. While the Commission accepts AltaLink's evidence that landowners have expressed a clear preference for line configurations that result in fewer structures, the Commission also notes that this impact has been addressed by ascribing greater amounts to each of loss of use, tangible adverse effects, and intangible adverse effects for 240-kV and above high capacity towers than it does for two/multiple pole structures as set out in AltaLink's evidence.²⁵⁶ More importantly, however, the Commission is very concerned that AltaLink's capital program based on the extensive use of R-Series towers is hundreds of millions of dollars more expensive than a program based on the H-Frame design. As discussed in sections 4.5.1 and 4.5.2 above, all forms of landowner compensation have increased, and now include an easement payment regime under which AltaLink offers to pay the fair market value per acre for the total area of easements which cross a landowner's property.²⁵⁷ Consequently, based on the high cost differential that has been shown to exist between R-series lattice structures and H-Frame structures, it is not self-evident that the landowner's interest of minimal disruption should outweigh the significant cost differential of competing designs, which costs are borne by all ratepayers in Alberta.

496. These findings reflect the Commission's views set out below with respect to the need for additional expert review of transmission facility design and selection matters.

Foundation costs

497. While foundation cost issues were not specifically raised in the RPG Grid Power 2 evidence, this evidence does illustrate that the R-series towers pursued following review by the Tower Development Project committee process have a significantly higher overturning moment than either H-Frame structures²⁵⁸ or lattice tower designs in common use prior to the ISO Rule 502.2 and Tower Development Project processes.²⁵⁹

498. Given this, the Commission considers that the potential for certain designs to require larger and more costly foundations should be a matter for consideration in the design and selection of transmission towers for future projects. Accordingly, the Commission considers that foundation matters should be within the ambit of the independent expert assessment of transmission facility design and selection matters discussed below.

499. Further to the Commission's findings in Section 6.1.6 below, the Commission will not direct AltaLink to undertake either cost or performance audits for projects currently in progress, as recommended in Section 4, Part 1 of the RPG general evidence.²⁶⁰ However, the Commission considers that all AltaLink decisions with respect to the reasonableness and prudence of foundation costs are subject to review in the context of applicable future DACDA proceedings.

Line optimization requirements

500. No evidence was presented in the current proceeding to suggest that AltaLink failed to comply with the obligation under Section 12 of ISO Rule 502.2 to perform either conductor or

²⁵⁶ Exhibit 50.04, Attachment AUC.AML-019(a).

²⁵⁷ Exhibit 50.04, AUC.AML-021(b).

²⁵⁸ Exhibit 117.01, page 14.

²⁵⁹ Exhibit 122.05, page 4-33.

²⁶⁰ Exhibit 122.05, page 4-3.

bulk transmission line optimization studies for any projects for which the AESO set out the functional specification after January 1, 2012.

501. Although the Commission is concerned that decisions to propose the use of R-series towers may not have been extensively scrutinized on projects for which the functional specification was set out by the AESO prior to January 1, 2012, the Commission makes no finding at this time as to the adequacy of AltaLink line optimization efforts on any pre-2012 projects, as this is a matter for consideration in the context of future AltaLink DACDAs.

502. On a go-forward basis, the Commission considers that the requirements for conducting a bulk line optimization study as required by Section 12(1)(d) ISO Rule 502.2 may not be sufficient to support the Commission's assessment of the prudence of these project costs. Of particular concern to the Commission is that the requirement for a full bulk transmission line optimization study, including assessment of the cost of structures, may be by-passed by dividing projects into subprojects of less than the 50 km threshold. This matter is further discussed below in the Commission's comments regarding the RPG's request for an independent expert review of transmission facility design and selection matters.

Conductor selection

503. The RPG has presented persuasive evidence that the revised wet snow loading requirements set out in ISO Rule 502.2 have affected the economics of using twin bundled conductors. The Commission understands that prior to the imposition of ISO Rule 502.2, twin bundled conductors offered the potential to provide incremental throughput capacity to accommodate future load growth at comparatively little incremental cost. The RPG Grid Power 2 evidence indicates that in order to comply with the new ISO Rule 502.2 wet snow loading requirements, transmission lines utilizing twin bundled conductors require significant additional structural capabilities to be incorporated into tower designs that could potentially be avoided with single conductors.

504. While the Commission is not prepared to make a blanket finding with respect to conduction selection matters in this decision, the Commission considers that in the interests of promoting optimal design for future projects, conductor selection matters should be considered for inclusion in the terms of reference of an independent review of transmission design and selection decisions, as further discussed below.

Expert review of transmission facility design and selection matters

505. Much of the RPG's evidence on tower design and selection matters is based on a review of projects that have received permit and licence approval from the Commission. For such projects, the costs associated with the transmission tower and line design and selection decisions are matters for consideration by the Commission in DACDA proceedings.

506. However, based on the Commission's assessment of the issues identified in the RPG Grid Power 2 evidence that have been discussed in the previous subsections, the Commission considers that additional expert review of tower design and selection matters involving rate payer interest is warranted to ensure that optimal decisions are made on future projects.

507. Accordingly, pursuant to Section 68(1)(c) of the *Alberta Utilities Commission Act*, the Commission is considering the engagement of an independent expert to ensure that rate payer

interests are taken into account in decisions about standard designs. The Commission will set out terms of reference at a later date.

508. The RPG has requested that AltaLink provide various studies used within the context of the Tower Development Project. The Commission considers that such studies may be useful for an independent expert's review and will leave decisions on the need to seek out such information to the independent expert.

6.1.5.4 Detailed engineering costs

509. Section V of the RPG FTI (public) evidence²⁶¹ prepared by Mr. Mohr provided a comparison of AltaLink's engineering costs drawn from a selection of AltaLink projects to those of ATCO Electric based on a selection of similar ATCO Electric projects.

510. Table 13 of the RPG FTI (public) evidence, reproduced in part below, provides a side-by-side comparison of AltaLink and ATCO Electric projects representing four different project size categories:

Table 33. ATCO vs. AltaLink engineering cost comparison

Project category	ATCO		AltaLink		Comparison
	No. of projects	Engineering cost as % of total	No. of projects	Engineering cost as % of total	Average difference
Cost < \$5MM	14	6%	5	12%	6%
Cost between \$5MM and \$10MM	4	4%	9	10%	7%
Cost between \$10MM and \$100MM	6	1%	3	11%	10%
Cost > \$100MM	2	1%	1	16%	5%
Totals	26	2%	18	8%	6%

Source: Exhibit 116.01, Table 13.

511. Based on the analysis presented in the above table, Mr. Mohr suggested that AltaLink's contracting strategy and/or its control of detailed engineering expenses did not appear to be efficient or cost effective as, on average, AltaLink spent six per cent more than ATCO Electric for detailed engineering as a percentage of total project costs. Given AltaLink's forecast capital expenditures of \$3.136 billion for 2013 and 2014, Mr. Mohr suggested that the elimination of the six per cent engineering cost differential between AltaLink and ATCO Electric could achieve a saving in the order of \$188 million. Mr. Mohr also recommended that:

- AltaLink's engineering service contracting strategy be reviewed and audited to ensure that AltaLink has secured cost competitive bids for engineering services.
- AltaLink's internal project management control procedures be examined to ensure EPCM providers are not paid excessive/unwarranted charges for mistakes, omissions, low productivity, and rework.
- The Commission engage an independent firm with experience in assessing/evaluating engineering services to conduct a performance audit of AltaLink engineering services contractor business practices and systems.
- AltaLink undertake a benchmarking study to determine key performance indicators for engineering deliverables.

²⁶¹ Exhibit 116.01, page 54 to 59.

512. Mr. Mohr submitted that AltaLink's capital expenditure forecasts should be re-assessed after the implementation of the above-described steps.

513. The RPG also addressed engineering costs in Section 2, Part 2 of the RPG general evidence, with additional focus on the charges for engineering services paid by AltaLink to SNC-ATP. On the basis of an analysis of a connection project considered in both 2005 and 2010, the RPG suggested, that after adjusting for the effects of salary escalation, the number of hours required to complete engineer-related tasks appeared to have more than doubled between 2005 and 2010.²⁶² The RPG submitted that this analysis supported observations of industry participants that the number of man-hours required by SNC-ATP to complete the same task has materially increased over time.

514. On the basis of the concerns discussed in Section 2, Part 2 of the RPG general evidence, the RPG submitted that the Commission should:

- cap the cost of detailed engineering costs to no more than three per cent of estimated total final project costs for direct assign capital projects used for ratemaking purposes, and
- direct a cost and performance audit of detailed engineering charges attributable to AltaLink DA projects²⁶³

515. AltaLink submitted in rebuttal evidence that the approach of singling out one element of costs relative to total project costs represented an inappropriate use of benchmarking data. As well, AltaLink submitted that the RPG's ostensible apples-to-apples comparison of the same project where estimates were obtained five years apart, as a means to demonstrate an increase in the number of engineering hours, is flawed because of significant changes in the scope of the substation portion of the project that required significant additional engineering effort at the later time.²⁶⁴

516. AltaLink submitted that applying a cap on engineering costs could have a detrimental impact on overall project costs and asset quality by limiting opportunities to promote design innovation to improve costs. AltaLink submitted that an inference in the RPG FTI (public) evidence, that reductions in engineering costs leads to dollar-for-dollar reductions in total project costs, ignores the true relationship between engineering costs and construction costs. In this regard, AltaLink noted that the AACE industry standard cost influence curve provided as Appendix E-6 to its rebuttal evidence shows that the ability to affect total project cost severely decreases after procurement and construction have started, and also, that total project cost is significantly influenced by early engineering. As well, AltaLink submitted that the AACE industry standard cost influence curve shows that the best opportunity to improve costs is at the front end of a project, by engineering for constructability.²⁶⁵

517. AltaLink submitted that the RPG provided no evidence establishing that its proposed three per cent cap was even remotely appropriate, and noted that as its capital forecast is presented on an aggregate basis using its uncertainty adjusted probabilistic model, the

²⁶² Exhibit 122.05, page 2-9.

²⁶³ The Commission notes that the RPG's evidence also requested that the Commission make a downward adjustment to AltaLink capital projects included in its 2010-2011 DACDA by the amount of the difference between ATCO Electric and AltaLink percentages of total costs for detailed engineering. This recommendation is dealt with in the Section 14.3.2 of this decision.

²⁶⁴ Exhibit 150.02, paragraphs 316 to 332.

²⁶⁵ Exhibit 150.02, paragraph 280.

application of a cap on a project basis as required by the RPG's proposal is problematic because the uncertainty adjusted forecast does not separately break out engineering costs.²⁶⁶

518. AltaLink submitted that the RPG's proposal to reduce the amount of the approved engineering cost eligible for inclusion in rate base for projects included in the 2010-2011 DACDA application is inappropriate for several reasons, including:

- concern that the RPG analysis makes several broad assumptions as to the equivalency of ATCO Electric and AltaLink data²⁶⁷
- concern that the RPG comparisons fail to take into account several considerations which tend to lead AltaLink projects to require greater engineering effort and cost than ATCO Electric projects, including:
 - differences in the level of engineering as between brownfield and greenfield projects²⁶⁸
 - the additional engineering activity that tends to be required for projects located in populated areas²⁶⁹
 - the impact of contracting methods (especially turnkey contracts) that shift engineering into procurement cost²⁷⁰
 - third party facilities, such as pipelines and residences, which tend to require additional engineering effort to minimize impact and remove conflicts²⁷¹
 - fundamentally different engineering execution business models²⁷²

519. In argument, AltaLink submitted that its evidence demonstrated that its engineering costs are well within the Association of Professional Engineers and Geoscientists of Alberta industry norms, and comparable to those of ATCO Electric. AltaLink submitted that engineering costs are more complex than presented for comparison purposes in the RPG's evidence and that the RPG used flawed data that is not comparable, consistent or reliable to present its recommendations.

520. The RPG briefly summarized its engineering cost evidence and repeated its request for a 3 per cent cap on AltaLink engineering costs in argument. In its reply argument, the RPG noted that in an undertaking response,²⁷³ it had clarified that its request for a three per cent cap is intended to apply for forecast ratemaking purposes. Accordingly, the RPG noted that if AltaLink, acting prudently, can demonstrate that spending in excess of three per cent is required for efficient and cost effective engineering services, it should spend accordingly but should also bear the burden of proof in the DACDA proceeding that its actions were prudent.

521. The RPG submitted that contrary to AltaLink's characterization of the requested cap as unprecedented, there is ample precedent where the Commission has reduced a portion of the TFOs revenue requirement, while still holding the expectation that the TFO will prudently incur costs as necessary to meet its obligations. In this regard, the RPG noted that as direct assign

²⁶⁶ Exhibit 150.02, paragraph 280.

²⁶⁷ Exhibit 150.02, paragraphs 301 through 314.

²⁶⁸ Exhibit 150.02, paragraphs 294 through 296.

²⁶⁹ Exhibit 150.02, paragraph 300.

²⁷⁰ Exhibit 150.02, paragraphs 292 and 293.

²⁷¹ Exhibit 150.02, paragraphs 297.

²⁷² Exhibit 150.02, paragraph 281.

²⁷³ Exhibit 273.08, page 2.

projects are covered by a deferral account, any amounts in excess of the approved revenue requirement can be recovered if they have been prudently incurred.

Commission findings

522. While the RPG's general premise that, all things being equal, AltaLink's engineering costs ought to be similar to those of ATCO Electric appears reasonable, the Commission finds that AltaLink has provided evidence to explain, in part, the differences in engineering costs between ATCO Electric and AltaLink projects.

523. The Commission rejects the RPG's recommendation to impose a three per cent cap on forecast engineering projects for the following reasons. First, the Commission notes that AltaLink has proposed the use of an uncertainty adjusted forecasting approach that has the effect of reducing capital expenditures by a significant percentage from their base plan forecast for GTA forecasting purposes. This uncertainty adjusted forecast does not break down the engineering costs separately from other project costs. Consequently, a further reduction through an engineering cost cap is not reasonable. Second, further to the Commission's findings in Section 9.1, it is in the public interest to maintain sufficient cash flow to AltaLink during this test period to support its credit metrics. The Commission understands the argument of the RPG that AltaLink would be entitled to fully recover any prudent engineering costs it incurred in excess of the three per cent forecast cap because of the deferral account treatment applied to these capital projects. However, the converse is also true. That is, the RPG can challenge the prudence of engineering-related expenditures on specific projects in the context of the DACDA process.

524. The Commission has addressed the prudence of AltaLink's actual engineering costs as applied to projects included in AltaLink's 2010-2011 DACDA in Section 14.3.2 of the decision below.

6.1.5.5 Direct assign project benchmarking

525. In Section 3, Part 1 of the RPG general evidence, the RPG presented its views as to the importance of benchmarking data to ratepayers. The RPG submitted that there is a need for sufficient evidence to reassure customers that costs are not higher than necessary. Unfortunately, it was the preference of TFOs to release cost information at the highest level in order to minimize the probability that imprudent decisions, if any, will be identified.

526. The RPG submitted that it welcomed the AESO's transmission cost benchmarking study filed on March 28, 2013, but submitted that the AESO's benchmarking efforts were at the beginning of a long development process. Further, the AESO's initial benchmarking study was subject to limitations with respect to:

- its exclusive reliance on Alberta transmission project cost information
- reliance on cost data that requires further refinement

527. The RPG general evidence expressed concern over potential over-reliance on benchmarking conducted against the AESO's current benchmarking database. As well, the RPG noted that costs associated with the retention of benchmarking data were included in AltaLink's operating and capital costs and, as such, are paid for by ratepayers. For this reason, AltaLink should not be able to withhold benchmarking information in regulatory applications.

528. On the basis of its Section 3, Part 1 evidence, the RPG recommended that:

- AltaLink be directed to produce all of the benchmarking unit cost data that it has in-house, including reasonably comparable data from other jurisdictions
- AltaLink should be required to defend the reasonableness of its forecast of the cost of WATL project components with:
 - the cost of similar components on the EATL project
 - HVDC lines constructed in other jurisdictions
- After the AESO has made corrections discussed in the RPG evidence, TFOs should be required to calculate the cost components of their projects in comparison to appropriately matched components in the AESO's benchmarking database.²⁷⁴

529. In Section 3, Part 2 of the RPG general evidence, the RPG discussed various ways in which benchmarking analysis could be applied for the purposes of assisting in the assessment of whether costs are reasonable or prudent. The RPG discussed:

- the potential use of benchmarking analysis drawn from transmission contractor cost estimate information²⁷⁵
- benchmarking against the details of cost components set out in PPS estimates²⁷⁶
- benchmarking comparisons using final cost data, including a cost per km comparison of the AltaLink Cassils-Bownmanton-Whitla project with the ATCO Electric projects in the Hanna area²⁷⁷
- analysis of potential key learnings from the ATCO Electric Dover-Whitefish project constructed in 2003/2004, which the RPG identified as a well-executed project²⁷⁸
- assessment of the use of benchmarking data for policy purposes
- analysis of benchmarking data to determine whether productivity gains are being obtained by TFOs²⁷⁹
- assessment of the cost of Alberta transmission lines in relation to the cost of transmission lines in other provinces²⁸⁰

530. In Section 3, Part 3 of the RPG general evidence, the RPG examined increases in the cost of Alberta transmission projects against measures of inflation on input prices and against measures of output cost inflation. On the basis of this analysis, the RPG submitted that the sizeable cost escalation for Alberta transmission projects cannot be explained by the modest inflation in input prices. The RPG further submitted that transmission construction cost escalation is also at odds with transmission construction costs inflation measures for the rest of Canada and, with transmission cost construction measures for the United States.

531. In its rebuttal evidence, AltaLink disagreed with the RPG's view that benchmarking can be used for cost control or cost prudence decisions. AltaLink submitted that benchmarking involves a multi-step process for use in analyzing the root causes of cost differences for the purpose of identifying opportunities in areas subject to management control. However, some

²⁷⁴ Exhibit 122.05 page 3-6.

²⁷⁵ Exhibit 122.05, pages 3-7 to 3-8.

²⁷⁶ Exhibit 122.05, pages 3-8 to 3-10.

²⁷⁷ Exhibit 122.05, pages 3-10 to 3-12.

²⁷⁸ Exhibit 122.05, pages 3-12 to 3-13.

²⁷⁹ Exhibit 122.05, page 3-14.

²⁸⁰ Exhibit 122.05, page 3-14.

causes of cost variation such as local labour costs, local construction market supply/demand factors, local regulatory process obligations, and local land costs are beyond the ability of management to control. In addition, many factors can affect transmission costs, and without a clear understanding of underlying drivers, misleading conclusions can be drawn from cost comparisons across multiple projects. Due to factors beyond a TFO's ability to control, AltaLink submitted that costs per km is not a direct measure of a project developer's efficiency. AltaLink further submitted as the costs of North American projects can vary from \$0.3 million/km to \$12 million/km, costs per km is a poor metric for comparisons between projects.

532. Because of the broad range of factors that can affect costs, AltaLink submitted that any attempt to collect detailed information at the transaction level is unnecessary and impractical. The extensive transaction level data sought by the RPG would require a TFO to report every single cost item to the benchmarking data collector. The amount of data requested would be impractically voluminous and, even if possible to collect, extremely time consuming for both the company providing the information and the information collector.

533. According to AltaLink, the RPG's suggestion that the AESO's benchmarking database accepts costs from all projects, whether well executed or not, suggests that the RPG considers that costs used for benchmarking should only reflect projects it considers to be well executed. This comment also appears to suggest that the RPG equates higher cost projects to poorly executed projects. However, attempting to include only lower cost projects in a benchmarking database defeats the purposes of benchmarking and introduces bias. In addition, due to the diverse set of challenges that may be faced by specific projects, the level of the actual costs of a project can be unrelated to whether a project is well-executed.

534. AltaLink stated that the AESO has acknowledged the limitations of its benchmarking database and has recognized the need to consider the drivers of significant variability between different projects. Given these limitations, the AESO's benchmarking data cannot be used for setting rates. AltaLink indicated that while it supported the AESO's benchmarking efforts, it also noted that a CAMPUT-sponsored study from 2010 concluded that "...due to the nature of the Canadian regulatory environment, the size, number and distribution of utilities, and the variations in their operating environment, it will be difficult to establish cross-jurisdictional guidelines for performance that can be defended easily in the regulatory arena."²⁸¹

535. In other sections of its rebuttal evidence, AltaLink:

- critiqued the RPG's input price analysis on the basis its failure to take into account the impact of unprecedented price volatility in commodity markets since 2008²⁸²
- suggested that the RPG's analysis of inflation inputs failed to consider other key factors affecting transmission construction costs such as:
 - the cost of per diems and living out allowances
 - the impact of Alberta's constrained oil and gas driven labour market on the levels of per diems and living out allowances as compared to other provinces
 - the impact of comparatively high material transportation costs in Alberta²⁸³

²⁸¹ CAMPUT Benchmarking For Regulatory Purposes Prepared by: First Quartile Consulting, LLC Elenchus Research Associates, Inc. April 2010, referenced in paragraph 352 of AltaLink's rebuttal (Exhibit 150.02).

²⁸² Exhibit 150.02, paragraphs 353 to 356.

²⁸³ Exhibit 150.02, paragraphs 357 to 359.

- discussed its concerns with validity of the RPG's comparison of its Cassils-Bowmanton-Whitla project with the ATCO Electric Hanna area projects²⁸⁴
- rejected the RPG's suggestion that the ATCO Electric Dover-Whitefish project should be used as a benchmarking comparator because it would not provide any insights into how external conditions influencing the cost of that project at the time of its construction would have changed since 2003-2004²⁸⁵

536. In argument, AltaLink submitted that while it supports the AESO's initiative to develop a benchmarking database in the future, in the interests of regulatory efficiency, this initiative should be advanced through the AESO's ongoing industry wide process. The RPG's request that AltaLink benchmark both its GTA revenue requirement forecast and specific project facility applications against the AESO's benchmarking database misinterprets the role of benchmarking as a management tool. Any potential benchmarking in DACDA proceedings is severely restricted by the requirement that prudence analysis must be undertaken without the benefit of hindsight. Therefore, the Commission should refrain from making directions regarding benchmarking and leave the matter in the AESO's hands until its benchmarking database is fully operational.

537. In its argument, the RPG noted that a number of inter-jurisdictional comparisons provided in an information request confirmed that AltaLink's costs are higher, even after taking into account unique Alberta characteristics.²⁸⁶ Citing decisions by the Commission's predecessor regarding the use of benchmarking information,²⁸⁷ the RPG submitted that it is reasonable that benchmarking studies be used, as least as one tool, in determining reasonableness and prudence of costs. The RPG submitted that while AltaLink provided extensive rebuttal evidence devoted to the theme that benchmarking analysis is not valid, AltaLink's objections would also mean that the prudence of actual costs cannot be ascertained in any meaningful way through a comparison of actuals with PPS estimates.

538. In its reply submission, AltaLink submitted that the fact that actual costs can vary from PPS estimates is neither surprising nor meaningful, since authorized changes in project scope and unforeseeable circumstances can and do give rise to variances. AltaLink submitted that the Commission has recognized this unsurprising fact by approving the DACDA process which provides the opportunity to test the variance explanations provided.

Commission Findings

539. The Commission considers that certain aspects of the benchmarking-related evidence highlight the fact that generally, transmission projects in Alberta tend to cost significantly more than in other jurisdictions. Although the Commission has considered AltaLink's evidence that there is a need to consider factors such as commodity price volatility and Alberta-specific drivers of per diems and cost-of-living out allowances, the RPG's examination of increases in the cost of Alberta transmission projects against measures of input and output inflation casts some doubt on AltaLink's explanation.

²⁸⁴ Exhibit 150.02, paragraphs 364 to 368.

²⁸⁵ Exhibit 150.02, paragraphs 369 to 371.

²⁸⁶ Exhibit 138.02, AUC-RPG-24.

²⁸⁷ EUB Decision [2005-120](#): AltaLink Management Ltd., Reconciliation of Direct Assigned Project, Capital Deferral Accounts for the May 1, 2002 to April 30, 2004 Period, Application No. 1359518, November 22, 2005., pages 13 and 14 and EUB Decision [2003-040](#): ATCO Group, Affiliate Transactions and Code of Conduct Proceeding, Part B: Code of Conduct, Application No. 1237673, May 22, 2003, pages 78 and 79.

540. Much of AltaLink's benchmarking evidence establishes that higher costs in Alberta are the result of Alberta-specific factors that are beyond AltaLink's control. The Commission accepts this evidence in part, and considers that it is strongly supportive of the Commission's view expressed in Section 6.1.3 that the combination of Alberta's strong economy and the compressed period of time in which Alberta's significant transmission build is being attempted is a substantial driver of costs that could be mitigated, at least in part, by slowing down the pace of the build.

541. The Commission also accepts, in part, AltaLink's caution against the use of benchmarking information to assess the prudence of capital expenditures. The Commission agrees with the RPG that the introduction of benchmarking into prudence assessments is helpful in the identification of areas for further investigation. However, benchmarking comparisons do not, by themselves, demonstrate imprudence because benchmarking comparisons fail to control for external, company specific factors and do not address the requirement that prudence is assessed without the benefit of hindsight.

542. The Commission denies the RPG's request that AltaLink be directed to produce all of the benchmarking unit cost data that it has in-house, including reasonably comparable data from other jurisdictions. The Commission shares AltaLink's concern that the benefits associated with producing this information are likely to be offset by the costs of doing so.

543. The Commission similarly declines the RPGs request to direct AltaLink to compare WATL project cost components to comparable components of the EATL project or other HVDC lines. This finding is not intended to limit, in any way, the right of interveners in any future prudence review of WATL project expenditures to present their case in the manner of their choosing.

544. The Commission shares the apparent interest of all parties in the AESO's further advancement of its research into benchmarking comparisons. However, as all parties appear to agree that there is need for further development of the AESO's benchmarking capabilities, the Commission denies the RPG's request to require TFOs to compare the cost components of their projects against appropriately matched components in the AESO's benchmarking database at this time.

6.1.5.6 Project competitive procurement matters

545. The RPG discussed concerns with practices used to competitively procure labour and materials used in direct assign projects in Section 4, Part 3 of the RPG general evidence.²⁸⁸

546. While TFO compliance with ISO Rule 9.1.5 regarding project procurement helps to ensure that capital expenditures are reasonable and prudent, the RPG submitted that simple adherence to the express wording of the rule is not adequate. In this regard, the RPG submitted that a TFO's acceptance of the lowest price out of three or more bids received in an RFP process as required by ISO Rule 9.1.5 should not automatically mean that costs are prudent.

²⁸⁸ Exhibit 122.05, pages 4-27 to 4-32.

547. The RPG identified several concerns with existing competitive procurement processes:

- a perceived lack of accountability in ISO Rule 9.1.5 – including concern that the TFO’s ability to submit change proposals could incent contractors to make low bids to get selected but make a profit through subsequent change proposals²⁸⁹
- exemptions from the duty to select the lowest cost compliant bid – concern that the TFO’s duty to demonstrate to the AESO that an exemption is commercially reasonable is not sufficient²⁹⁰
- the practice of bid normalization by TFOs²⁹¹
- RFP packaging – concern that specification of work to be included in an RFP can be done in a manner favourable to a preferred supplier²⁹²
- non-compliant bids – concern that the ISO Rule 9.1.5.5 requirement that the TFO select the lowest-priced, fully compliant bid could be used to eliminate bidders in favour of a preferred supplier²⁹³
- limited bid distribution – concern that TFOs may be incented to keep the number of bidders to a minimum through lists of pre-qualified vendors to limit administrative work²⁹⁴
- bid response times – concern that inadequate notice and/or inadequate time to respond may affect supplier participation in competitive processes²⁹⁵
- bid clustering – concern that inadequate spacing of different competitive processes may limit participation²⁹⁶
- RFP technical requirements – concern that competitive process participation may be unnecessarily restricted by over-specification of technical requirements²⁹⁷
- RFP ambiguity – concern that excessively vague or ambiguous RFP wording could cause suppliers to increase risk premiums in their bids²⁹⁸
- Risk management issues – concern that risks may not be properly aligned contractually, leading to increased risk premiums²⁹⁹
- TFO reputation issues – concern that a TFO’s reputation for treating suppliers fairly may be such that certain potential suppliers decline to make bids³⁰⁰

548. In addition to the above, the RPG expressed concern that the market for supplying construction services for transmission and substation facilities may not be adequate. The RPG noted that a survey of EPCM and construction services suppliers filed as evidence in ATCO Electric’s 2009-2010 GTA identified 16 suppliers, overall staffing of 2,091 persons, and construction personnel of 1,198.

²⁸⁹ Exhibit 122.05, page 4-28, lines 5 to 15.

²⁹⁰ Exhibit 122.05, page 4-28, lines 16 to 29.

²⁹¹ Exhibit 122.05, page 4-28, line 30 to page 4-29, line 2.

²⁹² Exhibit 122.05, page 4-29, lines 3 to 28.

²⁹³ Exhibit 122.05, page 4-29, lines 29 to 34.

²⁹⁴ Exhibit 122.05, page 4-29, line 35 to page 4-30, line 12.

²⁹⁵ Exhibit 122.05, page 4-30, lines 13 to 20.

²⁹⁶ Exhibit 122.05, page 4-30, lines 21 to 22.

²⁹⁷ Exhibit 122.05, page 4-30, lines 23 to 26.

²⁹⁸ Exhibit 122.05, page 4-30, lines 27 to 31.

²⁹⁹ Exhibit 122.05, page 4-30, line 32 to page 4-31, line 8.

³⁰⁰ Exhibit 122.05, page 4-31, lines 9 to 16.

549. In light of industry consolidation and new entries into the Alberta market that has occurred since that time, the RPG submitted that a new survey should be conducted to assist the Commission in understanding the risk that transmission project costs will be affected by the absence of competitors.

550. The RPG, submitted in its argument, that basic TFO compliance with ISO Rule 9.1.5 should be considered a starting point but insufficient to ensure that costs are reasonable. The RPG summarized its detailed concerns in argument, and also indicated that additional concerns with “stink bids”³⁰¹ and “rebidding”³⁰² had arisen from AltaLink evidence.

551. In light of its concerns, the RPG recommended that the Commission should:

- direct AltaLink to demonstrate how its procurement practices are sufficiently rigorous to place appropriate downward pressure on prices, such that the resulting price reflects fair market value
- initiate a survey of transmission and substation resources and equipment providers to ensure the market is capable of providing the necessary resources at reasonable costs

552. In argument, AltaLink submitted that it complies with ISO Rule 9.1.5 on all project bids for materials and construction services and noted that the AESO regularly monitors and audits compliance with these requirements pursuant to ISO Rule 9.1.5.8. AltaLink takes the issue of its compliance with these requirements seriously, and submitted that any intervenor suggestions to the contrary are inappropriate. In reply, AltaLink emphasized the mandatory nature of ISO Rule 9.1.5 and noted that in accordance with the Commission’s oversight of ISO rules under AUC Rule 017, the Commission has reviewed and approved ISO Rule 9.1.5.

553. AltaLink submitted that the attack on ISO Rule 9.1.5 by the RPG was inappropriate because:

- Any change to ISO Rule 9.1.5 is an industry matter that should be dealt with through an industry-wide process.
- The GTA proceeding tests the reasonableness of AltaLink’s forecast revenue requirement, and any concerns about the prudence of its capital expenditures should be examined in the context of the DACDA process.

554. AltaLink submitted that the fact that its costs have been determined to be in full compliance with the AESO’s mandatory procurement rule should end any debate as to whether amounts so determined are eligible for inclusion in its revenue requirement. Further, AltaLink submitted that any subsequent challenge to the prudence of the incurred costs in a DACDA proceeding should have regard for the fact that costs incurred in compliance with the AESO’s procurement rule, resulting from a competitive bid process, are tested in the market and are thereby demonstrated to have been prudently incurred. Finally, AltaLink submitted that the RPG’s request for a market survey would be unnecessarily duplicative.

Commission findings

555. The Commission notes that the RPG did not tie the various factors that it identified as theoretically affecting competitive procurement outcomes to specific projects included in

³⁰¹ RPG argument, paragraphs 312 to 313.

³⁰² RPG argument, paragraphs 314 to 315.

AltaLink's 2010-2011 DACDA, nor did it use this evidence as a basis to suggest alterations in AltaLink's direct assign capital expenditure and additions forecast for the 2013 or 2014 test years.³⁰³ Accordingly, the Commission shares AltaLink's view that any specific concerns that the RPG members have with the adequacy of competitive procurement processes undertaken pursuant to ISO Rule 9.1.5 should be presented to the AESO.

556. As discussed above in Section 6.1.3, the Commission shares the RPG's general concern that the marketplace for competitively procured construction materials and labour may be limited in light of the large volume of capital work that AltaLink and other Alberta TFOs are attempting to accomplish in a short period of time, with a consequential impact on pricing. However, system planning is the responsibility of the AESO, as set out in Section 17 of the *Electric Utilities Act* and Part 2 of the *Transmission Regulation* and the Commission questions what specific value a survey of the marketplace would have relative to the cost of such a study, or how the results of such a survey, could assist in addressing the pricing currently experienced in the Alberta market. Accordingly, the RPG's request for a survey is denied.

6.1.6 Cost and performance audits

557. Section VI of the RPG FTI (public) evidence prepared by Mr. Mohr discussed the need for independent cost and performance audits for AltaLink direct assign projects.³⁰⁴

558. Mr. Mohr outlined the difference between compliance audits, cost audits, and performance audits. Mr. Mohr described a cost audit as follows:

A cost audit for a direct assign project tests whether costs are accurately recorded in a company's project cost reports, business systems and general accounting ledgers. It checks to ensure that costs are properly supported by source documents (e.g. time sheets, expense reports, vendor invoices), that costs were actually incurred (i.e. were actually paid) and that the costs were incurred in accordance with prevailing terms and conditions of existing contract documents or purchase orders.³⁰⁵

559. Mr. Mohr explained the nature of a performance audit as follows:

A performance audit for a direct assign project refers to an examination of a program, function, operation, or the management systems and procedures of an entity to assess whether the entity is achieving economy, efficiency and effectiveness in the employment of available resources. Performance audits test for the reasonableness and necessity of project charges. The examination is objective and systematic generally using structured and professionally adopted methodologies. It uses an independent multi-disciplinary team of subject matter experts. Performance audits can be proactive as they can result in cost avoidance as project management and control practices can be improved through the process. A detailed performance audit can also help detect fraud.³⁰⁶

560. Mr. Mohr set out separate recommendations in Section VI of the RPG FTI (public) evidence regarding cost and performance audits for customer connection projects and for system projects. For customer projects, Mr. Mohr recommended that all customers requesting

³⁰³ The Commission acknowledges the RPG's concerns with WATL project HVDC converter station costs, but deals with this matter separately in Section 6.1.5.2 of this decision.

³⁰⁴ Exhibit 116.01, pages 59 through 73

³⁰⁵ Exhibit 116.01, page 64, PDF page 66.

³⁰⁶ Exhibit 116.01, page 65, PDF page 67.

interconnection facilities be granted the full right to audit all labour, material, equipment, subcontracts, indirect costs, unit prices, installed quantities, schedules, performance measures and other items that make up total project cost.³⁰⁷ For system projects, Mr. Mohr recommended that independent cost and performance audits be performed on all AESO-initiated projects with total costs over \$100 million, and on selected projects with total costs that are less than \$100 million.³⁰⁸

561. AltaLink responded to the RPG's request for cost and performance audits in Section 6.1 of its rebuttal evidence.³⁰⁹ AltaLink noted that in Decision 2009-151, the Commission found that any change in direct assign project cost control would be through development of a Commission rule, not through a GTA process,³¹⁰ and recognized the importance of involving all TFOs and other key stakeholders in the development of a Commission rule.³¹¹

562. AltaLink submitted that current industry processes provide reasonable regulatory oversight of direct assign project reporting, controls, oversight and prudence review. As such, AltaLink submitted that any additional compliance, cost, or performance audit oversight undertaken on behalf of the interveners is redundant, would result in micromanagement of TFOs, and could compromise the statutory obligations of TFOs to ensure the safe, reliable and economic delivery of electricity to Albertans.

563. In argument, AltaLink reiterated its view that the current regulatory scheme provides sufficient oversight and audit scrutiny through various AESO, Commission and industry processes. AltaLink noted that, at the request of the Commission, it had prepared an estimate of the cost associated with the RPG's recommendations with respect to cost and performance audits. On the basis of such review, AltaLink submitted that it is clear that the audits recommended by the RPG would be both unjustifiably costly and burdensome. In this regard, AltaLink submitted that if the RPG's recommendations were to be accepted, it would be required to perform 134 cost or performance audits during 2014, or approximately one every two business days.³¹² It estimated that the total cost of the audits recommended by the RPG could be as much as \$100 million,³¹³ a financial burden that the RPG had admitted would be borne by rate payers even if no savings were found.³¹⁴ AltaLink submitted that was neither appropriate nor wise to burden rate payers with this cost.

564. In its argument, the RPG submitted that because the Commission and stakeholders lack an efficient means to obtain essential project cost and performance information, the present regulatory oversight model is deficient. For this reason, the RPG suggested that the Commission broaden its regulatory oversight by employing cost and performance audits for major projects, especially for those involving major affiliate transactions such as AltaLink's EPCM arrangements with SNC-ATP. The RPG submitted that while AltaLink claims it has nothing to hide, it has consistently opposed granting audit rights that would allow customers to assess

³⁰⁷ Exhibit 116.01, page 72, lines 15 to 18.

³⁰⁸ Exhibit 116.01, pages 72 and 73.

³⁰⁹ Exhibit 150.02, paragraphs 241 to 258.

³¹⁰ Decision 2009-151, paragraph 478.

³¹¹ Decision 2009-151, paragraph 479.

³¹² Exhibit 291.02 and Exhibit 291.01, page 2.

³¹³ Exhibit 291.01, page 6.

³¹⁴ Transcript, Volume 12, page 2666.

whether AltaLink's costs are prudent. The RPG submitted that it had demonstrated several benefits of undertaking cost and performance audits, including:

- addressing a stated Commission desire to monitor costs closer to real time
- the likelihood of savings arising from audits greater than the cost of the audits
- improved ability to address shortcomings of benchmarking data
- the ability to conduct root cause analysis where costs appear to be higher than normal
- the ability to investigate learnings obtained from the review of more successful projects
- avoidance of the expensive regulatory process, particularly in DACDA proceedings where the degree of data disclosure could become contentious
- improved ability to assess the efficacy of practices, processes and procedures related to competitive procurement
- the ability to assess whether risk reward programs are being properly implemented
- improved ability to assess the efficacy of EPCM arrangements
- confidentiality concerns would be addressed

565. The RPG noted that in an undertaking response,³¹⁵ it indicated that:

- A range estimate for performing both cost and performance audits should fall between 0.25 per cent and 0.45 per cent of a TFO project cost.
- Using 0.4 per cent as an upper limit, the RPG estimated that the total cost of audits would be \$24 million for AltaLink projects worth approximately \$5.9 billion.
- Since not all projects will require a full scale audit, this cost estimate should be viewed as an upper limit.
- The scope and scale of interim cost and performance audits can be scaled down once improvements to business processes are noted and incorporated.

566. The RPG also noted that, at the request of the Commission, it had identified the Bowmanton-Whitla, Heartland, and WATL projects as priorities for audits for projects under development and an audit of the SW project in conjunction with the DACDA proceeding. The RPG estimated the cost of these requested audits to be \$9.36 million.³¹⁶

567. The RPG rejected AltaLink's estimate of \$100 million as the cost of an audit program on the grounds that AltaLink misapplied range estimates provided by Mr. Mohr during cross-examination and further over-estimated the sub-contractor costs required to support the audit program.

568. The RPG submitted that AltaLink's effort to portray the audit program as expensive is understandable in light of AltaLink's desire to deter the Commission from conducting the audits. However, when considering the RPG's request for audits, the Commission should take into account that:

- At 0.4 per cent of total project cost, the cost of audits is small in relation to the opportunity they provide to address major customer concerns on cost performance.
- Customers have agreed to support expenditures on audits in the tariff.

³¹⁵ Exhibit 272.07 and 272.08.

³¹⁶ Exhibit 273.04. The RPG adds \$8.46 million to \$0.9 million to obtain \$9.36 million.

- Mr. Mohr provided evidence that the saving from conducting audits are usually well in excess of costs.
- In the case of the SW project, only an independent cost and performance audit can confirm that the overruns incurred by AltaLink were warranted in light of the challenges faced.

Commission findings

569. In general, audits are beneficial in that they provide an independent check of the capital costs that have been recorded in a company's books of account for capital projects. This will help assure that the capital project costs ratepayers are being asked to pay are properly supported.

570. The need for and value of conducting audits is closely tied to project oversight and reporting processes. Although these matters are linked, the consideration of the circumstances under which audits of various types should be undertaken is a distinct matter within the broad area of project reporting and oversight processes. The Commission has addressed matters respecting project reporting and oversight in Section 6.1.7.

571. The Commission does not agree with AltaLink's submission that a generic process involving the participation of all Alberta TFOs, the AESO, customers and other interested parties should be conducted before considering any changes in the current audit regime. Given the magnitude of the capital expenditures described in the application, the Commission is of the view that there may be insufficient time to await the full development of the oversight protocol before taking action on certain transmission projects.

572. This view is consistent with the findings of the Commission in Decision 2013-358 at paragraph 401:

401. The Commission remains interested in the potential for significant improvements to cost reporting and oversight processes to be adopted through the further development of the Transmission Project Reporting and Oversight Protocol discussed above. However, given the magnitude of the capital expenditures described in the application, the Commission is of the view that there may not be sufficient time to wait for the full development of the oversight protocol before taking action on certain transmission projects. As a result, where the Commission has determined that the project costs or other considerations in respect of a specific project identified in a GTA requires further investigation, either through a form of audit or other investigation, the Commission will issue directions to this effect prior to the completion of the Transmission Project Reporting and Oversight Protocol process.

573. The Commission notes that, in the current proceeding, the RPG is requesting that the Commission direct AltaLink to undertake both cost and performance audits, and that each of these types of audits should be applied both to projects that have been completed and to projects that are not yet complete.

574. With respect to uncompleted projects, the Commission has determined that a decision to direct the commencement of audits on one or more projects that are underway, but not completed, is not warranted. It is important that a TFO be given both reasonable discretion and the full responsibility to manage prudently all aspects of project development and execution. There is a danger that running an audit program concurrently could be both disruptive to prudent execution and decision-making and could also cause AltaLink auditor sign off for major

decisions. Even if a mid-stream audit process were to question certain decisions or practices that the TFO has made or undertaken, it is unclear that it would be in the public interest to attempt to undo those decisions. In this regard, the Commission is mindful of the cost influence curve presented as part of AltaLink's rebuttal evidence,³¹⁷ which suggests that the ability to influence costs (or undo them) typically declines substantially and rapidly after the initial design stages of project development have occurred. As AltaLink remains accountable for the consequences of imprudent decisions, whether prudence is assessed after the conclusion of a project or earlier, the Commission finds that there is no significant incremental benefit to directing an earlier stage audit. The Commission is also concerned about the cost of pre-completion audits relative to the benefits obtainable. While the Commission acknowledges the substantial gulf between the RPG's and AltaLink's estimates of the cost of both in-progress and completed project audits, the Commission finds either number to be a significant cost to be borne by Alberta ratepayers.

575. The Commission understands that the primary reason the RPG is urgently seeking audits on projects in progress is to affect some course corrections for major areas identified in other parts of the evidence of the RPG and other interveners. The Commission has addressed these issues in other parts of this decision. The Commission refers to its direction set out in Section 6.1.3 that AltaLink discuss with the AESO whether it is necessary to complete all direct assign projects by the in-service dates currently forecast and its decision in Section 6.1.5.3 to consider undertaking a comprehensive review of tower and line design selection practices and decisions.

576. However, the Commission is currently of the view that undertaking audits of AltaLink's completed projects may be beneficial in certain circumstances. The Commission is not prepared, to make such audits mandatory for all capital projects that have a cost in excess of \$100 million as requested by the RPG. Rather, the Commission considers that it may be necessary to direct an after-the-fact audit in the course of a DACDA review if the Commission has identified significant areas of uncertainty or concern that require additional investigation before the Commission can approve final costs for that project.

577. In this regard, the Commission is concerned that some of AltaLink's decisions and actions in respect of the SW project may not demonstrate prudent actions and has determined that additional investigation is required to assist the Commission in making a final decision. In Section 14, the Commission has directed that an audit, under the direction of the Commission, be carried out with respect to the SW project. Specific details regarding the audit scope, audit plan, selection of the independent auditor, and any materiality limit will be provided in due course. All capital additions for the SW project are approved as placeholders until the audit is complete.

578. This matter is discussed in greater detail in Section 14.2 below.

6.1.7 Project reporting and oversight processes

579. In its rebuttal evidence to Section VI of the RPG FTI (public) evidence regarding the need for cost and performance audits of direct assign projects, AltaLink submitted that, contrary to the claims of the RPG FTI (public) evidence, sufficient oversight and audit scrutiny exist within the Commission and the AESO. In this regard, AltaLink noted that it provides project service proposals to the AESO, including project cost estimates, monthly project progress

³¹⁷ Exhibit 150.08, Appendix E-6, page7.

reports, project change proposals, final cost reporting, and follows competitive procurement requirements in accordance with DA project rules set out in ISO Rule 9.1.

580. AltaLink noted that as part of the DACDA process, it provides a comprehensive reconciliation filing for all direct assign projects which goes through a full regulatory process leading to the Commission's decision on prudence. AltaLink also took note of the following industry checks, already in existence:

- various controls internal to AltaLink
- AltaLink's processes for customer interconnections
- the existing audit functions of both the Commission and the AESO
- the AESO's approval of the reasonableness of costs at the proposal to provide service (PPS) stage
- the requirement for the AESO to approve project change requests
- Commission and intervenor review of the reasonableness of forecast costs as part of the GTA
- the AESO's proposal to work with the Commission to develop a transmission project reporting and oversight protocol to align the above processes with the needs of all interested parties
- the Department of Energy's initiation of an industry stakeholder consultation process to review the *Transmission Regulation*, specifically sections 25 and 46
- the AESO's review of ISO Rule 9.1 initiated at the beginning of 2013 with a focus on estimating, reporting and procurement activities³¹⁸

581. AltaLink noted that in Decision 2011-453, the Commission reaffirmed its intention to develop an AUC rule respecting direct assign project cost and cost reporting, and to conduct broad consultations as part of this process. AltaLink submitted that it will engage in any process that the Commission enables, whether through a generic proceeding or rule development process, should the Commission determine that a rule is still required.

582. In argument, AltaLink submitted that it provided a comprehensive summary of the applicable project reporting and oversight scheme in the cost and performance audits section of its rebuttal evidence. In summary, AltaLink submitted that this evidence indicates that:

- the existing project reporting and oversight scheme is sufficient and robust, such that any changes directed in the context of AltaLink's GTA would be unwarranted, redundant and costly
- the AESO's ongoing, industry-wide cost accountability process is currently exploring additional project reporting requirements with the intent to incorporate them in proposed ISO Rule 9.1.3
- an individual TFO's GTA proceeding is not an appropriate forum to determine the issues that equally affect and require input from all Alberta TFOs

583. AltaLink submitted that there is no need for the Commission to intervene in the AESO's Cost Accountability process, which the Commission has encouraged and actively supported over a number of years. Accordingly, AltaLink submitted that intervenor recommendations regarding additional project reporting and oversight should be rejected.

³¹⁸ Exhibit 150.02, paragraph 249.

584. The RPG submitted that the dramatic expansion in direct assign capital expenditures required an enhanced regulatory process to assist the Commission in assessing whether the significant costs it is being asked to approve are reasonable and prudently incurred.

585. The RPG noted that, in addition to its key recommendation for the extensive use of cost and performance audits, the effectiveness and efficiency of such audits could be enhanced and made more focused through the provision of more complete and insightful cost reporting. In this regard, the RPG recommended that the Commission adopt:

- reporting practice changes outlined in its response to information request AUC-RPG-18³¹⁹
- changes to PPS estimates based on the table set out in Attachment 2 to AUC-RPG-18³²⁰

586. The RPG noted that it provided a lengthy response to AUC-RPG-18, but noted that, at a high level, the RPG's principal recommendations were:

- the implementation of earned value reporting to assist in determining if projects are on time and on budget
- other recommendations set out in AUC-RPG-18, including:
 - the use of S-curves
 - more detailed estimates
 - more timely estimates
 - improvements in project trend/change authorization forms

587. In reply, AltaLink submitted that all of the RPG proposals based on AUC-RPG-18 and, in particular, those items related to earned value and other reporting, should be addressed as part of the AESO's ISO Rule 9.1 working group process. AltaLink submitted that as the present regulatory forum is not designed for such deliberations, the Commission should not grant the relief requested by the RPG.

588. In its reply, the RPG submitted that AltaLink's argument should be rejected because any Commission decisions on reporting requirements in this GTA are binding on AltaLink only. The RPG submitted that as any Commission directions to AltaLink would not be binding on other TFOs, such directions would not prejudice the AESO's ongoing efforts to improve cost reporting. Conversely, Commission directions to AltaLink could benefit the AESO cost accountability process by demonstrating the essential and substantive information required by the Commission to demonstrate prudence. Additionally, AltaLink's EPCM service provider relationship with its affiliate SNC-ATP, justifies a unique and high standard of reporting requirements and oversight for both AltaLink and SNC-ATP.

589. The RPG submitted that there is no reasonable basis to expect that the AESO's cost reporting requirements would satisfy the Commission's requirements. Accordingly, the Commission should not fetter itself to an AESO process which may or may not address concerns unique to the Commission's mandate to assess AltaLink's prudence in managing over \$3 billion of expenditures on direct assign projects in this test period. While AltaLink has argued that GTA and DACDA proceedings allow interveners to review and test various project issues, in reality, AltaLink has refused to answer numerous information requests, cross-examination questions and undertakings.

³¹⁹ Exhibit 138.02, PDF pages 40 to 45.

³²⁰ Exhibit 147.05.

590. In closing, the RPG submitted that the Commission was correct to state in Decision 2009-151 that AltaLink's existing internal project reporting and control processes are inadequate.³²¹ Given AltaLink's significantly larger capital expenditure profile in the present test period, the RPG submitted that the need to address concerns regarding the sufficiency of project reporting and control processes is even more urgent.

Commission findings

591. The Commission has noted the inadequacy of AltaLink's existing internal and external project and control processes in past decisions but has not directed significant changes to these processes.

592. In Decision 2011-122,³²² in respect of the reconciliation of AltaLink deferral accounts for 2009, the Commission stated the following:

59. The Commission also acknowledges AltaLink's observation that past decisions, including Decision 2010-284 and Decision 2009-151, have indicated that certain matters including issues related to the preparation of direct assign project forecasts and the reporting of actuals would be addressed in a future AUC rule. However, the Commission also notes that, as a result of changes in legislation including Section 25.1 of the Transmission Regulation, certain matters that might be considered for inclusion within an AUC rule may also be within the ambit of matters considered by the Transmission Facilities Cost Monitoring Committee that was established on July 31, 2010. The Commission is in the process of evaluating the impact of these developments on the need for and/or scope of the AUC rule contemplated in Decision 2010-284 and Decision 2009-151.

593. The Commission further notes that, in June 2011, the Transmission Facilities Cost Monitoring Committee made a recommendation to the Minister of Energy that the AESO initiate a review process on the current framework for cost accountability for transmission development. A consultative process pursuant to this recommendation was initiated by the AESO in November 2011.³²³

594. On December 8, 2011, the Commission sent a letter to the AESO in the context of its cost accountability framework review advising that the Commission was suspending the development of its own cost reporting rule while the AESO's process is underway.³²⁴

595. On October 30, 2012, the AESO issued a paper setting out a proposal to develop a transmission project reporting and oversight protocol in conjunction with the Commission.

596. The Commission notes that, at a number of points during the oral proceeding, parties made references to ongoing processes external to this proceeding relating to the oversight and

³²¹ Decision 2009-151, paragraph 476.

³²² Decision 2011-122: AltaLink Management Ltd., Reconciliation of 2009 Deferral Accounts, Application No. 1606677, Proceeding ID No. 897, April 1, 2011.

³²³ <http://www.aeso.ca/transmission/24633.html>.

³²⁴ http://www.aeso.ca/downloads/2011-12-08_-_AUC_Comments_on_Transmission_Cost_Accountability_Paper.pdf.

reporting processes for direct assign projects.³²⁵ Active consultations involving representatives of the AESO, TFOs, other stakeholders and the Commission have now commenced.

597. The Commission has reviewed the proposals set out in the RPG's response to AUC-RPG-18 and the proposed reporting template set out in AUC-RPG-18, Attachment 2 and considers that both of these proposals have sufficient merit to warrant further consideration. The further development of earned value reporting and further investigation of interactions between contingency allowances and project cost range estimates provided at various project development stages may be of particular benefit.

598. However, the Commission is also of the view that the harmonization of capital project cost reporting requirements between the AESO and itself should be pursued to the extent possible. This notwithstanding, in Section 14.5 of this decision, the Commission has established additional filing requirements for future AltaLink DACDA applications. These updated filing requirements may change depending on the outcome of ongoing consultative processes.

6.1.8 Minimum filing requirements for DA capital forecasts in AltaLink GTAs

599. AltaLink submitted that it has fully complied with the applicable minimum filing requirements (MFR) as set out in Alberta Energy and Utilities Board Bulletin 2006-25.³²⁶ AltaLink noted that pursuant to Section 10 of the MFR, it is obligated to:

- explain its rate base and capital additions
- explain major factors driving capital expenditures
- describe how capital expenditures are consistent with stated policies
- explain how its policies are reflected in the stated assumptions used to develop the capital expenditure forecast used in the application
- explain the nature of each significant project and the drivers and assumptions used in developing the forecast³²⁷

600. AltaLink submitted that interveners failed to lead any evidence demonstrating that it has not complied with MFR or raise issues of this nature at the oral hearing. Accordingly, AltaLink submitted that the Commission should find that the direct assign capital forecast in its GTA complied with all applicable MFR requirements.

601. In reply, the RPG submitted that AltaLink did not comply with Section 10 of the MFR and that the Commission should direct AltaLink to provide the deficient information at the time of its GTA compliance filing.

Commission findings

602. The Commission finds that AltaLink complied with the MFR as it relates to information supporting direct assign capital expenditure and capital addition forecasts used for revenue requirement purposes in the GTA. In reaching this finding, the Commission did not assign any weight to the submissions made by the RPG in its reply argument as the RPG did not provide substantive comments on this matter in argument, and only provided the substance of its

³²⁵ Transcript Volume 2, pages 362 to 364.

³²⁶ Bulletin 2006-25, Announcing the Approval in Principle of the Form and Content of a Uniform System of Accounts and Minimum Filing Requirements for Alberta Electric Utilities, July 12, 2006.

³²⁷ EUB Bulletin 2006-025, page 1.

submission in its reply argument. The Commission considers this practice to be procedurally unfair and advises the RPG and other participants that it will disregard such submissions in their totality if parties engage in this practice in future proceedings.

6.2 Contracted EPC/EPCM services and related matters

6.2.1 EPC/EPCM competitive procurement process

Introduction

603. In 2002, AltaLink entered into a 10-year agreement (the Master Services Agreement or MSA) with its affiliate SNC-ATP whereby the affiliate became the sole supplier of EPCM services to AltaLink for the direct assign projects allocated to AltaLink by the AESO.³²⁸ The MSA expired on April 30, 2012.

604. AltaLink sought approval of this contract in its inaugural general tariff application for the 2003-2004 test period. In Decision 2003-061, the Energy and Utilities Board (board) delivered its findings with respect to the MSA. These included (1) rejection of AltaLink's request to increase the labour rates provided for in the MSA from a 2.0 times labour multiplier to a 2.5 times multiplier; and (2) a direction to develop a project cost control process and to file on an annual basis an assurance certificate to be signed by the chief operating officer (COO). With the exception of these amendments, the Board was prepared to accept the terms of the MSA.

605. Interveners have expressed concern with the affiliate sole source arrangement since its inception and the outsourcing arrangement for EPCM services has been contested in every AltaLink general tariff application heard by the board and the Commission since the EPCM contract was first signed. In Decision 2007-012,³²⁹ the board considered AltaLink's analysis of the benefits of in-sourcing versus out-sourcing its EPCM work to SNC-ATP. The board made the following findings: (1) while the services provided by SNC-ATP were important, they were not integral to the maintenance of the reliability and safety of the transmission system in real time; (2) that the continued provision of EPCM services by SNC-ATP should be at a lower cost than the cost AltaLink would be expected to incur if AltaLink provided the same services in-house; and (3) that AltaLink's request to change the contract pricing be denied. Further, in Decision 2007-012, the board also addressed the issue of whether AltaLink should be required to re-tender some or all of its EPCM out-sourced work that was going to SNC-ATP. Due to the reorganization of AltaLink's ownership, the terms of the agreement between AltaLink and SNC-ATP permitted AltaLink to terminate the agreement at that time. IPCAA and the CG requested the board to direct AltaLink to terminate its agreement and competitively bid for a new EPCM provider. While the board denied the interveners' request to immediately initiate a competitive process, it did state that any competitive procurement process must commence in a timely manner prior to the end of the MSA. In particular, the board found as follows:

...the Board concludes that the commencement of a competitive procurement process would not generate sufficient benefits to justify the costs and risks that would be likely to

³²⁸ The Commission recognizes that there are several documents (Engineer Procure and Construct Master Services Agreement—original and restated, and the Schedules to the Master Services Agreement) that comprised the contractual relationship between AltaLink and SNC-ATP however, for ease of reference, these documents are simply referenced collectively as the MSA.

³²⁹ Decision 2007-012: AltaLink Management Ltd. / TransAlta Utilities Corporation, 2007/2008 TFO Tariff Application, Application No. 1456797 and AltaLink Management Ltd. Settlement of Self Insurance Reserve Account for the Period May 1, 2004 to December 31, 2005, Application No. 1468229, February 16, 2007.

arise from a decision to proceed with such an initiative. As such, the request of the CG and IPCAA to direct AltaLink to initiate a competitive procurement process to either replace or augment AltaLink's existing EPCM service supply arrangement with SNC-ATP is denied.

Notwithstanding the above noted finding, however, the Board wishes to clarify that the SNC-ATP contract should not be renewed or extended beyond its current term without providing a rigorous competitive process involving other potential EPCM service providers. Additionally, in the event that AltaLink does eventually consider the continuation of an outsourcing arrangement for the procurement of EPCM services beyond the current SNC-ATP [sic] arrangement term, any required competitive process must be initiated sufficiently in advance of the end of the SNC-ATP arrangement to ensure that potential timing or disruption concerns will not influence any decision to permit SNC-ATP to carry on into an extended term.³³⁰

606. In Decision 2009-151, the Commission was again asked to consider the SNC-ATP arrangement. AltaLink had again requested an increase to the pricing of the agreement and, once again, the Commission denied the request. Of significance, the Commission specifically addressed issues concerning the approaching expiration of the EPCM contract term. The Commission noted that only 1.5 years would remain on the contract by the end of the test period. AltaLink argued that it would be premature to consider its options at that time. The interveners provided evidence regarding potential transition options and urged the Commission to direct that AltaLink ensure that processes could be put in place to obtain competitive EPCM services without putting at risk AltaLink's service obligations. The Commission confirmed that its views were similar to that of the board and stated at paragraph 454 of the decision:

454. The Commission's views on transition timing and implementation for the SNC-ATP contract are consistent with the views expressed by its predecessor. Notwithstanding, the Commission's primary concern is that, no matter which option AltaLink pursues, sufficient time must be allowed prior to the expiration of the contract so that the prudence of the costs arising from any subsequent arrangement adopted by AltaLink can be properly considered. This is especially important should AltaLink propose (even on an interim basis) anything other than a move to an open, competitive process for securing EPCM services following expiry of the contract. The Commission reiterates the position expressed by the Board that "any new approach must be initiated sufficiently in advance of the end of the SNC-ATP arrangement to ensure that potential timing or disruption concerns will not influence any decision to permit SNC-ATP to carry on into an extended term."³³¹

607. Finally, in Decision 2011-453 dealing with the 2011-2013 GTA, the Commission again addressed issues respecting the MSA including the transition of projects currently in progress under the MSA, which by that time was expiring. The Commission stated at paragraphs 615 to 617:

615. In its decision of July 29, 2011 respecting the IPCAA motion, the Commission confirmed that AltaLink has the responsibility and consequently, the risk, of running the operations of its business. In this regard, it is responsible to put in place the necessary resources to ensure that it meets its statutory obligations to ensure the safe, reliable and economic delivery of electricity to Albertans. In the event that AltaLink is unable to

³³⁰ Decision 2007-012, page 97.

³³¹ Decision 2009-151, page 79, paragraph 454.

discharge its statutory burden of demonstrating that the CPP process, transition provisions and associated expense is not just and reasonable, AltaLink is at risk of having those costs disallowed.

616. The Commission also indicated in its ruling on the IPCAA motion that it will only be able to assess the sufficiency of AltaLink's CPP and the overall effectiveness of AltaLink's transition plan after the transition has occurred. During the transition period, there may be costs incurred by AltaLink solely attributable to the transition and AltaLink bears the burden of demonstrating that its costs are prudent and that the safety and reliability of the system has not been compromised. Accordingly, to the extent that a future Commission assessment determines that AltaLink failed to plan or execute its transition in a timely fashion, or that timing and disruption concerns arose which prevented AltaLink from effectively tendering projects to anyone other than the incumbent SNC-ATP, such failures could impact the Commission findings regarding the prudence of costs incurred during the transition period.

617. The Commission notes the comments of the CCA that the true competitiveness of the CPP cannot be based only on the final result and that the fairness advisor must confirm that based on criteria and standards used in the industry, that the process for tendering, short listing and selection of an EPCM provider is competitive and that the ranking of bids is fair, just and reasonable to ensure the transparency of the CPP. The Commission considers that AltaLink must demonstrate that the competitive procurement process and timing will be fair, open and transparent to the proponents and that the resulting costs are prudent. Accordingly, the Commission considers that the prudence of the CPP including the deliberations of the fairness advisor, the form of RFQ and RFP, the transition provisions and costs and the costs resulting from the CPP will be assessed in AltaLink's next GTA.³³²

Overview of the competitive procurement process (CPP)

608. AltaLink provided an overview of the CPP at Section 10.6 of the application. Copies of relevant documents used in the process were provided in Appendix 10 of the application. AltaLink maintained that the process undertaken responded to the Commission's directions in Decision 2011-453. AltaLink noted that a third party procurement expert, Accelerator Consulting, was contracted to assist in the design of the process and a fairness advisor (FA), KPMG, was engaged to act as an independent observer and provide advice in this capacity to the AltaLink CPP team. AltaLink stated that this role included an overall review of the structure of the process, inclusive of the evaluation criteria.

609. AltaLink explained that the process was conducted in three phases

- request for qualifications (RFQ)
- request for proposal (RFP)
- negotiations

³³² Decision 2011-453, page 110.

610. The RFQ phase was designed to accomplish the following objectives

- develop the list of qualified proponents to continue to the RFP process
- screen out unqualified proponents for the RFP process
- notify proponents of their status to proceed to the next phase

611. The RFP phase was designed to accomplish the following objectives

- comprehensively evaluate RFP proponents' ability to meet AltaLink's requirements
- assess the credibility of each proponent's proposal through physical verification of stated capabilities
- assess each proponent's project execution methodology through a project estimate simulation (also called the proxy project)

612. The negotiations phase included

- creating and communicating the negotiation protocol (Appendix 10-S – Negotiation Protocol)
- reviewing each term and condition with each party to ensure mutual understanding and alignment
- negotiating with each party as required to finalize terms of the relationship agreements
- negotiating agreements in parallel with both remaining parties
- successfully executing agreements with Burns and McDonnell Canada Ltd. (B&M) and SNC-Lavalin ATP Inc. (SNC-ATP)

613. The CPP process formally commenced with the release of the RFQ. It was directly emailed to a pre-determined vendor list of 42 firms and posted on AltaLink's website. An additional 14 firms requested copies of the RFQ. Seventeen of the 56 firms provided confidentiality undertakings, as required by AltaLink. Of these 17 firms, 12 responded to the RFQ. During the course of the RFQ evaluation, five of these firms were eliminated as they did not meet AltaLink's pass/fail criteria for health, safety and environment (HS&E). Of the remaining seven firms that were evaluated at the RFQ stage, four were eliminated and three were invited to proceed to the RFP stage. All three firms submitted their RFP proposals. Following the evaluation at the RFP stage, the top two firms were tied and both were selected to enter the negotiation phase. Negotiations with both firms were successfully concluded resulting in two EPC service provider contracts being entered into with AltaLink effective May 1, 2012.

Comments of the parties³³³

614. AltaLink submitted that it had delivered what it undertook to do. Namely, it conducted a fair, open and transparent process in the market to secure EPC services, it secured engineering

³³³ When the Commission refers in this decision to AltaLink's incumbent EPCM service provider, it is referring at all times to SNC-ATP. Any reference to SNC-Lavalin that the Commission makes in this decision is a reference to the parent of AltaLink and SNC-ATP. Interveners have been less precise in their submissions, sometimes using SNC to refer to SNC-Lavalin, SNC-ATP and/or both. Except where the context clearly demands, the Commission has not endeavoured to divine which of SNC-Lavalin and SNC-ATP was intended by intervenor references to SNC.

services at rates determined by the market, and it secured additional engineering capacity to ensure it can continue to meet its obligation to provide safe and reliable transmission service.

615. AltaLink maintained that key benefits to ratepayers and AltaLink included:

- additional contracted engineering capacity to execute on the mandated transmission build
- market competitive rates
- competitive tension between suppliers to continue to improve cost and schedule performance
- new project execution based performance clauses in the contracts to allow AltaLink, at its discretion, to move projects from one provider to another if pre-agreed performance criteria such as safety and environmental performance or engineering schedule performance are not being delivered
- stability for all parties through a five-year agreement with an option for a five-year extension
- incorporation of a construction risk and reward model providing AltaLink with the option, on a project by project basis, to transfer a portion of the cost and schedule performance risk during construction to the EPC partner

616. The RPG³³⁴ did not consider that the CPP was a fair, open and transparent process and recommended that the Commission reject the results of the process. The RPG submitted evidence prepared by Mr. Mohr of FTI Consulting (FTI) and recommended, in particular, that the Commission either direct AltaLink to initiate a new CPP which excluded the participation of SNC-ATP or reject future procurement processes that result in exclusive or near exclusive access to AltaLink's direct assign project work.

617. As an alternative, the RPG suggested that a more effective method of ensuring that services are retained at the best price and performance is by implementing a project development and delivery process based on competition for each project. This could be done by:

- prequalifying three to four EPCM service providers based on rates, labour efficiencies, material efficiencies, safety and environmental performance factors
- inviting the three to four EPCM contractors to compete on each project based on delivery schedule and project cost
- monitoring the EPCM service providers' performance and providing quarterly feedback
- eliminating the lowest performing provider and qualifying a replacement every two to three years³³⁵

618. The RPG also suggested that the Commission direct a rigorous independent third-party cost and performance auditing process to ensure that the costs of all projects undertaken by SNC to date, and that may be performed in the future, are fair and reasonable.³³⁶

³³⁴ Evidence was filed on the CPP issue in both the public and confidential portions of this proceeding. The intervenor evidence filed in the public portion of this proceeding was submitted by the RPG. The confidential evidence was submitted by the CCA. Mr. Todd Mohr of FTI filed evidence in both modules.

³³⁵ Exhibit 116.01, FTI evidence, page 40.

³³⁶ Exhibit 116.01, FTI evidence, page 41.

619. The specific concerns identified by the RPG and AltaLink's response to these concerns have been summarized below. The findings of the Commission follow.

(i) **The RFQ process was not sufficiently advertised**

620. According to the FA, it is a standard fairness principle that all potential bidders have the same opportunity made available to them to access information. This principle requires that all potential bidders have the same opportunity to access calls for tenders, that calls for tenders be released to all potential bidders at the same time and that reasonable efforts be made to post communications in all appropriate media.³³⁷

621. AltaLink advertised its RFQ by sending emails directly to each of 42 firms on a pre-vetted RFQ vendor list and by posting the RFQ on its website. Subsequently, 14 additional firms not on the RFQ vendor list requested copies of the RFQ.

622. Under cross-examination by Mr. Forster, Mr. Chalk confirmed³³⁸ that it was his decision to use what he termed a direct contact approach in the RFQ. Mr. Chalk explained that AltaLink developed a research list of potential respondents. This was then followed up by a phone call to the organization to gauge interest in the RFQ and to determine the appropriate person to whom to direct the RFQ. The RFQ was then emailed to that person. Mr. Chalk stated this was a standard procurement practice.

623. FTI claimed that soliciting interest in this type of costly competitive bidding process via email or website posting, as AltaLink had done, was not appropriate. FTI suggested that the process could have been improved by having senior executives of AltaLink meet with senior executives of prospective EPCM firms.

624. In rebuttal evidence, AltaLink maintained that building a bidders list through direct contact was a well-established, commonly-used and acceptable procurement practice and was consistent with its goal to research and create a comprehensive RFQ vendor list of international firms that had experience with project delivery in North America. Each party on the vendor list was contacted to gauge interest and to ensure the RFQ was forwarded to the appropriate parties in the organization. AltaLink stated that the use of direct executive interaction was neither time nor cost effective, could limit the number of proponents and that FTI had not provided any evidence as to its effectiveness.

625. The witness appearing for the FA, Mr. Lipson, testified that before the RFQ was released, he undertook to identify industry associations or other groups to which the RFQ might be sent that had not been contemplated by AltaLink but, in the end, did not identify any and, consequently, accepted the AltaLink approach as meeting fairness requirements.³³⁹ Mr. Lipson also stated that no procurement process could be 100 per cent compliant with all aspects of the fairness requirements, stating "That's reality....It's a standard that's just not there."³⁴⁰

³³⁷ Transcript, Volume 9, page 1979 referencing Exhibit 4, Appendix A, page A-1, page 855.

³³⁸ Transcript, Volume 6, page 1247.

³³⁹ Transcript, Volume 9, page 1980.

³⁴⁰ Transcript, Volume 9, page 1983.

(ii) **Reservation of rights and discretion clauses**

626. In both evidence and argument, the RPG maintained that certain legal clauses in the RFQ were excessive and would have a chilling effect upon the response rate to the RFQ. They referred to Section 3.4 and Article 1.2 of the RFQ in particular. Article 1.2 states:

In this RFQ, whenever AltaLink is entitled to act in its discretion, AltaLink shall act reasonably and not arbitrarily in exercising such discretion, except where AltaLink is entitled to act in its "sole" or "arbitrary" or "unfettered" discretion (or a combination of those), in which case such discretion may be exercised unreasonably or arbitrarily.³⁴¹

627. The RPG maintained that the CPP could not be deemed to be fair when the language contained within it allowed AltaLink to act unfairly.

628. In argument, AltaLink maintained that such language was common in procurement processes. In rebuttal, AltaLink provided language from a BC Hydro tender that was very similar. AltaLink also noted that the language contained in an example provided by Mr. Mohr of FTI, in response to an IR, was also very similar.³⁴²

(iii) **Non-disclosure of AltaLink procedures**

629. The RPG noted that while AltaLink provided a roster of work that it anticipated would be available to successful proponents, it did not provide any information with respect to its processes, procedures or design standards. It claimed that this was a violation of Fairness Standard #1 and would provide an advantage to SNC-ATP as it would have detailed knowledge of these due to its prior exclusive EPCM services contract with AltaLink.³⁴³

630. AltaLink's procurement expert, Mr. Chalk of Accelerator Consulting, testified that with respect to the RFQ, AltaLink was inquiring about the experience the respondent could bring to AltaLink at a generic level. The respondents to the RFQ did not have to have a knowledge of AltaLink procedures.³⁴⁴ With respect to the proxy project that was part of the RFP, Mr. Chalk stated that AltaLink was looking for new vendors and for innovation. As such, when AltaLink created its proxy project, AltaLink informed the vendors that it was not necessary for proponents to use AltaLink standards in the proxy project. Mr. Chalk explained that such insistence would work counter to the innovation AltaLink was looking for.³⁴⁵

(iv) **Scoring mechanism used in RFQ**

631. In evidence, FTI reproduced the scoring table to be followed by the evaluators in grading the submissions. FTI maintained that the table lacked clarity and would not ensure fairness and objectivity. In particular, the description for a score of four, which was "below average," was the same as that for a score of seven, which was "high." This broad range of scores for the same

³⁴¹ RPG argument, page 143.

³⁴² Exhibit 150.02, AltaLink rebuttal evidence, pages 83 to 84.

³⁴³ FTI evidence, page 33.

³⁴⁴ Transcript, Volume 6, pages 1241-1242.

³⁴⁵ Transcript, Volume 6, page 1240.

described level of compliance lent additional room for subjectivity on the part of the evaluators.³⁴⁶

632. In rebuttal, AltaLink pointed out that it was Mr. Chalk, described by AltaLink as an external resource, who was responsible for the creation of the templates, criteria and scoring mechanisms.³⁴⁷

633. AltaLink also stated that it did not restrict the FA's scope of work and that the FA issued a clean report on the CPP.

634. In its rebuttal evidence, the FA clarified that it did review the evaluation criteria, but only "from the perspective of the fairness of the process."³⁴⁸

(v) Conflict of interest mechanism and third party evaluation

635. FTI claimed that the conflict of interest form was too narrow, focused on financial matters and did not require disclosure of non-financial relationships. FTI claimed this undermined the credibility of the CPP process.

636. FTI suggested that the relationship between AltaLink and SNC, as well as the personal relationships that would have developed over time between employees of the two companies, made it very difficult for AltaLink to avoid the appearance of a conflict of interest. FTI suggested that AltaLink could have retained a third party agent to evaluate the qualifications of proponents and select those for contract negotiations.

637. In rebuttal, AltaLink stated that it used its standard conflict of interest form. It also stated that its legal counsel/compliance officer reviewed the forms and that the FA was present at their completion.

638. The FA confirmed that it was present at the signing of the forms and that, in its view, the process required evaluators to disclose any conflict of interest.

639. With respect to FTI's suggestion that the process should have been delegated to a third party for execution, AltaLink maintained that it was "inconceivable"³⁴⁹ that it would out-source such a critical business decision and abdicate its management responsibility to an external party.

(vi) "Named projects" and requirement to submit transition plan

640. In evidence, FTI noted that Section 3.4 of the RFQ required proponents to submit "named projects" that demonstrated their experience in providing the requested services and to submit a transition plan that detailed how the proponent would transition projects from AltaLink to itself and seamlessly deliver direct assign projects.

641. FTI suggested that this was clearly biased in favour of SNC-ATP as it has been the sole supplier of EPCM services to AltaLink for the past 10 years. FTI also claimed that SNC-ATP would not have to supply a transition plan given its status as the incumbent supplier.

³⁴⁶ FTI evidence, page 16.

³⁴⁷ Exhibit 150.02, AltaLink rebuttal evidence, page 88.

³⁴⁸ FAI rebuttal evidence, page 5.

³⁴⁹ Exhibit 150.02, AltaLink rebuttal evidence, page 87, paragraph 430.

642. In rebuttal, AltaLink noted that the RFQ was distributed to companies around the world and maintained that it had to ensure that any prospective partner was capable of delivering large scale transmission projects in the unique environment that existed in North America, Canada and Alberta. AltaLink stated that this was measured on “an increasingly localized scale”³⁵⁰ so as to not place too much weight on Alberta alone. AltaLink pointed out that one of the successful proponents, B&M, was based in the United States and was able to meet the required standard. AltaLink also noted that Familiarity of Region was actually worth only 10 per cent of the 40 per cent allocated to that section, or four per cent of the total potential score, which was equally divided among the three locations.

643. Under cross-examination, Mr. Lipson, representing the FA, noted that SNC-ATP was required to submit a transition plan. The FA stated that there were new features to the relationship agreements, such as the volume of work and the presence of a risk/reward mechanism, that made the new agreement different from the expired MSA. In particular, the FA emphasized that:³⁵¹

A transition plan was one of AltaLink's true
 14 requirements. It needed to ensure there would be a smooth
 15 transition from any organization -- from its incumbent, I
 16 should say, to any organization, including potentially its
 17 incumbent, given the change of nature of what was occurring
 18 in this procurement.

(vii) Role of the fairness advisor (FA) and structure of process

644. The RPG was critical of the role played by the FA in the CPP process. FTI noted that the FA's role did not include an assessment of the appropriateness of AltaLink's technical requirements, financial requirements or the evaluation criteria. Without such a review being conducted, FTI submitted that there was no evidence that the CPP was conducted in a fair and unbiased manner.

645. FTI also observed that the FA “will not be involved in creating any of the procurement documentation such as...the evaluation templates and criteria, or the scoring mechanisms to be used in assessing submissions.”³⁵² According to FTI, the templates, criteria and scoring mechanisms were the processes and tools developed by AltaLink personnel to screen the RFQ respondents and the RFP proponents. In FTI's view, these processes and tools were biased in favour of SNC-ATP and, in the end, likely ensured that SNC-ATP would be chosen to continue to provide EPCM services. FTI argued that AltaLink should have ensured that the scope of work for the FA included sufficient evaluation and assessments regarding these processes and tools to eliminate any pre-disposed bias.³⁵³

646. In argument, the RPG also maintained that the FA did not spend sufficient time on the engagement, noting that the FA staff involved spent little more than 100 hours in total on the engagement. The RPG also stressed that the FA did not have any prior experience in the electric transmission industry.

³⁵⁰ Exhibit 150.02, AltaLink rebuttal evidence, page 81.

³⁵¹ Transcript, Volume 9, page 2069.

³⁵² KPMG proposal letter, page 2, dated April 18, 2011, Appendix 10-B to application.

³⁵³ Exhibit 116.01, FTI evidence, page 15.

647. AltaLink submitted that Mr. Lipson was the only qualified, independent expert witness to submit evidence in this proceeding on the fairness advisory question. AltaLink maintained that there were no fairness violations and that the FA's opinion was unqualified.

648. In reply, AltaLink stated that the FA was fully aware of what was transpiring at each stage of the CPP and came to an unbiased professional opinion that the CPP was fair.

(viii) Health, safety & environment (HS&E) evaluation

649. FTI underlined that the HS&E evaluation was conducted by one individual, an AltaLink employee, and that this individual eliminated 41 per cent, that is, five out of 12, of the companies that submitted responses to the RFQ. FTI submitted that eliminating major EPCM firms from participation in the CPP based on the subjective judgment of a single individual with respect to a prospective firm's ability to comply with AltaLink's health, safety and environmental requirements was questionable and inappropriate. FTI took the position that this step in the CPP process introduced an unwarranted degree of subjectivity and opened the door to new or further bias.

650. FTI also noted that the FA stated in its interim report of July 22, 2011 that, "As the fairness monitor, KPMG's scope did not involve the appropriateness of the project's technical requirements and the financial requirements, the evaluation criteria or the submissions."³⁵⁴

651. FTI submitted that it was clear from KPMG's statement that KPMG, in its capacity as Fairness Advisor, did not evaluate the HS&E technical requirements and evaluation criteria to determine if they were appropriate.

652. FTI suggested that AltaLink could have submitted the materials used for the HS&E evaluations to an independent third-party firm with specific expertise in health, safety and environmental matters for an assessment of each respondent EPCM firm's HS&E capabilities. In FTI's view, this could have improved the objectivity of the HS&E evaluation and reduced the potential for bias.

653. In Argument, AltaLink pointed out that the following statement about its commitment to safety as a core value can readily be found on its website: "Safety is a part of who we are and what we stand for, it will never be prioritized."³⁵⁵ AltaLink stated that its management was accountable for the consequences of safety performance for all work executed by and for AltaLink. According to AltaLink, transmission safety management is unique in the transmission industry as the work brings unique challenges, including tower erection, stringing and working on or near energized facilities.

654. AltaLink submitted that as an electric utility owner and operator it clearly had the safety leadership expertise and accountability to determine which firms met AltaLink's safety requirements.

655. AltaLink stated that any suggestion that it would jeopardize safety in order to bias its CPP decision making towards SNC-ATP lacked any foundation and was offensive.

³⁵⁴ Exhibit 116.01, FTI evidence, page 15, refers to the application, Appendix 10-D4.

³⁵⁵ AltaLink website, visions/values.

656. AltaLink added that the safety requirement in the RFQ was based on self-reported safety statistics (All Injury Frequency Rate (AIFR)) and that the requirement to be met was only half as stringent as the standard to which AltaLink holds itself.

657. AltaLink chose to align its statutory obligations in respect of safety with its stated safety values by applying objective criteria, following the RFQ evaluation protocol, and utilizing its HS&E director who had extensive experience in this area and the accountability to ensure that AltaLink was adhering to its safety obligations and values. In view of this, AltaLink submitted that it was not appropriate to outsource this responsibility.

658. Under cross-examination, the FA explained that it reviewed the HS&E evaluations with Mr. Savoy (AltaLink's HS&E director).³⁵⁶ Mr. Lipson stated that KPMG satisfied itself that Mr. Savoy had applied the evaluation criteria appropriately.

659. In reply, AltaLink suggested that the RPG had ignored the simplest explanation for HS&E disqualification, namely, that AltaLink did what was necessary to ensure safe construction and operation of the transmission system.

(ix) Lack of competitive pricing

660. The issue of pricing was not directly raised in the public arguments of the parties. However, the issue of the final contract pricing received from the two selected bidders was raised in the confidential module.

661. During the course of the public hearing there was an exchange between Mr. Forster, counsel for the RPG, and Mr. Chalk concerning the stage or stages of the CPP during which pricing information could be obtained from proponents.³⁵⁷ The exchange is as follows:

What would have stopped the company from
 11 seeking or -- yes -- seeking information from the
 12 companies -- those 12 companies or, let's say, even the
 13 seven, on rates and then negotiating with them in such a way
 14 as to the bind them to those rates?
 15 A. MR. CHALK: I'm sorry, Mr. Forster. I'm
 16 having trouble following that question.
 17 Q. I'm just wondering why, sir, you could not have entered
 18 into negotiations with respect to rates when you had a
 19 greater number of EPCM service providers still participating
 20 in the process?
 21 A. MR. CHALK: Well, I think the simple answer
 22 is that wasn't the process, Mr. Forster. We started with a
 23 RFQ. We went through the RFP. We laid out how those would
 24 be proceeding through the documents. You would confuse the
 25 market if you would ask for binding things in a RFP process.
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 1 And you would also -- you'd be exposing yourself -- your
 2 company, because you can't really say that it's binding.
 3 Once you start saying it's binding, it becomes a tender.

³⁵⁶ Transcript, Volume 9, pages 2012-2014.

³⁵⁷ Transcript, Volume 7, June 12, 2013, pages 1492-14 (underlining added).

4 Q. Sir, are you here telling this Commission that rates
5 that were agreed to between AltaLink and its affiliate and
6 one other company reflect fair market rates?
7 A. MR. CHALK: I'm not telling the Commission
8 anything. I'm trying to provide evidence. But what we're
9 saying is we had a process. We had rates as part of the RFP.
10 We had a standard rate sheet as part of that RFP. We
11 evaluated those rates as part of the RFP, and we came through
12 to two parties that were then recommended to negotiations,
13 which is a common practice and what you would expect as we
14 wrote in our process after the RFP phase.
15 Q. So you were not -- you were not asked to design a
16 competitive procurement process that would result in fair
17 market value rates at the end of the day?
18 A. MR. CHALK: Of course I was, and of course
19 we're presenting that these are fair market rates.
20 Q. I thought that's what I just asked you, sir, a minute
21 ago, and you said you weren't presenting them as that.
22 A. MR. CHALK: I think what I said is I'm not
23 telling the Commission -- I'm careful not to tell the
24 Commission -- I provide them the information that they need
25 to make their decisions.

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1 Q. I see. But that's what you were instructed to do. You
2 were instructed to design a CPP which would, at the end of
3 the day, result in fair market value rates which would allow
4 this company to come before this Commission; yes?
5 A. MR. CHALK: We were trying to, yes, create
6 a process that was fair, equitable, and transparent that was
7 fair market rates. I wouldn't say would. I would say we
8 did. [emphasis added]

Commission findings

662. As noted above, in Decision 2011-453, the Commission stated:

617. ...The Commission considers that AltaLink must demonstrate that the competitive procurement process and timing will be fair, open and transparent to the proponents and that the resulting costs are prudent. Accordingly, the Commission considers that the prudence of the CPP including the deliberations of the fairness advisor, the form of RFQ and RFP, the transition provisions and costs and the costs resulting from the CPP will be assessed in AltaLink's next GTA.³⁵⁸

663. The Commission also stated in Decision 2011-453 that:

615. ...In the event that AltaLink is unable to discharge its statutory burden of demonstrating that the CPP process, transition provisions and associated expense is not just and reasonable, AltaLink is at risk of having those costs disallowed.³⁵⁹

³⁵⁸ Decision 2011-453 at paragraph 617.

³⁵⁹ Decision 2011-453 at paragraph 615.

664. In addition, in Proceeding ID No. 1021, the Commission issued a ruling which stated, in part, that:

The Commission considers that it has the jurisdiction to take whatever measures are necessary to ensure that the rates to be paid by ratepayers for facilities constructed using out-sourced EPCM services that could potentially be provided by a non-arms length provider are prudent. The EPCM costs that result from AltaLink's proposed competitive bid process will be assessed by the Commission and, to the extent that AltaLink's CPP process is determined to be unsatisfactory by the Commission, AltaLink may not be able to rely solely on its CPP to demonstrate that its rates are prudent.³⁶⁰

665. Accordingly, the Commission is called upon in this proceeding to make the following two determinations with respect to AltaLink's CPP: (1) was the CPP designed and administered in a manner that ensured it was fair, open and transparent to the proponents and (2) did the CPP result in vigorously contested and competitively determined market rates for the EPCM services to be provided by the two winning vendors so as to permit the conclusion that these rates are just and reasonable (i.e., prudent)?

666. SNC-ATP, an AltaLink affiliate and the incumbent EPCM service provider, was not only a participant in the CPP but was also one of the two successful vendors emerging from the CPP process. As a result, the Commission, in addressing the first of the above two questions, and in particular to satisfy itself that the CPP was fair, must also determine whether the CPP was designed and administered so as to preclude the possibility that any informed, reasonable and right-minded person viewing the matter realistically and practically, and having thought the matter through, might reasonably apprehend that SNC-ATP had been accorded preferences or favour by AltaLink relative to any unaffiliated participants at any stage of the CPP.

667. The Commission considers the design of the CPP to include the following elements:

- the role of independent external advisors in designing the CPP
- the role of the fairness advisor
- the constituent phases of the CPP, being the RFQ, RFP and the relationship agreement negotiation phases
- the manner in which the RFQ was advertised and, more generally, the process followed in soliciting participation in the RFQ
- the evaluation categories and how they were sequenced across the three phases of the CPP
- the evaluation criteria and scoring mechanism(s)
- the principles determining which evaluation categories entailed pass/fail outcomes and which were subject to cardinal rankings
- whether and, if so, when, and to what extent, all participants are to receive advance notice of all evaluation categories and the sequencing thereof
- whether and, if so, when, and to what extent, all participants are to receive advance disclosure all evaluation criteria and scoring mechanisms
- the role of independent (non-AltaLink) evaluators/reviewers in the scoring and selection process

³⁶⁰ Commission ruling, July 29, 2011, Proceeding ID No. 1021.

- the EPCM rate determination process including the stage in the CPP at which price bids are to be sought, from which participants (including, if applicable, the incumbent affiliate) and under what circumstances (including the information provided to invited bidders about the identity and number of other invited bidders)

Was the CPP fair, open and transparent to all participants?

668. In the Commission's view, to be considered fair, open and transparent to all participants, a CPP process, especially one in which the affiliate-incumbent will be participating and the intended participation of which is publicly known, must be advertised broadly enough and sufficiently far in advance to ensure that competent, reputable and qualified competitors not only become aware of the opportunity and but have the time to prepare a robust application in response thereto. The decision to participate will depend on many factors including whether the CPP process, as described in the RFQ, is perceived by potential applicants to be fair in the sense that outcomes will be determined on the merits of the applicants rather than by virtue of corporate affiliation. Competitors will have no incentive to participate in a competitive procurement process if an examination of the publicly disclosed terms of that process could lead to a reasonable apprehension that the outcome is preordained.

669. With these preliminary considerations in mind, the Commission will provide its specific findings below with respect to the manner in which the RFQ was advertised and the potential impact of the "reservation of rights" clause in the RFQ on the willingness of otherwise able, qualified and competent non-affiliated rivals to participate in the CPP process.

(i) Advertising of the RFQ

670. AltaLink used a direct contact methodology to develop a contact list for the RFQ. AltaLink identified 42 companies for contact. Many were large and had international operations. An additional 14 companies accessed the RFQ from the AltaLink website.

671. The Commission explored other potential options of disseminating the RFQ with FTI in a confidential information request (IR). FTI identified a number of websites that it claims could have been utilized by AltaLink to advertise the RFQ. The Commission, however, considers that the EPCM services being contracted are highly specialized and that the options identified by FTI did not invalidate the process used by AltaLink.

672. The Commission views the receipt of preliminary indications of interest from 56 potential CPP participants to be significant and notes the testimony of Mr. Lipson as follows:

- 17 Q. Okay. Let's just look a little bit more at this
- 18 paragraph. It says -- when it talks about "release to all
- 19 potential bidders at the same time," there is an "and," "that
- 20 reasonable efforts are made to post communications in all
- 21 appropriate media."
- 22 Reasonable efforts, sir, and you said that
- 23 you've certainly posted announcements of RFQs and tenders or
- 24 requests for bids I suppose in the Globe and Mail and other
- 25 newspapers?
- 1 A. I'm probably dating myself. That was probably more
- 2 common before there was Internet. That was a means by which
- 3 tenders and proposal calls were more commonly posted. You

4 don't see that that much anymore.
 5 Q. Well, it wouldn't have been too onerous to post it in
 6 the Globe and Mail, the leading newspaper in London, England,
 7 leading newspapers in Europe? Asia?
 8 A. My recollection is those papers aren't that cheap for
 9 these kinds of ads, but it's a judgment call as to what's too
 10 onerous and what's not.
 11 Q. Right. But, sir, it says here "reasonable efforts"?
 12 A. Yes.
 13 Q. Apparently it's your judgment call?
 14 A. Yes. Yes, it is my judgment call that what was utilized
 15 was sufficient for the purposes. One other factor we
 16 consider is the fact that this is not an industry that
 17 doesn't talk to each other so that someone who may not be a
 18 qualified firm but wants to joint venture with a qualified
 19 firm, which may not have been aware of this, for example, in
 20 London, England, will reach out, is our experience, and, you
 21 know, bring the opportunity to that firm.
 22 You know, going out to 42 firms in the context
 23 of this type of endeavour is actually a pretty large number,
 24 is my experience, and that's certainly how we satisfied
 25 ourselves -- that was one of the factors we satisfied

1 ourselves with at the time.³⁶¹

673. The Commission accepts the evidence of Mr. Lipson on this issue and finds that the approach taken by AltaLink in advertising its RFQ was fair and reasonable.

(ii) **"Reservation of rights" clauses**

674. The RPG made much of the presence of these clauses in the RFQ, claiming that they would have a chilling effect on the process and discourage participation.³⁶²

675. When questioned about the similarity of other exclusion clauses found in tender documents produced in evidence by the RPG, Mr. Mohr testified as follows:

25 A. MR. MOHR: I think that there's two
 02700
 1 distinct differences. While the reservation of rights that
 2 you see here has some of the same language, it's not the same
 3 language. What you see somewhere in the -- what you see
 4 somewhere in the very front end of the RFQ document is a
 5 statement that AltaLink, I believe, reserved the right to act
 6 not only in a sole and unfettered manner, but also in an
 7 unreasonable and arbitrary manner, and in my experience, I
 8 have never seen that.
 9 Most proponents will enter into a tender
 10 process or a procurement with the understanding and the
 11 presumption that the owner will act reasonably and in good
 12 faith, not unreasonably or arbitrarily, so in my mind that's

³⁶¹ Transcript, Volume 9, pages 1993-1994.

³⁶² RPG argument, page 145.

13 a difference. The other difference is that we're dealing
14 with a firm whose affiliate is participating in the pool,
15 which is different than a traditional incumbent.

16 Q. Let's just look at 1.8, the last part: (as read)
17 "Owner makes no representations,
18 written or oral that it will enter into
19 any form of agreement with any
20 respondent for any service, and no such
21 representation is intended or should be
22 construed."
23 Why wouldn't that have a similar chilling effect on a
24 proponent? There's no guarantee here that this is going to
25 go forward, that it's going to be evaluated, that it might be

02701

1 rejected. And there's no reason at all that has to be given
2 when I look at the language in 1.8 in that example.

3 A. MR. MOHR: That's true. And that type of
4 reservation of right not to move forward is typical, and it's
5 something that I've seen frequently in other tender
6 processes. Again, I don't believe that is the situation that
7 AltaLink was in. They were in a situation where their
8 existing contract was going to expire and they had to
9 complete a process.

10 So although I believe that same language is in
11 the AltaLink RFQ, the reality is that they had to do
12 something, and so it's a little bit different in that regard.

13 Q. Okay.

14 A. MR. MOHR: I mean, I guess they could have
15 scrapped it and started over at that point in time if they
16 didn't like the outcome, but the reality is that if that was
17 the case, then they'd have to go through a second process and
18 complete that by April 30th, of 2012.

19 Q. So I think I understand the subtlety you're referring to
20 now. The objection isn't the fact that they had a clause
21 like this. It's that you didn't consider it possible that
22 they could act on a clause like this given the time
23 constraint unlike in the example you provided where that was
24 a real option or could have been a real option. Is that what
25 you're saying?

02702

1 A. MR. MOHR: Actually it's both. I think
2 that the reality is I don't believe they could have acted out
3 as they got deeper into the process because of the time
4 constraints, and that in conjunction with the other
5 reservation of rights language within the RFQ, that was, in
6 my mind, a much more onerous situation where it would give
7 AltaLink the discretion to act in a unreasonable, unfettered,
8 and arbitrary manner.
9 And again that to me, that's contrary to the
10 presumption and position that proponents would take going

11 into an RFQ. And you combine that with the fact that there's
12 been public support by AltaLink for its affiliate, and they
13 are participating makes it unique in that regard.³⁶³

676. The Commission does not share Mr. Mohr's concerns. If, as Mr. Mohr contends, AltaLink was under a time constraint to complete the CPP, then the Commission does not understand how the presence of such language is a problem. AltaLink would not want to rely on this clause as it would not have time to cancel the CPP and restart the process. The Commission also notes that Mr. Mohr has acknowledged that such language is fairly common. Finally, the Commission notes that 17 parties signed the necessary confidentiality document and 12 responded to the RFQ. The Commission does not consider this to be compelling evidence of a "chilling effect."

677. Based on the record of this proceeding, the Commission considers such language to be common practice in procurement. In particular, the Commission notes that the example provided by FTI itself contained such language.³⁶⁴

678. The Commission does not consider the reservation of rights clause in the RFQ to be unfair to non-affiliated potential participants or to raise a reasonable apprehension that the CPP process favoured the affiliate-incumbent.

(iii) Non-disclosure of AltaLink procedures

679. The Commission finds this argument of the RPG to be unpersuasive and does not consider the non-disclosure of AltaLink procedures to be a flaw in the process. The Commission notes the testimony of Mr. Chalk that AltaLink was seeking innovation and that it was not necessary to use AltaLink design standards in responding to the RFP proxy project requirement. Similarly, in the RFQ portion of the process, AltaLink was seeking information with respect to respondents' experience and skills. Knowledge of AltaLink procedures was not necessary.

680. The Commission does not consider that the lack of such disclosure disadvantaged any proponent.

Remaining elements of design and administration

681. The remaining elements of the design and administration of the CPP raise greater concerns for the Commission with respect to the question of fairness, openness and transparency of the process and whether, as a result, a reasonable apprehension arises that the CPP accorded preferences to AltaLink's affiliate relative to unaffiliated participants in the process. The unifying theme in the findings which follow is that there was insufficient attention paid by AltaLink in being, and being seen to be, sufficiently objective and even-handed in how it evaluated each participant on the merits as a potential future EPCM supplier at each stage of the CPP process to dispel any reasonable apprehension that the CPP was not fair.

³⁶³ Transcript, Volume 11, pages 2700-2702.

³⁶⁴ Exhibit. 138.03, RFQ from Anderson Cancer Center.

(iv) Scoring mechanism

682. The Commission shares, to some extent, the RPG's concerns that the scoring mechanism is vague and allows for overly subjective decisions on the part of evaluators. For example, the Commission observes that, in the scoring template, the scores four through seven are all described as "some shortfall noted." At the same time, the Commission observes from its review of the confidential record that some additional evaluation guidance was provided to the AltaLink evaluators in applying the scoring criteria. The Commission also acknowledges the comments of Mr. Lipson in his testimony³⁶⁵ about ensuring that criteria were being applied consistently and appropriately to all respondents. However, the Commission does not consider the comfort offered by Mr. Lipson in this regard to be a substitute for robust design.

683. In the Commission's view, the subjectiveness inherent in the scoring mechanism was a weakness that should have been identified by the FA, especially to the extent that it could lead to a reasonable apprehension of unfairness in the process that ultimately resulted in the selection of SNC-ATP as one of the two successful vendors in the CPP. The responsibilities and performance of the FA will be discussed more fully below.

(v) Conflict of interest mechanism and third party evaluation

684. Among the broader concerns of the RPG with the CPP is that the personal relationships that have developed over time between AltaLink evaluators and SNC-ATP employees cannot but result in an apprehension of evaluator bias in favour of SNC-ATP. Mr. Mohr's testimony suggests that, with the inclusion of SNC-ATP in the process, it would be impossible to design any type of CPP that would be fair and objective. He stated:

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- 1 ... And at that point in time, we believed -- and I still
- 2 believe -- that the RFQ and RFP process that had been
- 3 designed and outlined would be difficult, if not impossible,
- 4 to ensure its transparency, fairness, and openness such that
- 5 allowing SNC to participate would guarantee sufficient and
- 6 open competition.³⁶⁶

685. The Commission allowed the participation of SNC-ATP in the CPP. It did so because it considered SNC-ATP to be an experienced, quality provider of EPCM services that could bring an element of competition to the process. This was not disputed by Mr. Mohr who stated in testimony:

- 14 Q. You certainly do not dispute that SNC ATP has
- 15 significant experience in providing EPCM services for high
- 16 voltage transmission in the province of Alberta; correct?
- 17 A. MR. MOHR: No, I don't dispute that.³⁶⁷

686. While the Commission does not question the integrity of AltaLink evaluators, it recognizes that it may be difficult for some parties to have confidence in a selection process involving an affiliate that has been providing the requested services on an exclusive basis for a

³⁶⁵ Transcript, Volume 9, pages 2072-2073.

³⁶⁶ Transcript, Volume 11, page 2503.

³⁶⁷ Transcript, Volume 11, page 2523.

long period of time. In the Commission's view, such apprehension of unfair or preferential treatment can be mitigated only by a process that is properly designed and incorporates strict internal controls at every stage. Mr. Lipson agreed, stating:

02034

10 A. Our standard methodology is general -- sorry -- was
 11 generated to cover a wide variety of situations. I think I
 12 discussed earlier the wide range of sectors we've applied it
 13 in, for example, when I worked at York Region from sewers to
 14 social housing to transit.
 15 It's also been designed to cover fairly unique
 16 procurement situations also. That doesn't mean it can cover
 17 100 percent of every possible situation, and in applying our
 18 methodology, we may in theory, if I had to make special
 19 adaptations for especially circumstances.
 20 In this instance, we did not do so because,
 21 again, for the most part, the fact that there was an
 22 affiliate involved basically meant there should be a lot of
 23 attention spent on the fairness and the principles that we
 24 employ, but it didn't mean the principles were erroneous or
 25 needed to be changed or needed to be adjusted in any fashion.³⁶⁸

687. The RPG has suggested that one way to have instilled greater confidence in the process would have been for AltaLink to out-source the screening and selection of service providers to a third party. AltaLink has replied that it would be inconceivable for it to out-source a management decision of such critical importance. The Commission agrees with AltaLink that it would be an abdication of responsibility to totally out-source the decision-making in this process. The Commission is persuaded, however, that more independent review and oversight should have been present at certain critical points in the process.

688. In particular, the Commission notes the cross-examination of Mr. Mohr by Mr. Block in which they discuss the example of an RFP provided by Mr. Mohr in response to an information request.³⁶⁹ In their discussion, it becomes apparent that the utility in question had not totally out-sourced the evaluation function. The Commission, however, considers this to be a workable example of how an external, independent party could be involved.

689. The Commission will comment on the importance of incorporating into the CPP a greater degree of independent third-party evaluation and review in other sections below.

(vi) **“Named projects” and requirement to submit transition plan**

690. The RPG has noted that one of the requirements of the RFQ was to demonstrate experience in construction of high voltage transmission and to present a transition plan showing that the proponent was capable of seamlessly taking over direct assign projects. It maintained that SNC-ATP would have an unfair advantage given its status as the incumbent long-term service provider.

³⁶⁸ Transcript, Volume 9, page 2034.

³⁶⁹ Transcript, Volume 11, pages 2526-2529.

691. AltaLink has stated that the RFQ was circulated to companies throughout the world and that it had to ensure itself that successful proponents were capable of delivering services in its unique operating environment. The FA has noted that a transition plan was one of AltaLink's "true requirements."³⁷⁰

692. The Commission understands that AltaLink would want to assure itself that respondents would have experience in environments similar to that prevailing in Alberta. If this were the objective, however, the Commission questions why the criteria could not have been somewhat more generic. This may have created a slightly more level playing field. The Commission also notes, however, that the marks assigned to this criteria were a small part of the total.

693. The Commission also considers that greater confidence in the fairness of the process could have been instilled by a more rigorous independent review of the criteria established and a more rigorous independent evaluation of submissions, as discussed below.

(vii) Role of the fairness advisor and structure of the process

694. The RPG noted that the FA's role did not include an assessment of the appropriateness of AltaLink's technical requirements, financial requirements or the evaluation criteria, nor did it include a review of the scoring mechanism or templates employed in the process. The RPG also questioned the qualifications of the FA.

695. In the Commission's view, the structure of the process and the lack of a proper review by an independent, qualified third party are the most significant weaknesses in the CPP from the perspective of fairness. The process and how it was implemented not only needed to be fair, but needed to be seen to be fair, so as to preclude any reasonable apprehension of preference or favouritism being accorded to AltaLink's affiliate-incumbent. The Commission went to significant lengths in previous decisions and rulings to forewarn AltaLink about the scrutiny the CPP would receive from the Commission and interveners, precisely because AltaLink's affiliate-incumbent would be participating in the process. Accordingly, AltaLink should have ensured that such qualified, independent oversight and review mechanisms were made a core element of the CPP in order to demonstrate to stakeholders that the RFQ criteria were reasonable and that the process was fair, open and transparent. As previously noted, in Decision 2011-453, the Commission stated in no uncertain terms that "AltaLink must demonstrate that the competitive procurement process and timing will be fair, open and transparent to the proponents and that the resulting costs are prudent."³⁷¹

696. It is clear from the evidence that the CPP was designed by AltaLink. Under cross-examination, Mr. Chalk stated that he developed the process with input primarily from Mr. Fedorchuk and Ms. Picard-Thompson.³⁷² While AltaLink initially described Mr. Chalk as an independent expert,³⁷³ the record clearly shows that Mr. Chalk commenced his engagement with AltaLink in September 2010, continued in the role for which he was hired until at least the conclusion of the hearing in June 2013, and that AltaLink was his sole client. While the Commission is willing to accept that Mr. Chalk has procurement experience, the Commission

³⁷⁰ Transcript, Volume 9, page 2069.

³⁷¹ Decision 2011-453 at paragraph 617.

³⁷² Transcript, Volume 8, page 1783.

³⁷³ Application, Section 10, page 10-45.

considers it more accurate to describe Mr. Chalk as an AltaLink contract employee. Under cross-examination, even Mr. Chalk appeared to agree with this assessment.³⁷⁴

697. No independent review or assessment of (as opposed to in) any element or step in the CPP process took place other than the fairness reviews performed by the FA.

698. The fact that the FA did not review anything other than fairness is clear from Mr. Forster's cross-examination of Mr. Lipson. Mr. Forster was seeking clarification of Mr. Lipson's comments contained in the FA's rebuttal evidence. The exchange was as follows:

12 Q. So we have a heading on this page, "The role of AML's
13 fairness advisor and their assessment of fairness."
14 Heading 2.1, "KPMG's scope of work."
15 You refer to FTI's comments at page 14 of
16 their report that the fairness advisor did not assess or
17 adequately assess the fairness of the evaluation criteria.
18 And then you note that FTI supports this
19 conclusion by referring to your own report that KPMG's role
20 did not involve an assessment of the appropriateness of the
21 CPP's technical requirements and financial requirements, the
22 evaluation criteria or the submissions; yes?

23 A. Yes.

24 Q. And then you answer that you weren't stating that from
25 the perspective of a fairness advisor; you were –

02062

1 A. No.

2 Q. -- making those comments from the perspective of some
3 other perspective?

4 A. No. Sorry. Let me try and be clear because this is an
5 area where there easily could have been some ambiguity.

6 The intention was to state we did not review
7 the appropriateness of those matters, say, the evaluation
8 criteria, for example, from other than the perspective of a
9 fairness advisor.

10 In other words, we have procurement expertise,
11 we have financial expertise, we have accounting expertise
12 available to myself. None of those expertises were brought
13 in when we reviewed the various matters. That's what I was
14 trying to clarify in the rebuttal evidence.

15 I also wanted to make it clear that we
16 obviously did review those matters. We just didn't do it
17 from a perspective other than fairness.³⁷⁵ [emphasis added]

699. The Commission has also reviewed Mr. Lipson's CV provided at Appendix B of Appendix 10-B to the application. While it is clear that Mr. Lipson has considerable experience in procurement, his testimony clearly indicates that this expertise was not brought to bear in this engagement. As noted above, the FA reviewed matters solely from a fairness perspective.

³⁷⁴ Transcript, Volume 6, page 1239.

³⁷⁵ Transcript, Volume 9, pages 2061-2062.

700. The Commission considers the fairness principles enunciated in KPMG's Appendix A to, constitute, at best, general guidelines, albeit well thought-out guidelines, by which any ethical and competent procurement person would follow. The Commission notes, however, that nowhere among KPMG's fairness principles is it expressly stated that the process must not only be fair but must also be seen to be fair, particularly where an affiliate incumbent is participating. The Commission notes further that Mr. Lipson has declared no experience in electric utility procurement and the terms of reference did not even include a review of the CPP's technical or financial requirements. While the FA has stated that it did offer suggestions and advice from time to time,³⁷⁶ the Commission considers the FA would have been hampered by its lack of transmission experience. Finally, as noted by the RPG, the FA spent only a little over 100 hours on the engagement. The Commission finds, therefore, that it can place only limited weight on the evidence of the FA.

701. The Commission notes that KPMG has described itself as a major accounting firm³⁷⁷ and that Mr. Lipson has described himself as working in an audit firm for over three decades.³⁷⁸

702. Under cross-examination, Mr. Lipson stated the following when differentiating the scope of his engagement from that of an audit:

- 11 Q. Okay. I'd like to discuss with you how you viewed your
12 role in this instance as a fairness advisor, and I'm
13 wondering if it is somewhat like the role of an auditor where
14 you review and audit the process undertaken, but you're not
15 actually participating in or creating the process. Is that a
16 similar analogy?
17 A. It has similarities. I generally try and differentiate
18 the fairness monitoring services we provide from what people
19 associated with audit. Because audit is invariably after the
20 fact, and we were there to head off issues before the fact.
21 That was clear.³⁷⁹

703. Contrary to Mr. Lipson's assertion that the FA was taking an active role in identifying and correcting deficiencies in the CPP,³⁸⁰ given the timing of the FA's engagement, the Commission questions whether there was adequate time for the FA, in Mr. Lipson's words, to be "there to head off issues before the fact" especially as concerns the actual design of the CPP process. The timeline of the CPP indicates that Mr. Chalk was retained by AltaLink in September 2010 and started to develop the CPP shortly thereafter. The FA was not engaged until April 29, 2011,³⁸¹ more than 7 months later. The RFQ was issued less than three weeks after that, on May 16, 2011. Moreover, the reports issued by the FA do not support the FA's assertion that it was there to identify and correct deficiencies before they arose.³⁸² It was the evidence of the FA that AltaLink had a specific process outcome in mind which the FA accepted as given.

³⁷⁶ Transcript, Volume 9, pages 2066-2067.

³⁷⁷ Appendix 10-B of the application, KPMG letter to AltaLink.

³⁷⁸ Transcript, Volume 9, page 2073.

³⁷⁹ Transcript, Volume 9, page 2066.

³⁸⁰ Transcript, Volume 9, page 2073-2074.

³⁸¹ Appendix 10-C of the Application, KPMG engagement letter.

³⁸² Appendix 10-D, Volume 2 to the application.

2041

17 And I recall that AltaLink said that they want
 18 a very limited number of suppliers in accordance with the
 19 true requirements because there would be inefficiencies in
 20 having multiple firms splitting up work, having various firms
 21 getting up to speed, taking some of these EPCM firms away
 22 from the marketplace, from being on the other side
 23 potentially with their engineering knowledge, et cetera.
 24 So they were not looking, right from the
 25 beginning, to have a long list of roster people who they

02042

1 would then decide who gets what project. They were looking
2 for a fairly short list to come out of this.
 3 Q. So you were not surprised, sir, that the evaluators that
 4 included a number of AltaLink employees allowed only two
 5 companies to go into the negotiation phase?
 6 A. I was comfortable that the determination at the RFP
 7 stage that two would proceed, based on the results of the RFP
 8 evaluation, was appropriate, yes.³⁸³ [emphasis added]

704. In the Commission's view, if a sufficiently rigorous fairness review had taken place prior to the release of the RFQ, the FA could have alerted AltaLink to the fact that the process could result in significant numbers of respondents being disqualified early in the RFQ stage. Indeed, from the above transcript it appears that the FA was aware of this desired outcome and saw nothing wrong with it. While the Commission is prepared to accept that there may not have been anything unfair about rejecting a significant number of potentially very capable non-affiliated competitors at an early stage in the process, provided that a sufficient number of such non-affiliated competitors still remained at the stage where pricing information was to be solicited, this too appears to have escaped the FA's attention. Any process that materially limits the number of viable, non-affiliated respondents from which AltaLink could ultimately secure competitive pricing is inconsistent with the second major requirement of the CPP, namely, that it result in competitive market pricing. This will be discussed in greater detail later in this section.

705. The evidence in this proceeding also shows that the FA's preferred method of communication with AltaLink was by telephone. Few written records were kept of these conversations. The absence of a detailed paper trail identifying issues that might have been raised by the FA, together with their resolution, does not serve the objective of demonstrating that the fairness of the process and how AltaLink administered it was subject to rigorous external oversight.³⁸⁴

706. The FA should also have suggested an independent review be undertaken of the requirements of the RFQ to assure stakeholders that the criteria being tested and the thresholds to be met by respondents were reasonable. In particular, the FA should have observed that having only a single in-house evaluator grade the HS&E portion of the RFQ on a pass/fail basis, at the very outset of the process, was a serious control weakness. The FA did not need to know that this step would lead to five out of 12 respondents being disqualified. It only had to observe that this was a control weakness that should be corrected. The Commission notes that the FA did not have

³⁸³ Transcript, Volume 9, page 2042.

³⁸⁴ Transcript, Volume 9, pages 2073-2074.

to be a technical expert to make the above observations. The FA only had to note that AltaLink's desired outcome and the lack of independent review could unreasonably limit competition from the outset and lead parties to question the fairness of the process.

707. In addition, although the record shows that the FA had expressed its concern to AltaLink about the number of competitors that were eliminated from the process at the HS&E stage of evaluation, nothing concrete appears to have come of these concerns. At the same time, the FA does not appear to have expressed any concern with the fact that respondents were not advised of the evaluation criteria in advance of the HS&E evaluation and thus had no opportunity to adjust their submissions to account for differences in their operating conditions relative to Alberta. Competitors operating in more dangerous environments than typically encountered in Southern Alberta, for example, might well have poorer HS&E scores in absolute terms but still be operating consistent with the highest HS&E standards. Allowing for independent third party review of the results of the HS&E evaluation may well have identified this potential flaw in how participants were graded and resulted in a revised outcome. In suggesting this possibility, the Commission is cognizant of AltaLink's testimony that it compensated for differences in operating circumstances by holding non-affiliates to half the standard to which it held itself.³⁸⁵

(viii) Health, safety and environment (HS&E) evaluation

708. As noted above, the HS&E evaluation was completed by a single in-house employee. The Commission appreciates AltaLink's statement that safety is a core value to it and that it had the expertise to evaluate this criteria. The Commission does not consider it unreasonable that AltaLink would want to have some role in evaluating this criteria.

709. The importance of safety to AltaLink and its claim to expertise in this area does not alter the fact that having one person evaluate such an important criteria is a serious breach of internal control, whether that person be in-house or external. We now know that five of 12 respondents were disqualified at this stage and the RPG has claimed that respondents could have been unfairly disqualified. The opposite concern, that unqualified respondents were allowed to proceed, could also have been raised if no respondents had failed.

710. In the Commission's view, a second, qualified independent grading of HS&E submissions should have been performed, particularly as this was a pass/fail criteria. Incorporating a second independent grading in the process would have provided parties greater assurance that the evaluation was performed properly and that the process was fair.

711. The second grading of the HS&E section could have taken place at the main evaluation stage. After failing to conduct a second review as part of the initial evaluation, the fact that five of 12 respondents were disqualified at this stage could have triggered a second independent review at that point. By its own admission, the FA was not qualified to undertake such a review.³⁸⁶ Mr. Lipson should have recommended an independent review. A phone call to Mr. Savoy is simply not satisfactory. In making this finding, the Commission does not question the integrity or competence of Mr. Savoy. It is simply acknowledging that there was a serious lack of internal control.

³⁸⁵ Transcript, Volume 8, page 1786.

³⁸⁶ Transcript, Volume 9, page 2013.

712. The Commission notes that the reason given by AltaLink for grading HS&E on a pass/fail basis is that safety is a matter of paramount importance to it. AltaLink would not want to do business with a vendor maintaining less than high HS&E standards. This is understandable. Yet, the ability to effect a seamless transition to the new procurement contract regime was also described, in this case by the FA, as a “true requirement” of the CPP, which the Commission interprets to mean a necessary condition or precondition to awarding a supply contract to any given participant in the process. This begs the question, therefore, why the ability to effect a seamless transition was not also graded on a pass/fail basis. At least that would not have advantaged the incumbent relative to any non-incumbent suppliers able to satisfy this criteria, even if less ably than the incumbent. Instead, this criteria was ranked cardinally, virtually assuring that the incumbent-affiliate would score, or at least be perceived as being able to score, more highly than non-incumbents.

(ix) **Participation, effectiveness and independence of external advisors**

713. AltaLink claims that its reliance on independent external advisors to assist it with the design and administration of the CPP should be sufficient to alleviate stakeholder concerns that the CPP was not fair, open or transparent to applicants. In particular, it points to the role played by Mr. Chalk in developing the CPP, the central role played by KPMG as fairness advisor, the role played by Mr. Eoin Cooke as an external technical reviewer and the role played by PwC as an external reviewer of the financial capabilities of each applicant. The Commission has already addressed what it considers to be the limitations or shortcomings in the roles played by the fairness advisor and by Mr. Chalk. In so far as the assistance provided by Mr. Cooke is concerned, the Commission notes only that not long after his engagement on the CPP was completed, AltaLink hired Mr. Cooke in a senior management role. Although this decision was entirely within AltaLink’s authority to make, and the bona fides of that decision are not being questioned in any way by the Commission, the timing was such that it could be said to raise a reasonable apprehension that Mr. Cooke’s independence at the time of his engagement on the CPP was potentially compromised.

714. Based on the totality of the evidence in this proceeding, the Commission is not persuaded that the scope and degree of external advisor participation in the CPP was sufficient to find that this external party involvement would overcome reasonable apprehensions of preferential treatment of the incumbent affiliate.

(x) **Lack of competitive pricing**

715. It is a matter of public record that hourly labour rates were not obtained from competitors until the RFP phase as part of the proxy project, when only three proponents remained. Binding prices were not obtained until the negotiation phase when only two parties were left.

716. As noted above, AltaLink knew well in advance of developing its CPP process that one of the principal CPP outcomes ratepayers were looking for, and legitimately demanded, was the assurance that the rates being charged by EPCM contractors for work on direct assign projects are reasonable and competitive with the market. The Commission does not consider that any process that results in only two parties submitting binding price offers to AltaLink, with each finalist knowing the identity of the other at the time price negotiations are taking place and with one of them simultaneously being both the incumbent and an affiliate, provides the necessary assurance.

717. The Commission accepts that the CPP process led to two capable finalists. Each had been evaluated and ranked (subject to the Commission's earlier-noted concerns with respect to the scoring mechanism) on the basis of, among other criteria, technical competence, service quality, financial robustness, reputation for integrity, adherence to the highest standards relating to health, safety and the environment and their ability to effect a seamless transition. None of these criteria, however, was sufficient to ensure that the EPCM rates that emerged from the negotiations with each of these vendors were just and reasonable or the product of competitive market forces. The problem resides in the fact that there were only two (as opposed to three or more) bidders and that these remaining participants, rather than being forced to bid against each other, were engaged in independent by-lateral negotiations with AltaLink. Not only that, but one of the two was an affiliate of AltaLink. In these circumstances, it is difficult to envision how AltaLink might have ensured, with a high degree of certainty, that the bids it received from the two remaining participants were competitive with the market. What was missing was the necessary incentive for each finalist to make its best possible price offer (as each might have were the rule established by AltaLink winner-take-all). Even had that not been the rule governing the outcome of the price bidding process, the presence of one or more equally (or comparably) capable and non-affiliated rivals would have gone a considerable distance to ensuring a much more vigorously contested price bidding process. Absent that pressure, there was simply insufficient incentive to engage in vigorously competitive pricing, especially when one of the two remaining proponents was both the incumbent and an affiliate, the other knew this to be the case, and there was no communication from AltaLink to suggest that either finalist risked being eliminated from the competition based on the prices that it bid relative to the other.

718. Mr. Lipson, was questioned as to whether the seven remaining firms in the RFQ were competent. Mr. Lipson testified that all were capable at some level.

- 9 Q. You have no information, sir, and I guess I'll just
10 confirm this, that any one or more of the seven companies
11 that remained after Mr. Savoy got through with his red pen,
12 that any one of those companies were not qualified to carry
13 out the EPCM firm that was mandated by the -- or at least set
14 out in the RFQ?
15 A. I don't recall how the various scores ended up as to
16 whether somebody was so far up the track that they shouldn't
17 have even bothered responding.
18 Certainly in my career I've seen many
19 instances where firms just come after something and you
20 scratch your head and you say: Why did they even bother?
21 In this instance, I don't recall that there
22 was one that was, you know, totally incompetent. But
23 honestly I don't recall. As far as I know, all seven were
24 capable at some level.³⁸⁷

719. When asked why all seven could not have proceeded to the RFP round, Mr. Lipson explained that it was customary to have only a few companies proceed to an RFP round because of the effort and cost involved. One ran the risk of having respondents, potentially qualified ones, dropping out if the pool was too large.³⁸⁸

³⁸⁷ Transcript, Volume 9, page 2041.

³⁸⁸ Transcript, Volume 9, page 2016.

720. Given this testimony, the Commission considers that it would have been relatively simple to obtain hourly rates from all seven remaining firms, even if they were not all invited to the RFP round. AltaLink would then have obtained rates from seven presumably qualified firms and could have used this information to support the negotiated rates ultimately agreed to. Another alternative would have been to include more firms in the RFP phase, say five instead of three.

721. Instead, only two firms were invited to the negotiation round and both parties knew who was left standing. From the confidential record, the Commission knows that the rates bid in the RFP proxy project were not binding. New rates were agreed to in the negotiation stage. This causes the Commission some concern and provides further reason to question the prudence of the prices negotiated.

722. The Commission notes the comments of Mr. Lipson in response to Mr. Forster:

8 In this instance, there were rates provided

9 with the proposals.

10 Q. Right. Sir, but they were not binding?

11 A. Yes, although had there been changes to those rates

12 between the proposals and the final agreement without a valid

13 reason for those changes, we would have considered that to be

14 an issue that we would have had to understand from a fairness

15 perspective.³⁸⁹

723. And later,

15 My general advice to clients is don't touch

16 the rates. Those are sacrosanct.³⁹⁰

724. Finally, the Commission observes that, from AltaLink's inception, all EPCM services have been provided pursuant to an exclusive services contract with SNC-ATP. For its part, AltaLink has had no experience in EPCM procurement and has, throughout its past GTAs, advocated for price increases on behalf of its affiliate. If market competitive prices were the desired outcome, the Commission would have anticipated a price bidding procedure that was capable of producing this outcome. For example, AltaLink might have solicited bids not only from its affiliate but from a number of equally or comparably competent rivals rather than relying on bi-lateral negotiation with each of two finalists, one of which was its affiliate.

Summary of Commission findings and conclusions

725. The Commission considers that a summary of its findings would be helpful.

726. The Commission finds that the scoring mechanism template was vague and opened the door to subjective judgments. This could lead participants or, indeed, any impartial observers, to reasonably apprehend the scoring process to be unfair.

727. The Commission finds that the FA was unsuccessful in meeting its stated objectives and, in particular, did not identify in advance, and cause AltaLink to correct, deficiencies in the CPP process so as to render it fair, open and transparent or to provide stakeholders, including the

³⁸⁹ Transcript, Volume 9, page 2018.

³⁹⁰ Transcript, Volume 9, page 2022.

Commission, with a high degree of confidence, that the outcome of the process would be competitive market pricing. In particular, the Commission finds that the FA did not conduct a thorough review of the proposed CPP prior to its public launch. If the FA had done so, it would have realized that the process appeared to have been designed to disqualify a significant number of parties at the very outset. This precluded AltaLink from securing competitive pricing information at an earlier stage in the process, from a larger number of potential suppliers. The FA appears to have been aware that this was AltaLink's desired outcome but did not see this to be a problem. A qualified technical review of the RFQ criteria and the weights assigned to scores should also have been recommended, to assure stakeholders that the scores were reasonably and appropriately weighted. A second evaluator should have been recommended for the HS&E qualification stage. Failing this, an independent review should have been recommended after five of 12 respondents failed the initial review and were permanently eliminated from further stages of the competition.

728. The Commission finds that the handling of the HS&E criteria was seriously flawed from a fairness perspective. AltaLink ought to have made a second evaluation mandatory to instill greater confidence in the assessment. Failing this, the FA should have recommended an independent review upon observing the high failure rate of ostensibly capable and competent rivals, some of which the Commission recognizes as being large, international EPCM providers.

729. Finally, the Commission is unable to accept as market competitive rates that were obtained from only two parties, one of whom is the incumbent-affiliate, when those rates were negotiated under circumstances where the incentives to price competitively were much diminished, if not largely non-existent.

730. In conclusion, the Commission finds the following material weaknesses in the CPP:

- (i) failure by the FA to conduct a more thorough review of the entire process prior to its commencement
- (ii) failure to obtain an independent review of the RFQ criteria
- (iii) a scoring mechanism that is too vague and open to differing interpretations
- (iv) failure to obtain a second evaluation of HS&E as part of a planned process
- (v) failure to obtain a second evaluation of HS&E after observing the high failure rate
- (vi) failure to incorporate independent third-party evaluation at each major stage of the process
- (vii) failure to secure demonstrably competitive pricing

731. In previous decisions, the Commission has approved the use of an actual labour cost multiplier for use by SNC-ATP to determine its hourly rates billed to AltaLink, along with certain mark-ups for procurement and construction management. For purposes of forecasting the capital expenditures related to the projects allocated to SNC-ATP due to its being at the PPS stage, AltaLink is directed to continue the use of this approach, as previously approved by the Commission, that being the two times labour multiplier and the other approved mark-ups.

732. For purposes of forecasting the capital expenditures related to those projects allocated to SNC-ATP and B&M pursuant to the new relationship agreements, AltaLink is directed to use the same rates as above, namely, the two times labour multiplier and other approved mark-ups. Given that the Commission cannot accept the rates resulting from the CPP, the rates approved pursuant to the MSA are the only proxy for market rates available to the Commission.

733. The Commission expects that the expenditures made in furtherance of all these projects will be subject to a future DACDA proceeding. At that time, AltaLink can present further evidence with respect to what it considers market competitive rates. For example, AltaLink could consider obtaining certification that the rates it negotiated with B&M and SNC-ATP, respectively, are equal to or lower than the lowest rates each of these EPCM providers offers to any other EPCM customer in North America, possibly excluding regional or local jurisdictions with labour markets bearing little resemblance to that of Alberta (viz., certification of AltaLink being offered “most favoured” or “most preferred” customer pricing by each of its two EPCM providers). Alternatively, it remains open to AltaLink, at any time, to design and conduct another competitive procurement process taking care to avoid the shortcomings the Commission has identified with the most recent CPP.

734. The Commission would like to make a final observation. There was nothing wrong or improper in having AltaLink’s affiliate, SNC-ATP, participate in the CPP process or to be selected as one of the successful vendors. However, as AltaLink was very much aware, the very fact of SNC-ATP’s participation in the CPP and emergence as one of the winning vendors required that AltaLink demonstrate that the process was fair, open and transparent to proponents and led to competitive market pricing. This was a demanding, but far from impossible, evidentiary burden. The Commission has concluded that AltaLink has failed to meet this burden.

6.2.2 Risk and reward model

Overview

735. AltaLink introduced its Risk/Reward Model (RRM) at Section 10.6.5 of the application. AltaLink stated that it had negotiated the option to apply a structured construction RRM to projects in order to achieve greater cost and schedule certainty during the construction phase of a project. AltaLink further stated it had aligned this capability to apply construction risk and reward in response to customer, intervener, and Transmission Facilities Cost Monitoring Committee (TFCMC) feedback and recommendations to provide increased cost and schedule certainty.

736. The basic framework for the RRM is described below:

- the risk and reward is for the construction phase or post permit and licence (P&L) phase
- the risk and reward model incorporates both a construction target price and a construction target schedule
- the construction target price incorporates the construction tenders, the construction indirect costs and the construction contingency
- the construction target schedule is created in conjunction with the construction target price and is related to the substantial completion date project milestone
- the risk and reward model is structured as follows:
 - the risk and reward has symmetrical bands for each project and is dependent on the project contingency for each project and can therefore vary for each project
 - the maximum risk and reward bands are -20 per cent to + 20 per cent of construction target price
 - risk and reward sharing only occurs within the bands set for each project
 - no reward sharing for amounts below the cap
 - no risk sharing for amounts above the cap:
 - above the construction target price, only incurred costs are paid

- no construction management fee is paid above the cap;
 - reward is affected if target schedule is not achieved
- liquidated damages continue to provide schedule tension in the situation where target price has been exceeded

737. AltaLink stated in the RFQ stage in the CPP its intention to negotiate an RRM with successful contractors. Upon conclusion of the RFP phase, AltaLink entered into simultaneous negotiations with SNC-ATP and B&M to finalize the format of the RRM ultimately proposed. As the RRM was meant to be implemented in conjunction with the CPP, AltaLink was not seeking formal Commission approval of the RRM. However, as AltaLink may wish to incorporate an RRM into future contractual negotiations that it undertakes, the Commission has provided its views about this proposed RRM.

738. The Commission received evidence about the RRM in both the confidential module of the hearing and on the public record. In providing its views, the Commission has considered all of the evidence on the record, including the confidential record, and the Commission has determined that it can provide its views in this decision without the need to issue a separate confidential addendum.

Views of the parties

739. The RPG filed evidence prepared by Mr. Mohr of FTI with respect to the proposed RRM. FTI was critical of the proposed RRM. In particular, FTI stated that the parameters used for a risk and reward model should be based, in part, on historical information from past project performance. Relying on past project performance, it was possible to determine contingency levels, management fees and success rates of achieving target schedules and costs. FTI maintained this type of information was critical to determining the structure and cost of a risk and reward program.

740. FTI noted that the model only included construction costs, not engineering and procurement costs. FTI maintained these could have a significant impact on price and schedule. It therefore considered the model incomplete and prone to misuse. FTI also claimed that the model appeared to ignore the impacts of construction quality and safety. FTI maintained that quality and safety should be key measures of performance of any construction project. FTI noted that AltaLink had mentioned quality and safety in its RFQ documents but that these two criteria appeared to be lacking in the RRM proposal.

741. In rebuttal argument, AltaLink responded to FTI's contention that historical information should be used in the RRM. AltaLink stated that it had proposed an RRM that determined project cost and schedule on a project-by-project basis and that it had provided an example³⁹¹ of how the elements of the RRM are set on a project-by-project basis. The risk and reward procedures were supplied in the confidential module of the hearing.

742. In response to FTI's suggestion that the RRM should include engineering and procurement costs, AltaLink explained the RRM only related to the construction phase or post-P&L phase because that is where the risks were better known, quantifiable and more within AltaLink and its EPCM service provider's direct control. AltaLink stated that if the EPCM

³⁹¹ AUC-AML-040.

contractors were asked to price a risk that they could neither understand nor control, the owner and, ultimately, ratepayers would be charged a significant associated risk premium.

743. In response to FTI's claim that the RRM did not incorporate quality and safety criteria, AltaLink stated that it determined the best mechanism for safety and environmental performance was not within a RRM, because a party could sacrifice safety and environmental performance to meet or better schedule and cost targets. AltaLink explained it negotiated new project execution-based performance clauses in the contracts. These clauses allowed AltaLink, at its discretion, to move projects from one provider to another if pre-agreed performance criteria, such as safety and environmental performance or engineering schedule performance, were not being delivered. These performance clauses were examined in the confidential module of the proceeding.

744. FTI suggested that customers or ratepayer group representatives should be involved as a counter-party in determining target prices and target schedules. It suggested that AltaLink had an inherent conflict of interest in this regard and, as such, the process for setting target prices should involve a knowledgeable independent third-party participant. Any RRM should include at least the following three conditions:

- (1) An independent determination of the cost estimate by a third party. That third party should not be AltaLink or the AESO.
- (2) Third-party competence and adequate resources to determine a realistic target price. The target price needs to be objective and based on an unbiased cost estimate.
- (3) All costs incurred on a cost-plus project should be open-book at the transaction level.

745. In argument, the RPG referred to its cross-examination of AltaLink in which AltaLink testified that neither cost certainty nor schedule certainty had historically been a problem.³⁹² The RPG also noted that while AltaLink had claimed that the RRM was brought forward as a result of customer feedback, no customers had appeared before the Commission in support of the RRM. To the contrary, the RPG, as a representative of customers, interveners and members of the TFCMC, unequivocally opposed implementation of the RRM.

746. In argument, the RPG also noted that the contingency amount for the project played a prominent role in the calculation of the risk/reward band. Given that calculation of contingency amounts had proven to be contentious in the hearing, the RPG was concerned about the use of this amount as a basis for calculating the RRM bands.

747. Finally, the RPG noted that, in the application, AltaLink had stated that once target price had been exceeded, only "incurred costs", and no management fee, would be payable to the EPCM contractors. Without verifying the actual costs of the EPCM contractor, the RPG maintained it was highly likely that the invoiced charges for labour, equipment and other items would contain some margin such that even in the absence of receiving compensation for the construction management fee, the EPCM firms would still be making profit above the negotiated cap.

748. In reply, the RPG noted that in response to AUC-RPG-24, it had highlighted several comparisons that showed AltaLink's costs were higher than in other jurisdictions and claimed

³⁹² Transcript, Volume 7, pages 1601-1604.

that AltaLink did not refute these comparisons or provide any explanation to justify its high costs. The RPG submitted that the differences in unit costs were more fundamental, and rooted in AltaLink's internal processes and procedures, including its project execution practices. Consequently, the RPG maintained that cost and performance audits would be far more productive in identifying business processes and decisions that are not cost-effective than would an inter-affiliate bonus that would come from the RRP.

749. In argument, AltaLink stated that, at its heart, the RRM was a contract pricing method that aligned the interests of the EPCM service provider (and sub-contractor service providers) with AltaLink (and the ratepayers). To the extent the EPCM service providers lose bonuses for missing schedules and bear the cost burden of bringing delayed projects back on schedule, AltaLink maintained the RRM provided schedule certainty and penalized schedule delays. The benefit created by the alignment of risk and reward through the EPCM service provider and its contractors comes from the financial tension placed on both to perform efficiently, effectively and with innovative construction practices.

750. AltaLink also noted that FTI had suggested that interveners should be involved as a counter-party in the determination of target prices and target schedules. AltaLink stated it had the responsibility and, consequently, the risk of operating its business to meet its statutory obligation to ensure safe, reliable, and economic delivery of electricity. Ratepayers did not. To insert interveners into the management of AltaLink's business would add unnecessary complication and risk.

Commission findings

751. AltaLink has stated that the RRM was implemented, at the request of customers, to provide certainty around target price and schedule. The evidence of AltaLink was as follows:

- 8 Q. So you want it because it will be a betterment for
 9 AltaLink and customers, but has it historically been a
 10 problem; that is, let's stick to cost certainty for a moment.
 11 Has cost certainty been a problem that AltaLink had
 12 experienced?
 13 A. MR. FEDORCHUK: Not specifically, and I think
 14 our rationale for putting it in place was also based on
 15 feedback that we had been receiving from our customers and
 16 through some of the dialogues we had been having with the
 17 industry groups as well.
 18 Q. Was schedule certainty a problem historically for
 19 AltaLink?
 20 A. MR. FEDORCHUK: No, not historically.³⁹³

752. And, a short while later:

- 6 Q. So the customers told you to implement the risk/reward
 7 model to solve these problems?
 8 A. MS. PICARD-THOMPSON: No, sir, not specifically.
 13 Q. But you told me, sir, that there were no specific
 14 examples of problems with cost certainty in earlier on in

³⁹³ Transcript, Volume 7, page 1601.

15 this discussion. So I'm a little surprise that you seem to
16 be trotting out a solution in paragraph 708 of the
17 application in search of a problem that didn't exist.
18 A. MR. FEDORCHUK: That's correct, Mr. Wachowich.³⁹⁴

753. No customers or representatives of customer groups appeared before the Commission in support of the RRM. To the contrary, the customer representative groups that appeared before the Commission opposed its implementation. As such, the Commission finds that the RRM cannot be supported on the basis of customer demand for such a mechanism.

754. FTI has stated in its evidence that the RRM is flawed because it does not include either engineering or procurement costs. AltaLink has excluded these costs on the basis that they are beyond the control of the EPCM service provider. The Commission disagrees. EPCM service providers are retained because of their experience and expertise in engineering and procurement and they generally perform these functions with their own in-house staff. Consequently, the Commission considers EPCM service providers should be able to exercise some control over these costs.

755. FTI also argued that the RRM did not adequately account for quality and safety criteria. AltaLink explained that these were addressed elsewhere in the contractual agreements because it did not consider it appropriate to have them subject to the RRM. The Commission accepts the explanation of AltaLink with respect to this issue.

756. FTI has suggested that the interveners be allowed to play some role in the determination of target price and schedule. AltaLink countered that this amounted to micro-management of its business. The Commission agrees. It is the legislative responsibility of AltaLink to manage system planning and construction in response to AESO direction.

757. In argument, the RPG has noted that once target price has been reached, only incurred costs and no management fee, would be payable to the EPCM service providers. The RPG expressed concern that without better controls it may be possible for EPCM service providers to build margins into their "incurred costs" thus negating the intended effect of the cap on management fees. The Commission considers that "incurred costs" is not adequately defined and that it may be difficult to preclude additional profits from being earned even after the cap on management fees has been triggered.

758. Finally, the Commission notes that AltaLink does not appear to have considered any other RRM options prior to proposing the model in question. When considering capital project proposals, the Commission generally expects to receive a summary of the other options considered. Similarly, when presented with a new contracting model which includes a feature such as an RRM, the Commission would expect to receive an analysis of all other options considered.

759. For these reasons, the Commission finds that AltaLink has not demonstrated that it is reasonable to include the costs of its proposed RRM in its forecast capital costs in its tariff application. If necessary, AltaLink is directed to remove any impact of the proposed RRM in its refiling.

³⁹⁴ Transcript, Volume 7, page 1604.

6.3 Capital replacements and upgrades

760. AltaLink presented its forecast capital replacement and upgrade (CRU) expenditures in Section 10.3 of the application. AltaLink submitted that its CRU forecast should be approved because its proposed CRU expenditures are required to:

- continue to provide safe and reliable transmission service
- reduce the probability of damage to equipment and property
- minimize the frequency and duration of outages due to equipment failure
- address safety and environmental concerns outlined by legislation and regulation
- ensure public and worker safety
- restore asset functionality³⁹⁵

761. AltaLink filed 26 business cases for each of its CRU programs and projects as appendices to the application.³⁹⁶

762. In the UCA general evidence, the UCA expressed concern with AltaLink's forecast expenditures for the general upgrades (an element of line components) in 2013 and 2014 compared to expenditure levels forecast for the years 2011 through 2013 in AltaLink's 2011-2013 GTA. The UCA noted that while AltaLink forecast expenditures of \$5.0 million, \$5.2 million and \$5.5 million for 2011, 2012 and 2013, respectively, in its prior GTA, AltaLink was forecasting general upgrade expenditures of \$14.8 million and \$16.1 million for 2013 and 2014, respectively, in its present GTA. The UCA recommended that AltaLink's forecast for general upgrades for 2013 be reduced to \$5.452 million and the forecast for 2014 be set at \$5.670 million, which represented a four per cent increase.

763. In rebuttal,³⁹⁷ AltaLink submitted that the UCA's conclusion that AltaLink's forecast is 171 per cent higher in 2013 and 194 per cent higher in 2014 is an incorrect conclusion that occurred because the UCA compared two different sets of values. The correct values for general upgrades are \$9.5 million and \$10.1 million for 2013 and 2014, respectively. AltaLink noted that with the correct values, the forecast increase for 2013 is only 19 per cent above the average of the 2011 and 2012 approved period and the 2014 forecast is only a six per cent increase above the 2013 forecast. Moreover, as the Commission did not approve a three year test period in response to AltaLink's application for a 2011-2013 test period GTA, it is inappropriate to make a comparison of the prior GTA's 2013 forecast and the forecast for the same year in the current GTA.

764. AltaLink's capital maintenance business case for line components includes many programs besides the individual line clearance mitigation program.³⁹⁸ AltaLink explained that through a new application of aerial mapping technology, it will be able to identify clearance issues and potentially raise the capacity of lines in a cost effective manner. AltaLink submitted that, in its experience, approximately one-third of AltaLink lines require line clearance expenditures to meet thermal requirements and safety codes. Therefore, it has forecast an

³⁹⁵ Application, paragraph 607.

³⁹⁶ Appendices 13-A01 through 13-A25 and 13-A28.

³⁹⁷ Exhibit 150.02, paragraphs 628 to 638.

³⁹⁸ Exhibit 4, Appendix 13, page 13-A2-10 and Exhibit 51.01, AltaLink response to UCA.AML-054.

increase in the amount of line clearance mitigation activities commensurate with its aerial mapping program.

765. In argument, the UCA noted that AltaLink reported 2012 management update expenditures on general upgrades of \$6.970 million. The UCA submitted that this amount is significantly less than AltaLink's 2013 and 2014 forecast expenditures of \$9.528 million and \$10.075 million, respectively. Based on this, the UCA reiterated its request that AltaLink's general upgrades forecasts be reduced to \$5.452 million and \$5.670 million for 2013 and 2014, respectively.

766. The UCA submitted that evidence adduced through cross-examination³⁹⁹ showed, that while AltaLink forecasts undertaking five line clearance mitigations in each of 2013 and 2014 and has forecast expenditures related to five line mitigations per year in the past, AltaLink's actual five-year average is 2.6 lines per year. The UCA submitted that AltaLink's line clearance mitigation forecasts should be based on the costs to complete line clearance mitigation on three lines for the 2013 test year and two lines for the 2014 test year. With these revised assumptions, the UCA submitted that AltaLink's capital costs should be reduced by \$848,000 for 2013 and by \$1.344 million for 2014.

767. In its argument, the CCA noted that, in its current GTA, AltaLink reported management update expenditures on transmission planned maintenance of \$17.9 million, representing a reduction of \$13.6 million from the forecast expenditure on transmission planned maintenance that AltaLink forecast in its 2011-2013 GTA. Given the size of the differential, the reduction from the 2012 forecast reported in AltaLink's 2011-2013 GTA did not appear to be in the normal range of forecast versus actual variances. Planned maintenance included in rates but not performed on an actual basis accrues to AltaLink's bottom line and creates the potential for deterioration in the reliability and safety of the system. The CCA was not seeking any adjustment to the test year forecasts for transmission planned maintenance for 2013 and 2014, but submitted that if the pattern of higher expenditures in one test year and reduced expenditures in another test year is likely to continue for any reason, AltaLink should be directed to reflect year-to-year expenditure forecast variances in its future forecasts.

768. In reply, AltaLink submitted that its evidence in support of its line clearance mitigation program is based on reliability methodology and allows AltaLink to deal with generically rated lines. However, AltaLink noted that, as its proactive maintenance programs may be impeded for various reasons, including access, weather and seasonal restrictions, historical values do not reflect the need for proactive maintenance going forward.

Commission findings

769. The Commission's findings in respect of AltaLink's capital replacement and upgrade expenditures and additions forecasts address the following matters:

- the UCA's request for a reduction in the general upgrades line item of AltaLink's line components forecast
- the UCA's request for a reduction in the allowed amount of the line clearance mitigation line item of AltaLink's line components forecast

³⁹⁹ Exhibit 158.02.

- AltaLink's forecasting track record with respect to its transmission planned maintenance program

770. In addition to the issues raised by the intervenor parties, the Commission also reviewed whether AltaLink complied with Commission Directive 26 from Decision 2011-453.

Line components - general upgrades forecasts

771. The Commission has reviewed AltaLink's business case for line components⁴⁰⁰ in light of the UCA's submissions, and finds that the UCA's request appears to have been based on a misapplication of the total amounts of the line components forecast for the years 2013 and 2014 to the general upgrades sub-component line item of the line components forecast for prior years. As the significant rate of increase underlying the UCA's concerns is based on an erroneous understanding of AltaLink's evidence, the Commission has determined that, with the adjustment, the rate of increase is reasonable. The UCA's request for a reduction in the 2013 and 2014 general upgrades forecast is denied.

Line components – line clearance mitigation

772. The evidence brought forward by the UCA suggests that in the last GTA, AltaLink has completed line mitigation on less than the five lines it had forecast it would do and since its future forecast is based on completion of line mitigation for five lines, its forecast should be reduced accordingly.

773. The Commission considers that AltaLink should have reasonable discretion within its overall budget to reallocate expenditures to reflect changing priorities. Furthermore, the Commission considers that AltaLink's overall track record of spending close to the amount forecast in recent GTAs is reasonable. In this context, therefore, the Commission does not consider the variance in line clearance mitigation expenditures as compared to this line item forecast in prior year line components business cases to be material. As such, the UCA's request for reductions of \$848,000 for 2013 and \$1.344 million for 2014 is denied.

Transmission planned maintenance

774. The CCA takes issue with the reduction in AltaLink's 2012 management update expenditures on transmission planned maintenance as reported in Schedule 10-4 of AltaLink's original GTA filing and the amount forecast in the comparable schedule of its 2011-2013 GTA and has suggested that this may be evidence that AltaLink is letting maintenance slide and applying the revenue it collects for this activity to its bottom line.

775. This is not the first time that interveners have raised issues of this nature. In Decision 2005-019,⁴⁰¹ the board was asked to consider whether AltaLink had violated the regulatory compact as it pertained to its requirement to perform vegetation management. The board stated at pages 14-15 of the decision:

Based on the positions advanced by the interveners and their characterization of the evidence before the Board in this proceeding, the Board considers that the interveners have a reasonable understanding of the regulatory compact. The Board would briefly

⁴⁰⁰ Exhibit 4, Appendix 13-A02.

⁴⁰¹ Decision 2005-019: AltaLink Management Ltd. and TransAlta Utilities Corporation, 2004-2007 General Tariff Application, Application No. 1336421, March 12, 2005.

describe it this way – a utility is entitled to a reasonable return on its investment and a return of its investment in return for providing safe and reliable service to its customers, at just and reasonable rates.

The Board is concerned with the position taken by AltaLink. AltaLink appears to acknowledge that it has a responsibility to provide safe and reliable service, however, it also chose to defer activities that it considered necessary once the allowed revenue requirement could no longer fund them. AltaLink itself has used the words “These were not easy decisions to essentially place the transmission system at increased risk because of lack of required resources”. The Board does not consider this approach to be correct or acceptable. In determining a revenue requirement and the consequent rates, the onus is upon the utility to demonstrate that its request is reasonable and that entails explaining and justifying its needs fully. Its explanations must be vigorous and not merely statements indicating how much it wants to do a job. It is not enough to convince the Board that the activity is necessary. The utility must also persuade the Board that the costs it has forecast as necessary to perform the activity are reasonable. In considering the evidence placed before it, the Board may determine that a different revenue requirement is appropriate. If the Board disallows certain amounts that a utility has sought, it does so considering the quality and comprehensiveness of the evidence before it. One methodology in which a utility could satisfy this onus would be to provide activity based cost data to support its request. That is, a utility should establish the cost per unit of work necessary and the total then results from the number of work units that are forecast as necessary.

In Decision 2003-061, the Board agreed with AltaLink that certain activities were necessary however, it did not agree with the revenue requirement requested by AltaLink to perform these activities. It determined, based on the evidence before it, that a different revenue requirement was appropriate. AltaLink, in turn, was obligated to conduct its affairs in a manner to ensure that it did not compromise service and reliability, seeking efficiencies as means to achieve any perceived extra resources, and to better present its case in future test periods. This was not an invitation to AltaLink to deliberately reduce the level of service it provided, particularly if the deferred activities involved actions which could affect reliability and safety. To conclude, the Board finds that AltaLink has violated the regulatory compact.

776. The Commission notes that the approved forecast levels for a number of AltaLink’s capital expenditure programs for its 2011-2013 GTA were reduced by the Commission. In addition, the Commission notes that as Decision 2011-453 was issued towards the end of 2011, AltaLink had the opportunity to take into account the Commission’s findings for maintenance programs undertaken in 2012. The Commission has prepared Table 34 below to examine AltaLink’s track record on its major ongoing capital replacement and upgrade programs over the past few years.

Table 34. Track record analysis for ongoing CRU programs

	2009 actual	2009 GTA	2010 actual	2010 GTA	2011 actual	2011 GTA	2012 actual	2012 GTA
	(\$ million)							
Transmission urgent repairs	3.3	2.9	11.7	3.1	3.8	3.9	6.5	4.0
Transmission planned maintenance	19.3	18.2	25.1	20.5	27.8	18.9	16.5	19.9
Substation planned maintenance	25.4	28.5	31.6	30.9	42.8	37.4	34.4	37.3
System control centre upgrades	1.2	1.3	0.9	0.8	2.7	3.0	1.6	1.9
Meter replacements	1.0	1.2	1.5	1.2	1.7	1.5	1.6	1.5
Tools & instruments	1.8	1.8	1.5	1.7	1.6	1.7	2.1	2.1
Total	52.0	53.9	72.3	58.2	80.4	66.4	62.7	66.7

Source: Prepared from Decision 2010-409,⁴⁰² Appendix 3, Schedule 6.5; Decision 2013-023,⁴⁰³ Appendix 3, Schedule 10-4; Exhibit 108.01, Schedule 10-4.

777. Table 34 appears to demonstrate that, on an overall basis, AltaLink has tended to meet or exceed its final approved GTA forecast expenditure levels. The Commission considers that AltaLink's reported actual expenditure of \$16.5 million, while below the final approved forecast of \$19.9 million, is not sufficiently below the forecast to cause substantial concern or support a finding that AltaLink has violated the regulatory compact.

778. Furthermore, while the Commission notes that the CCA did not request a specific reduction for 2013 or 2014, the Commission does not consider that the CCA's request for a general direction that AltaLink be required to take year-to-year variation patterns into account for future GTA forecasts requires a specific direction from the Commission.

Directive 26 from Decision 2011-453

779. In Decision 2011-453, the Commission found that AltaLink had not adequately justified its forecast for a significant increase in the level of capital expenditures for the years 2011-2013 for certain CRU programs which had been based on AltaLink's asset health assessment tool (AHAT).

780. As a result of this assessment, the Commission determined that the total amount it would allow in respect of AltaLink's expenditures on the following programs should be reduced:

- lines – rebuild older wood poles lines
- substation major equipment
- 25-kV bus

781. In Section 6.2.2 of Decision 2011-453, the Commission considered general comments of parties in respect of the merits of AltaLink's AHAT. As part of its findings, the Commission found that the AHAT appeared to be driving a step-change in the cost of the CRU programs to which it had been applied, and expressed concerns that AltaLink had not provided sufficient justification for the significant increase beyond the mathematical results generated by the application of the tool.

⁴⁰² Decision 2010-409: AltaLink Management Ltd., Second Refiling of 2009-2010 General Tariff Application, Application No. 1606350, Proceeding ID 722, August 20, 2010.

⁴⁰³ Decision 2013-023: AltaLink Management Ltd., Second Refiling Pursuant to Decision 2012-221, Decision 2011-453 and Decision 2011-474, Application No. 1608831, Proceeding ID No. 2138, January 30, 2013.

782. In Directive 26 from Decision 2011-453, the Commission encouraged AltaLink to continue to apply the AHAT model, but review its inputs, make any necessary adjustment to input parameters, and undertake a qualitative assessment and analysis to support AHAT model outputs.⁴⁰⁴

783. AltaLink discussed its compliance with Directive 26 in Section 10.3.3 of the application. AltaLink described the processes it has used to assess the risk of asset failure, and indicated that it also considers age-based indicators and equipment deficiency trends.

784. To test the validity of its analysis, AltaLink assessed the volume of replacement activities for each of transformers, high voltage circuit breakers, and wood pole replacements against the volume of replacements per year required to either (1) sustain the current age profile of the asset class to which each program belongs, or (2) to replace all assets in the class at the average service life for the asset class. A similar analysis expressed on a dollar basis was performed. The results of this analysis are summarized in Table 35 below:

Table 35. AHAT analysis

	Ave. volume/year			Average \$M/year		
	2013-2014 forecast	Sustain age profile	Replace at ASL	2013-2014 forecast	Sustain age profile	Replace at ASL
Transformers	1	10	48	1.4	14.0	115.0
High voltage circuit breakers	16	15	57	4.1	3.8	14.0
Wood pole lines	64 km	122 km	1000 km	17.1	30.0	245.0

Source: Application, Table 10.3.3.1.3-1.

785. The Commission considers that AltaLink's analysis described in Section 10.3.3 of the application satisfies Directive 26 from Decision 2011-453, and demonstrates the reasonableness of AltaLink's 2013-2014 expenditure forecast for the capital replacement programs included in the study.

786. AltaLink's CRU forecast is approved as filed.

6.4 IT capital costs

787. AltaLink presented its forecast IT capital costs in Section 10.4 and Appendix 13-B of the application and forecast expenditures of \$35.9 million and \$28.7 million for the 2013 and 2014 test years, respectively. AltaLink stated this forecast was consistent with its IT strategy described in previous GTA filings. The cost drivers for its forecast IT capital expenditures were ongoing lifecycle maintenance and the need for a structured, cohesive information system that would support AltaLink's operations over the foreseeable future. AltaLink's planned IT programs were a response to two specific requirements of transmission asset growth: (i) supporting AltaLink's asset risk management, and (ii) supporting AltaLink's organizational growth and maturity. AltaLink maintained its forecast IT programs would enhance its operations with data in an accessible and reliable information platform.

788. In its argument, the CCA expressed concern with the uncertainty surrounding the Alberta Reliability Standards Cyber Project portion of these expenditures. In its response to CCA.AML 5c, AltaLink stated that the primary variance for these expenditures was associated with the

⁴⁰⁴ Decision 2011-453, paragraph 504.

timing of critical infrastructure protection standards being finalized by the AESO. AltaLink explained that delays associated with these particular standards, and the corresponding forecast costs required to comply with these new standards, was the reason for the variance between GTA approved levels in 2011 and 2012 and the actual costs incurred.

789. The CCA noted that AltaLink was forecasting expenditures of \$7.1 million in 2013 and \$3.4 million in 2014 with respect to the cyber project and suggested that collaborative projects of this nature have the associated risk of delay. Accordingly, the CCA recommended that, in future proceedings AltaLink be directed to recognize and reflect in the test year forecast costs, the uncertainties in the timing of implementation of collaborative projects such as the cyber project and put forward a most probable test year forecast. However, the CCA did not object to the inclusion of the proposed additions with respect to the cyber project in the test years.

Commission findings

790. The Commission has reviewed the evidence in the application and considers the forecast expenditures to be reasonable. They are approved as filed. The Commission agrees with the concern of the CCA and for purposes of future proceedings, AltaLink is directed to use an uncertainty adjusted forecast for such expenditures.

6.5 Facility capital costs

6.5.1 Acheson material yard

791. In Appendix 13-C1.02 of the application, AltaLink filed a business case to support its request to approve the costs of the expansion of its material yard at Acheson at a forecast capital cost of \$13.4 million. AltaLink proposed to purchase a parcel of land contiguous to its existing Acheson warehouse facility in 2013 and to develop the site during 2014 on the basis that it required this expansion to meet its need for additional storage.

792. AltaLink explained that as a result of growth in its transmission system, there had been a proportionate growth in the need to store materials necessary for capital maintenance and emergency response. AltaLink also indicated that it intends to use the Acheson material yard to marshal emergency spares for planned transmission projects including the Southern Alberta Transmission Reinforcement (SATR), Heartland, and Western Alberta Transmission Line (WATL) projects. A more detailed breakdown of AltaLink's forecast capital expenditures by year is provided in Table 36 below:

Table 36. Acheson material yard capital expenditure forecast

Description	2013	2014
	(\$ million)	
Land purchase	10.4	0.0
Operational use site preparation		2.9
E&S		0.1
Total	10.5	3.0

Source: Exhibit 4, Appendix 13-C1.02, Table 2.

793. The UCA addressed both the Acheson material yard expansion project and the Foothills Technical Services Relocation project, discussed in Section 6.5.2 below, in the UCA general

evidence.⁴⁰⁵ The UCA submitted that, for both projects, AltaLink's business cases failed to meet the requirements for business cases set out in EUB Decision 2007-071.⁴⁰⁶

794. The key concerns in respect of the Acheson project identified by the UCA in its evidence were:

- That the alternative pursued by AltaLink is not the least cost alternative and has a negative net present value (NPV) of \$12.45 million as compared to the business-as-usual alternative. Disallowance of the forecast expenditure would reduce AltaLink's revenue requirement by \$0.752 million for 2013 and by \$0.999 million for 2014.
- AltaLink requested approval in its prior GTA for expenditure on expansion of storage capacity in Langdon on the basis that it would obviate the need for a more costly expansion at Acheson over the 2011-2020 period.⁴⁰⁷

795. The UCA submitted that, whereas the land purchase cost in AltaLink's business case (\$10.4 million) translates to an average cost of \$520,000 per acre, the land price for option 7 shown in the Colliers International report shows land costs in the range of \$325,000 to \$375,000 per acre. The UCA also expressed concern that AltaLink does not provide supporting documentation for estimated site preparation costs of \$2.9 million.

796. The UCA submitted that whereas AltaLink expresses significant concerns about the relationship between cash flow requirements and credit metrics, if approved, the Acheson expansion project would involve a cash outflow of \$10.40 million in 2013 and \$2.99 million in 2014. The UCA submitted that while each project individually may have a minimal impact on the credit metrics, a number of smaller projects completed during the same time period will aggravate the problem with credit metrics.⁴⁰⁸

797. Further, in the event that the Commission finds the project to be justified, the UCA submitted that as AltaLink only intends to use 10 acres, not the 20 acres it proposes to buy, the Commission should find the cost of the project as proposed by AltaLink to be excessive. In relation to this request, the UCA noted that whereas AltaLink's proposed purchase is based on a cost of \$500,000 per acre, an assessment prepared by Colliers International provided in response to an undertaking demonstrates that suitable sites should be available for approximately \$350,000 per acre.⁴⁰⁹

798. In its rebuttal evidence, AltaLink submitted that it did meet the business case requirements as outlined by the Commission in Decision 2007-071 and noted that it had received approval for several capital business cases containing the same categories of data and analysis challenged in the current proceeding by the UCA.⁴¹⁰

799. AltaLink submitted that the UCA's claim that it failed to provide independent support for the cost estimate for the land is incorrect, as indicated by its response to UCA.AML-057(d),

⁴⁰⁵ Exhibit 110.02, pages 18-20.

⁴⁰⁶ Exhibit 110.02, pages 16 to 18. Decision 2007-071: ATCO Electric Ltd., 2007-2008 General Tariff Application – Phase I, Application No. 1485740, September 22, 2007.

⁴⁰⁷ Exhibit 110.02, pages 18-20.

⁴⁰⁸ Exhibit 110.02, page 19.

⁴⁰⁹ Exhibit 162.01.

⁴¹⁰ Exhibit 51.01, UCA.AML-057(d).

which shows that it based its forecast on market information received from Colliers International. AltaLink noted that, while the report showed that land prices had declined significantly after 2008, more recently, land prices in the Acheson area have risen substantially. In particular, AltaLink noted that, while the Colliers International report indicated that an area landowner sold 20 acres of unimproved land for \$325,000 per acre in 2012, the same vendor would not agree to similar pricing in late 2013 or early 2014. AltaLink noted that Colliers advised that it could expect to pay \$475,000 per acre for improved land, based on \$350,000 per acre plus \$125,000 per acre for improvement. AltaLink rounded up this amount to \$500,000 per acre for the purpose of its business case.

800. AltaLink submitted that because the storage yard is now operating at over-capacity, it is clear that the status quo is not sustainable at Acheson. AltaLink noted that although there are no reasonable alternatives to its Acheson material yard expansion, its business case showed cash flows associated with its expansion proposal in comparison to a zero cost business-as-usual option.

801. AltaLink submitted that as the current owner has placed the 20 acres contiguous to Acheson up for sale as a single property, it is unable to purchase only half of the property. Additionally, AltaLink submitted that purchasing non-contiguous sites would decrease productivity and unnecessarily add incremental capital and operating costs related to duplicate warehouse facilities.⁴¹¹

802. AltaLink submitted that because it has a clear and distinct need for both the Langdon expansion and the Acheson expansion, the UCA's claim that congestion at the Acheson property was already addressed with the recent expansion and acquisition of 7.5 acres at Langdon is incorrect. AltaLink noted that, 500-kV monopole structures and tubular H-Frame structures are significantly larger than structures historically acquired, and requires additional space for spare transformers, including sufficient accommodation for containment of potential oil leaks. AltaLink provided calculations of the number of spares required and resulting space requirements in support of this claim. AltaLink's calculations show that it has an immediate incremental space requirement for 9.6 acres of storage space and forecast incremental requirements of 10 acres after 2015 in addition to the 7.5 acres required for the Langdon expansion.⁴¹²

803. In argument, the UCA submitted that AltaLink's statement in rebuttal that it cannot purchase only 10 acres is contradicted by Exhibit 162.01 which states that the property in question has "60 total acres available –can be subdivided to suit."⁴¹³ The UCA submitted that AltaLink has not provided convincing evidence that subdivision before purchase is not an option. In any case, if only 10 acres is going to be used during the test years, only 10 acres should be brought into rate base during the test years. In this regard, the UCA noted that the Alberta Court of Appeal has been clear that only assets used to provide utility services belong in rate base.⁴¹⁴

804. In the event that the purchase of the additional 10 acres is approved, the UCA submitted that this purchase should not be allowed in rate base or generate a return. The UCA submitted that such treatment is consistent with the following statement in a recent case: "The Commission

⁴¹¹ Exhibit 150.02, paragraphs 655 through 657.

⁴¹² Exhibit 150.02, paragraphs 658 through 668.

⁴¹³ Exhibit 162.01, option 7.

⁴¹⁴ ATCO Gas and Pipelines Ltd. v. Alberta (Utilities Commission), 2009 ABCA 246, at paragraphs 54 and 56.

considers that assets that are not properly in rate base because they are no longer used or required to be used to provide utility service should not be reflected in rates in any fashion.”⁴¹⁵ In addition, the UCA noted that AltaLink confirmed that it could accommodate the accounting entries if the Commission authorized a 20 acre purchase but ruled that AltaLink would only be able to earn a return on part.⁴¹⁶

805. The UCA submitted that to the extent that Langdon was considered to be an option in the past, it is clear that location is not the determining factor for spares storage. Therefore, the UCA submitted that land for spares can be located in other parts of the province.

806. In summation, the UCA submitted that as AltaLink has failed to demonstrate quantitatively that it has chosen the least cost alternative, the cost of the project should not be approved. Alternatively, should the Commission be inclined to approve the project, the UCA submitted that AltaLink should only be permitted to include costs equivalent to the least cost alternative.

807. In reply, AltaLink submitted that its rebuttal evidence demonstrated that a reasonable price for unimproved land in the Acheson area is \$350,000. AltaLink noted that it will have to pay this price regardless of whether the land is adjacent to the Acheson site or miles away. AltaLink further submitted that it has demonstrated based on past experience that improvements will cost \$125,000 per acre. AltaLink submitted that as Langdon serves the southern part of the province, the UCA’s suggestion that Langdon be used as overflow for Acheson makes no sense in the context of AltaLink’s operations.

Commission findings

808. In Decision 2011-453, the Commission stated:

546. AltaLink forecast capital expenditures totaling \$2.3 million in 2012 to expand its Langdon material yard for the purpose of increasing its capacity to store materials in southern Alberta and to relieve congestion at Acheson.

809. Notwithstanding, it is apparent from the evidence on this record that the congestion at Acheson has not been relieved and that facility storage of both 7.5 acres at Langdon and 9.6 acres at Acheson is required to support AltaLink’s operations.

810. However, AltaLink has not provided any persuasive evidence to support a future requirement for 10 additional acres at Acheson. Based on AltaLink’s evidence that the large transmission build is currently peaking, there is no basis to presume a requirement just in case. The Commission will not approve the costs for the additional 10 acres as AltaLink has not demonstrated that these additional acres are required to provide service.

811. While the Commission accepts the need for 9.6 additional acres of storage space based on current requirements, the Commission is not persuaded that there would be a material loss of productivity from having these facilities located in the area but at a non-contiguous site to AltaLink’s existing Acheson facility.

⁴¹⁵ Decision 2011-450 at paragraph 315.

⁴¹⁶ Transcript Volume 8, page 1772.

812. Further, the Commission finds that AltaLink arbitrarily rounded up its own best estimate of the cost of this purchase of \$475,000 to \$500,000. The Commission finds no basis for this.

813. In light of the foregoing, while the Commission considers that AltaLink cannot be precluded from acquiring its preferred adjacent site, the Commission will authorize an expenditure of \$4,560,000 (= 9.6 acres x \$475,000 per acre (includes improvement costs)) at this time. AltaLink is directed to make this adjustment in its refiling.

6.5.2 Foothills technical services relocation

814. In Appendix 13-C1.04 of the application, AltaLink filed a business case in support of the relocation of its Foothills Technical Services Building (FTSB) operations to a new facility at its Langdon site. In support of this project, AltaLink forecasts capital expenditure of \$17.8 million in the GTA test period, and a further capital expenditure of \$18.7 million in 2015. The proposed expenditures relate to the costs of site development, service bays, and storage facilities. AltaLink also noted that it has included the forecast gain on the sale of the FTSB as an offset to the project capital cost.

815. AltaLink submitted that whereas the FTSB was originally designed primarily as a workshop facility with truck bays sized for small and medium sized trucks, larger vehicles, including vehicles with trailers, have difficulty using the site. AltaLink indicated that the FTSB is currently being used as a field office for technical and transmission line staff, and noted that material and equipment regularly used by FTSB staff are stored at Langdon.

Table 37. FTSB capital expenditure forecast

Description	2013	2014	2015
	(\$ million)		
Site preparation	0.0	7.6	1.1
Buildings	0.0	5.2	11.7
Security	0.0	0.8	0.0
Telecommunications	0.0	0.0	1.1
Furniture	0.0	0.0	0.7
Equipment	0.0	0.0	0.4
Moves	0.0	0.0	0.2
Construction design consultant	1.0	1.4	1.5
Contingency and E&S	0.0	1.8	2.0
Total	1.1	16.8	18.7

Source: Exhibit 4, Appendix 13-C1.04, Table 2.

816. AltaLink's business case includes an incremental analysis of the FTSB relocation over a business as usual alternative which includes certain capital expenditures and operating costs, including additional lease space, to address the operating deficiencies of the FTSB. AltaLink submitted that the net present value of the forecast 10-year revenue requirement between the two alternatives is essentially equivalent, but noted that future additional qualitative benefits would be enabled by relocating to the Langdon site.

817. In its general evidence, the UCA submitted that AltaLink's business case demonstrates that the FTSB relocation project has an NPV of \$34.112 million.⁴¹⁷ Conversely, the UCA noted that the alternative of operating out of the existing facility with additional renovations and

⁴¹⁷ Exhibit 51.21, UCA.AML-062(b) Attachment Update.

leasing additional space has an NPV of \$24.057 million.⁴¹⁸ Therefore, based on AltaLink's own calculations, the UCA submitted that the FTSB relocation project is \$10.1 million more costly than the viable alternative presented in the business case. The UCA submitted that as with any competitive business, projects with a negative NPV should not be undertaken.

818. In addition, the UCA submitted that AltaLink only included construction and operating costs associated with the new facilities in its analysis. However, as AltaLink must still operate the existing facility at the current location to accommodate the new facility, the UCA submitted that AltaLink's NPV analysis underestimates the true cost of the decision to relocate to Langdon and the resulting impact on the cash flow and revenue requirement.⁴¹⁹

819. In rebuttal, AltaLink submitted that the UCA's assertion that it must still operate the existing facility at the current location is incorrect. AltaLink noted that it intends to offer the existing facility for sale before completion of the FTSB at Langdon, and expects the sale to close before relocation. While there will be a limited period of time when AltaLink will own both facilities, the operating costs for the existing FTSB facility are forecast to be insignificant with no material effect on AltaLink's FTSB business case analysis.⁴²⁰

820. In response to the UCA's assertion that projects with a negative NPV would not be undertaken in a competitive business environment, AltaLink submitted that positive cash flow is not the sole criteria for capital expenditures. AltaLink submitted that it is subject to various legislative requirements and operating standards, including the safe, reliable and economic operation of the interconnected electric system. AltaLink submitted that its business cases for both the Acheson and FTSB projects have been planned to assist AltaLink's ability to comply with these requirements.⁴²¹

821. AltaLink submitted that, notwithstanding the UCA's concern that the FTSB project has a negative cash flow NPV relative to the alternative presented, its analysis demonstrated that the NPV of the revenue requirement difference between the two alternatives is less than \$850,000 over a ten year period. AltaLink submitted that significant qualitative benefits, including direct customer benefits, more than compensate for the incremental revenue requirement over a 10-year period.

822. AltaLink noted that the FTSB relocation project has both quantitative and qualitative benefits. With respect to qualitative benefits, these include AltaLink's forecast of an accounting gain of \$1.5 million on the sale of the existing FTSB building and AltaLink's intention to treat the gain as no-cost capital to reduce the cost of the FTSB relocation. However, AltaLink noted that once a decision is issued in the Commission Utility Asset Disposition Proceeding (Proceeding ID No. 20) it intends to apply the decision to AltaLink's FTSB relocation to ensure compliance. AltaLink also noted that the business-as-usual alternative in the business case included capital, operating, and the costs of remaining at the current site, plus the cost of leasing additional space to manage the overflow from the existing FTSB.

823. AltaLink submitted that qualitative benefits from the FTSB relocation include:

⁴¹⁸ Exhibit 51.21, UCA.AML-062(b) Attachment Update.

⁴¹⁹ Exhibit 110.02, pages 20 and 21.

⁴²⁰ Exhibit 150.02, paragraphs 674 and 675.

⁴²¹ Exhibit 150.02, paragraphs 676 and 677.

- improved access, safety risk and significant gained productivity
- better protection of emergency response equipment through the appropriate sizing of vehicle bays
- faster emergency response time from improved access/egress
- eliminating the need for a large equipment repair facility at the HVDC converter station freeing up space in the Langdon material yard currently used for FTSB vehicles, tools, equipment
- material benefits arising from consolidated operations and shared services

824. The CCA submitted in argument that, whereas the FTSB relocation project is a multi-year project forecast to incur capital expenditures over a three-year (2013-2015) period, Schedule 10-2 of AltaLink's original GTA includes 2013 and 2014 capital additions for this project. As AltaLink's correct forecast has no additions in the test period for the FTSB facility, the CCA submitted that any additions related to the FTSB should be removed from the test-year rate base.

825. In its argument, the UCA submitted that AltaLink's business case shows that customers are worse off with approval of the project. Accordingly, the UCA recommended that the FTSB relocation be deferred until AltaLink can demonstrate a need to move, and demonstrate that it has chosen the least-cost alternative. Additionally, the UCA recommended that the Commission:

- direct AltaLink to prepare a comprehensive review of its long-term requirements at Acheson, Langdon, and the FTSB, and present such analysis at its next GTA
- direct AltaLink to ensure that business cases filed in future GTAs include a cost benefit analysis demonstrating a net benefit to customers for any significant non-direct assigned capital projects

Commission findings

826. The Commission accepts AltaLink's evidence that, due to growth in both the number and size of vehicles and other equipment, AltaLink is experiencing some operational problems at the FTSB. However, the Commission considers that AltaLink has failed to demonstrate that the relocation of the FTSB to Langdon is required in order to provide safe, reliable and economic operation of the transmission system, or to ensure compliance with any other legislative requirement.

827. The Commission considers that AltaLink has the onus to demonstrate through its evidence, including its business case analysis, that the benefits of the relocation exceed the cost. The Commission's review of this evidence leads the Commission to find that all forms of NPV analysis (i.e., cash flows and revenue requirement impacts) fail to demonstrate that such a net benefit exists, even after applying a forecast gain of \$1.5 million on the eventual sale of the FTSB location, which AltaLink has qualified in relation to the Commission findings in the utility asset disposition proceeding.

828. Accordingly, the Commission denies AltaLink's request for advance approval of this project, and directs AltaLink to remove any forecast capital expenditures and additions for this project from its revenue requirement calculations in its refiling.

829. The Commission considers it unnecessary to direct AltaLink to prepare a study of its long-term facility requirements at this time.

6.5.3 Other facilities projects

830. In Appendix 13-C1.03 of the application, AltaLink provided a business case for the relocation of a number of AltaLink employees to leased space at the DeVry building, located near its head office. Expenditures for this project in 2013, including building renovations to accommodate AltaLink employees, equipment and security requirements, are forecast to be \$3.9 million.

831. AltaLink currently leases head office space in three separate buildings within the Interplex Office Park in southeast Calgary, and of these three buildings, only AltaLink's main head office building is not a multi-tenant building.

832. AltaLink noted that one of the leases expires in 2014 and, other than the DeVry building, there are no available leases near AltaLink's head office building. AltaLink has a time-limited opportunity to lease the relatively low-cost DeVry building in its entirety for an eight-year term. AltaLink submitted that the relocation will allow it to remove lease risk and maintain the current centralization of employees within the Interplex Office Park.

833. AltaLink's breakdown of forecast capital expenditures on the DeVry relocation project is provided in Table 38 below.

Table 38. DeVry relocation project capital expenditure forecast

Description	2013 (\$ million)
Renovation	3.0
Furniture	0.5
Telecommunications	0.0
Moves	0.0
Construction consultant	0.4
E&S	0.1
Total	3.9

Source: Exhibit 4, Appendix 13-C1.03, Table 2.

834. AltaLink provided a business case in support of general facility maintenance expenditures in Appendix 13-C1.01 of the application. AltaLink forecast capital expenditures totaling \$6.5 million in 2013 and \$2.8 million in 2014 on various programs, summarized in Table 39 below:

Table 39. General facility maintenance expenditures

Description	2013	2014
	(\$ million)	
Head office plaza	5.0	1.2
Field office building maintenance	0.4	0.4
Substation building maintenance	0.1	0.1
Material storage	0.5	0.8
Security	0.5	0.2
Total	6.5	2.8

Source: Exhibit 4, Appendix 13-C1.01, Table 2-2.

835. No intervenor evidence was filed in respect of either the DeVry relocation project or general facility maintenance expenditures.

Commission findings

836. The Commission agrees with AltaLink's assessment that the opportunity to move AltaLink staff to the DeVry building in anticipation of its lease expiry is a unique opportunity to accommodate growing staff at a reasonable cost, with minimal disruption. The Commission considers AltaLink's proposed expenditure of \$3.9 million on this project to be reasonable. Accordingly, this expenditure is approved as filed.

837. However, the Commission has concerns about a portion of the forecast expenditure for general facility maintenance.

838. The Commission notes that whereas Table 10.5-1 of AltaLink's application document shows forecast total expenditures of \$4.0 million for 2013, AltaLink's business case in Appendix 13-C1.01 indicates forecast 2013 total expenditures of \$6.5 million. The Commission considers the \$2.5 million inconsistency to be material.

839. In Decision 2011-453, the Commission stated:

550. It has been the practice that regulated utilities provide a business case for any capital project for which the forecast capital expenditure exceeds \$500,000.

551. As such, the Commission was particularly struck by the absence of a business case in respect of a proposed expenditure of \$3.0 million over the 2011 to 2012 period for the replacement of office furniture, which is briefly (and exclusively) discussed in the application in a single sentence of AltaLink's description of forecast Calgary and South facility capital expenditures.

552. In the absence of any business case for this expenditure or any adequate explanation, the Commission considers that AltaLink has not met the onus to justify this expenditure, particularly in a time when its credit metrics may be under pressure. The Commission hereby directs AltaLink to reduce its forecast facilities capital expenditures by \$2.6 million in respect of 2011 and by \$0.4 million in respect of 2012 in its refile.

840. The Commission considers that, similar to its disallowance of forecast expenditures on office furniture in respect of its prior period GTA, AltaLink's business case for head office plaza expenditures totaling \$5.0 million in 2013, while more detailed than the justification for furniture upgrades in 2011 and 2012 continues to lack the detail necessary to support an expenditure well in excess of \$500,000.

841. AltaLink's business case simply describes the fact that it anticipates Head Office Plaza upgrades to the reception and shipping/receiving areas, structural changes in the AltaLink Control Centre, minor HVAC upgrades, repairs and renovations to outside pathways and stairs, additional washrooms, and replacement of the cafeteria appliances.⁴²² AltaLink describes the technical and business drivers for these expenditures as:

... upgrades to the reception and shipping/receiving areas, structural changes in the AltaLink Control Centre, minor HVAC upgrades, repairs and renovations to outside

⁴²² Exhibit 4, application, Appendix 13-C1.01, page 4.

pathways and stairs, additional washrooms, and replacement of the cafeteria appliances.⁴²³

842. Finally, in Section 5.0 of the business case, AltaLink describes the project benefits for all expenditures, in the general facilities maintenance business case totaling \$6.5 million in 2013 on the basis of the following brief paragraph:

In general, AltaLink's forecast 2013-2014 General Facility Maintenance capital expenditures will ensure its facilities and associated equipment are secure, in good working condition and will effectively meet AltaLink's staff and operational requirements.⁴²⁴

843. AltaLink's forecast expenditure of \$5.0 million on Head Office Plaza upgrades makes up the majority of the forecast total of \$6.5 million for 2013. The Commission has the same concerns as articulated in respect of furniture expenditures proposed in AltaLink's prior GTA, namely, that a generalized overview benefit analysis is insufficient justification for a material expenditure. The Commission also considers that a request for a discretionary expenditure of this magnitude at or near the time of the peak of AltaLink's direct assign program is particularly questionable in light of AltaLink's extensive evidence on credit metrics.

844. For the above reasons, the Commission considers that AltaLink's forecast expenditure on general facility maintenance for 2013 should be reduced to the \$4.0 million amount shown in Table 10.5-1. AltaLink is directed to make this adjustment in its refiling.

7 Working capital allowances

845. AltaLink discussed its working capital requirements at Section 11 and Appendix 7 of the application. AltaLink stated the previous lead-lag study was undertaken in 2010. To ensure that the most up-to-date cash working capital requirements were captured for the 2013-2014 GTA, AltaLink completed a new lead-lag study in 2012. The results of this study demonstrated a decrease in the cash working capital requirement. Utilizing the 2012 lead-lag study days, as compared to the 2010 lead-lag study days, resulted in an average decrease to the total revenue requirement over the two-year test period of \$0.4 million per year. AltaLink explained that the methodology utilized for the 2012 lead-lag study is consistent with the methodology utilized in AltaLink's previous lead-lag studies, and was most recently approved in AUC Decision 2011-453.

846. The ADC filed evidence in which it argued that working capital should be calculated on a cash basis and should exclude depreciation and equity returns. The ADC stated this would be consistent with several U.S. jurisdictions. In the ADC's view, inclusion of these items created additional profits for AltaLink "above what has been defined as just and reasonable."⁴²⁵

847. In reply, the ADC noted AltaLink had claimed that, if the Commission denied the inclusion of depreciation and common equity return in the working capital allowance, it would increase the risk of credit downgrade to AltaLink. According to the ADC, this argument is

⁴²³ Exhibit 4, application, Appendix 13-C1.01, page 5.

⁴²⁴ Exhibit 4, application, Appendix 13-C1.01, page 6.

⁴²⁵ Exhibit 112.02, page 19.

simply incorrect and very misleading. As Mr. Gorman discussed during cross-examination,⁴²⁶ rate base disallowances will not have a negative impact on the credit metrics as those adjustments would not require AltaLink to secure additional debt or equity to finance these rate base disallowances. Furthermore, the ADC maintained Mr. Gorman's credit metrics analysis already reflected the elimination of depreciation and equity return from the working capital allowances of AltaLink. Contrary to AltaLink's argument, the ADC submitted not recognizing depreciation and equity returns in working capital would not lead to a credit rating downgrade.

848. In argument, AltaLink stated its approach to working capital, including its use of lead-lag studies to derive cash working capital requirements, aligned with its industry peers. AltaLink also noted Mr. Meyer, the UCA's witness on working capital, confirmed that the Commission and its predecessors previously approved the continued inclusion of depreciation and common equity return in necessary working capital.⁴²⁷

849. AltaLink submitted that, if the Commission denied the inclusion of depreciation and common equity return in necessary working capital, it would likely be seen as a departure from the supportive regulatory environment. As such, a departure would increase the risk of a downgrade to AltaLink's credit rating at a time when AltaLink could ill-afford such a downgrade.

850. In reply, AltaLink explained that depreciation and equity return, as components of the transmission tariff, were earned throughout the month and recorded at month-end. The corresponding payment for these earned amounts was not actually received until several weeks later, a time period which is equivalent to the revenue lag. AltaLink submitted that the inclusion of equity return and depreciation in the calculation of working capital was necessary in order for investors to be given a fair opportunity to earn the authorized fair return, one that recognized this delay from the point that revenue has been earned, to the point that the related revenue is ultimately received.

Commission findings

851. The Commission acknowledges that AltaLink's approach to working capital conforms to the previously approved practices and standards of this Commission. Therefore, AltaLink's request for working capital is approved as filed, subject to adjustments necessary as a result of directions elsewhere in this decision.

8 Depreciation

852. AltaLink filed a comprehensive depreciation study, prepared by Larry Kennedy of Gannett Fleming Canada, ULC⁴²⁸ (Gannett Fleming) in its application⁴²⁹ and had accepted the report of Gannett Fleming including the 2013 and 2014 depreciation rate recommendations, which were based on the following:⁴³⁰

⁴²⁶ Transcript, Volume 10, page 2285.

⁴²⁷ Transcript, Volume 10, page 2256, line 23 to page 2258, line 8.

⁴²⁸ Exhibit 4, Appendix 8-A, Depreciation Study.

⁴²⁹ Exhibit 3, Section 6, Transmission Depreciation.

⁴³⁰ Exhibit 3, paragraph 508.

- inclusion of the forecast capital additions and retirements for the years 2011 through 2014
- conversion of the databases to reflect the new AUC USA
- separation of the annual accruals to reflect the amount related to the depreciation of original cost and salvage costs
- a complete review of the net salvage requirements completed in accordance with the approach found in Decision 2011-453
- a complete review of average service life and retirement dispersion estimates

853. AltaLink continued to use the methodologies approved in Decision 2011-453 including property account structure, the calculation of separate depreciation rates for invested capital (life rate) and recovery of costs of removal (net salvage rate), and filed information as required by the minimum filing requirements (MFR).

854. In response to IRs, AltaLink clarified that it had used the traditional approach to determine the expected requirement for future costs of retirement,⁴³¹ and that, in determining depreciation rates for the years 2013 and 2014, it relied on a database that included actual plant data up to December 31, 2011 and forecast plant additions and retirements for the years 2012 through 2014.⁴³²

855. AltaLink provided a schedule of its gross depreciation provision. The schedule was subsequently updated in its application and is reproduced below.⁴³³

Table 40. Schedule of transmission depreciation and amortization expense

Depreciation and amortization expense	2010 actual	2011 actual	2012 preliminary actual	2013 forecast	2014 forecast
	(\$ million)				
Gross depreciation provision	91.1	89.2	95.3	107.8	116.9
Amortization of contributions	-7.4	-8.6	-8.7	-9.2	-9.4
Amortization of software	6.4	7.4	9.5	10.8	10.7
Depreciation on rate base	90.1	87.9	96.0	109.4	118.2
Depreciation on DACDA	-	2.1	7.9	16.9	40.6
Total depreciation expense	90.1	90.1	104.0	126.3	158.8

856. AltaLink proposed service life and/or survivor curve adjustments for seven of its fifteen depreciation study accounts and proposed salvage rate adjustments for five of its fifteen depreciation study accounts.

857. The UCA challenged AltaLink's proposed changes for three of the accounts related to service life (accounts 350.1, 352 and 354) and four of the accounts related to salvage rate (accounts 352 to 355). The UCA submitted evidence prepared by Jacob Pous of Diversified Utility Consultants, Inc. to address the reasonableness of the requested depreciation provision for 2013 and 2014 as developed by Gannett Fleming in its depreciation study.

858. Mr. Pous concluded that the requested levels of depreciation resulting from AltaLink's proposed depreciation parameters were excessive and could not be justified. Mr. Pous'

⁴³¹ Exhibit 50.04, AUC.AML.43.

⁴³² Exhibit 50.04, AUC.AML.47.

⁴³³ Exhibit 108.02, updated GTA Schedule 3.1, line 10 and Schedule 6.1, lines 1 through 5, March 15, 2013.

recommendations for life and net salvage would result in a reduction to depreciation expense of \$5.7 million for 2013 and \$7.1 million for 2014.⁴³⁴

859. Other depreciation issues raised by the UCA during the course of this proceeding were related to AltaLink's adherence to MFRs, the level of detailed categorization of the investment in each account, including AltaLink's software systems accounts, and the need for a cause of retirement study.

860. No other intervenor filed depreciation-related evidence.

861. The Commission has summarized the depreciation parameters currently approved and proposed by parties in the following table.

Table 41. Summary of approved and proposed depreciation parameters

		Decision 2011-453 2011-2012 – approved		Proposed AML ¹ 2013-2014		Proposed UCA ² 2013-2014	
Account	Description	Estimated life and curve	Estimated net salvage	Estimated life and curve	Estimated net salvage	Estimated life and curve	Estimated net salvage
Transmission plant							
350.1	Land rights	52-S6	0	56-L5	0	80-R4	0
352	Structures and improvements	50-R2	(5)	50-R2	(10)	61-S0.5	(5)
353	Station equipment	45-L2	(10)	47-L1.5	(15)	47-L1.5	(10)
353.1	System communication and control	24-L0.5	(9)	24-L1	(10)	24-L1	(10)
354	Towers and fixtures	45-R2	(5)	45-R2.5	(7)	49-R2	(5)
355	Poles and fixtures	52-R3	(52)	46-R2	(45)	46-R2	(40)
356	Overhead conductors and devices	60-R4	(29)	65-R4	(29)	65-R4	(29)
358	Underground conductors and devices	45-R5	0	45-R5	0	45-R5	0
General plant							
390	Structures and improvements - general	43-R3	10	43-R3	10	43-R3	10
391	Office furniture and equipment	15-SQ	0	15-SQ	0	15-SQ	0
391.1	Computer hardware	5-SQ	0	5-SQ	0	5-SQ	0
391.2	Computer software - non-SAP	5-SQ	0	5-SQ	0	5-SQ	0
392	Transportation equipment – fleet vehicles	9-L0.5	15	6-R2	15	6-R2	15
394	Tools, shop and lab equipment	10-SQ	0	10-SQ	0	10-SQ	0
396	Power operated equipment	25-L2	15	25-L2	15	25-L2	15
1Exhibit 3, Section 6, Schedule 6-4							
2Exhibit 110.03, Q&A 11, page 4 and Q&A 38, page 13							

8.1 Minimum filing requirements

862. In his evidence, Mr. Pous indicated there was a lack of “detailed information regarding what is contained in each of the Company’s accounts as well as what is specifically retired on an annual basis for each of the accounts for at least the last 10 years.”⁴³⁵

⁴³⁴ Exhibit 110.03, UCA submission, Q&A 8.

863. In argument, Mr. Pous stated the depreciation study failed to provide the MFR-required “reasons for acceptance or rejection concerning the curves examined,”⁴³⁶ and that AltaLink’s claim that it is not able to provide any detail to its investment other than generalization of what is contained within an account is inconsistent with what Mr. Pous has experienced elsewhere.

864. Mr. Pous recommended that the Commission direct AltaLink to provide, in its next depreciation filing, detailed categorizations of what is reflected in each account and categorizations of what retired on an annual basis during the past 10 years. He stated that such information will provide all parties with valuable insight into life and net salvage characteristics and a better understanding of the basis for the specific selection of future proposed life and net salvage parameters proposed by AltaLink.⁴³⁷

865. In rebuttal, Mr. Kennedy submitted that the depreciation study is in complete compliance with MFR as issued in EUB Bulletin 2006-25. Mr. Kennedy stated that the MFR was developed on a consensus basis by a group of interested parties, including a representative from the UCA. This group determined that a cause of retirement analysis or any type of detailed categorization of the investment in each account would not be required as part of the MFR. He concluded that Section 6 of the MFR provides a listing of information required for the submission of depreciation studies, and that AltaLink fully complied with all such requirements in its application.

866. In Part II at page II-19 of the depreciation study,⁴³⁸ Mr. Kennedy provided seven items in a separate package of documents titled, “Additional Working Papers of Gannett Fleming,” which he contended complied with the MFR and the comments and directives of the AUC in Decision 2011-453.

867. These items were as follows:

- the data file including the historic plant accounting transactions as through to December 31, 2011
- the data file including the aged surviving balances for each account as forecast to December 31, 2014
- a file including the forecast plant additions and retirements for the years 2012 through 2014 which were used in the development of the aged surviving plant balances
- observed life tables for each of the placement and experience bands reviewed by Gannett Fleming in the conduct of this depreciation study
- a brief outline of the reasons that each of the above bands were selected for review and the reasons that each of the bands were not selected for inclusion in this report
- a plot of all smoothed Iowa curves reviewed against the finally selected placement and experience band
- a summary of the average service life estimates of peer Canadian regulated electric transmission companies that Gannett Fleming viewed as being reasonable to use as a peer utility

⁴³⁵ Exhibit 110.03, UCA submission, Q&A 70.

⁴³⁶ Exhibit 299.02, UCA argument, paragraph 111.

⁴³⁷ Exhibit 299.02, UCA argument, paragraph 112.

⁴³⁸ Exhibit 4, AltaLink submission, Appendix 8, Depreciation Study.

Commission findings

868. The minimum filing requirements for depreciation with respect to electric transmission utilities are as follows:

As part of the minimum filing requirements, irrespective of whether the utility is filing a new depreciation study or a technical update, the utility is required to file:

- historical additions and retirements (not required for technical updates);
- current-year plant balances by account/sub-account and vintage, if required to do the depreciation calculation; and
- all calculations showing the development of the depreciation rate, depreciation reserve adjustment, and resulting depreciation expense requested by the utility.

If a depreciation study is being filed, the utility is also required to provide:

- the basis for the life and net salvage;
- specific rationale for the selection of each account/sub-account life and net salvage including copies of all field notes, discussions with management, letters, emails, and related correspondence (if not available, a summary sheet is acceptable) as it relates to the depreciation witness; and
- various life and net salvage patterns examined and reasons for acceptance or rejection concerning the finally decided parameters for life and net salvage⁴³⁹

869. The UCA stated that the depreciation study failed to provide the MFR-required reasons for acceptance or rejection of the curves examined. The Commission considers that the purpose of the MFR, as it relates to a depreciation study, is to ensure there is sufficient information on the record to allow the Commission to examine the reasonableness of a utility's proposals, particularly where a change is recommended. Whenever a utility recommends a change in its depreciation parameters, the Commission requires detailed support for the proposed change, not detailed support for rejected alternatives.

870. During the IR phase of the proceeding, Mr. Pous provided an example of the information for each account that he recommended AltaLink provide.⁴⁴⁰ The Commission questioned Mr. Kennedy⁴⁴¹ about the ease of providing this information and its usefulness to AltaLink. Mr. Kennedy indicated that it could be generated using a software package called PowerPlan. However, AltaLink would face significant challenges in completing the asset remapping necessary to use PowerPlan. Mr. Kennedy stated that, while it would be "nice to have" and that he could understand why Mr. Pous would ask for this type of information, a software package such as PowerPlan would come at a significant price. Further, Mr. Kennedy testified that he did not believe having access to more detailed plant categorization would necessarily enhance the depreciation study to the level that would justify the cost and since the province of Alberta uses the equal life group (ELG) procedure, there is already a significant degree of sub-categorization of the utility's plant accounts.

871. The Commission then questioned Mr. Pous about the potential cost of implementing software that might allow for the detailed categorization of plant investment requested. Mr. Pous

⁴³⁹ Minimum Filing Requirements, May 4, 2006, page 15.

⁴⁴⁰ Exhibit 131.02, information responses, AUC.UCA.24.

⁴⁴¹ Transcript, Volume 9, page 1952 to 1957.

disagreed with Mr. Kennedy's testimony regarding the usefulness and value of providing the additional information. He suggested that, in theory, given the magnitude of depreciation expense and the variance in life and salvage parameters, customers might accept the additional costs required to obtain this level of detail. However, he also indicated that, without having seen all the numbers, it might not be worth the cost.⁴⁴²

872. The Commission accepts the evidence of Mr. Kennedy that providing the information Mr. Pous has recommended would require additional software, the cost of which may be significant. Without a business case to support the implementation of new asset management software, the Commission finds there is no reasonable basis, on the evidence in this proceeding, upon which it can direct AltaLink to invest in this software.

873. The Commission also questioned AltaLink as to whether the forecast additions of AC assets and DC assets are similar enough, in terms of service lives, to continue to be grouped together in the same accounts. Mr. Kennedy indicated that, until the assets are built and in service and being maintained and operated, it is too soon to see if there is a need to create and maintain sub-accounts for AC and DC assets. Mr. Kennedy stated that such an examination might be better suited for the next depreciation study.

874. The Commission understands that AltaLink currently has the ability to use plant sub-accounts to track various assets being placed into service. The Commission encourages this practice. For AC and DC assets, the Commission expects AltaLink to maintain the ability to track these distinct assets within sub-accounts in the future. However, the Commission accepts Mr. Kennedy's evidence and will not direct AltaLink to change its practice at this time.

875. With regard to Mr. Pous' request that AltaLink be directed to file a cause of retirement analysis, the Commission asked that Mr. Pous first provide an example of such an analysis.⁴⁴³ Mr. Pous was unable to do so and testified during the hearing that he had never seen a cause of retirement analysis in a regulatory proceeding and had never prepared or filed such a document himself.⁴⁴⁴ Therefore, the Commission denies this request.

876. The Commission finds that the information provided by AltaLink and Mr. Kennedy on the record of this proceeding satisfies the Commission's filing requirements.

8.2 Service life and Iowa curve adjustments

877. The purpose of utility depreciation is to allocate the cost of the utility's assets over its estimated useful service life for the purposes of capital recovery. The average service life resulting from an Iowa curve estimation is the main determining factor of the depreciation rate that, when applied to the cost of the utility assets, determines depreciation expense. During the course of a depreciation study, such as the one filed in this proceeding, service life and Iowa curve recommendations are reviewed by parties with the objective of ensuring that the resultant depreciation rates and expense are supported. This section examines the adjustments proposed by parties respecting the average service life and Iowa curve applicable to each account.

878. AltaLink's proposed service lives for its asset accounts were set out in the depreciation study prepared by Mr. Kennedy and presented in Appendix 8 of the application. The depreciation

⁴⁴² Transcript, Volume 10, page 2190.

⁴⁴³ Exhibit 131.02, information response, AUC.UCA.3(b).

⁴⁴⁴ Transcript, Volume 10, pages 2170, 2201 and 2202.

accrual rates and accrued depreciation were calculated using the straight-line method, the whole-life basis and the ELG procedure. The calculation was based on the attained ages and estimated service life and net salvage characteristics for each depreciable group of assets as of December 31, 2013 and December 31, 2014.

879. Mr. Kennedy stated that his survivor curve recommendations were based on a retirement rate method of analysis, current policies and outlook as determined through ongoing conversations with company personnel, and an examination of historical data of both AltaLink and other electric transmission companies.⁴⁴⁵

880. As indicated earlier in this decision, Gannett Fleming proposed service life and/or survivor curve adjustments for seven of its 15 depreciation study accounts. The UCA challenged the proposed changes for two of the accounts related to service life adjustments (accounts 350.1 and 354) and recommended an adjustment to Account 352, for which AltaLink had not suggested a change.

8.2.1 Account 350.1 – land rights

881. This account includes the investment associated with the payments for rights-of-way required for AltaLink's transmission lines. AltaLink proposed an average service life of 56 years for this account. The UCA recommended an 80-year life or, alternatively, a 65-year life.

882. AltaLink's proposed life-curve combination of 56-L5 for this account represented an increase of four years to the currently approved life-curve of 52-S6⁴⁴⁶ and was based on the fit of the Iowa curve to the observed life table data, which included a review of actual retirements. In his rebuttal evidence, Mr. Kennedy clarified that there is an expectation of nearly \$4 million of retirements forecast to occur in this account that Mr. Pous had not appeared to consider, but which will result in shorter life indications in future studies.⁴⁴⁷ When questioned by the Commission, Mr. Kennedy testified that the reason for the difference between AltaLink's proposed 56-year service life and the service lives used by its peers, which ranged between 36 and 75 years, is explained by the variety of land rights.

883. During questioning by the Commission, Mr. Pous testified that his first recommendation for an 80-year life was based on his personal knowledge of the type of assets in the account. His alternate recommendation of a 65-R4 life-curve was based on a review of historical retirement activity. Mr. Pous stated that it did not make sense to apply a 56-year life to an asset that is perpetual in nature. Moreover, given that AltaLink could not identify the cause of the retirements in the account, he remained unconvinced of the reasonableness of AltaLink's recommended life.⁴⁴⁸

884. In argument, Mr. Pous observed that after a careful review of the data on WP 1254, the actual retirement activity for Account 350.1 is \$0, not \$4 million as referenced by Mr. Kennedy.

⁴⁴⁵ Exhibit 4, AltaLink submission, Appendix 8, Depreciation Study, page II-19.

⁴⁴⁶ Exhibit 108.02, AltaLink submission, updated GTA Schedule 6-3, line 2, March 15, 2013.

⁴⁴⁷ Exhibit 150.05, AltaLink rebuttal evidence, pages 12 and 13.

⁴⁴⁸ Transcript, Volume 10 at page 2213.

Commission findings

885. The Commission has not been able to find the \$4 million in retirements referenced by Mr. Kennedy.

886. In Decision 2011-453, the Commission considered a similar request from the UCA to increase the service life of this account to 80 years. The Commission rejected the request on the basis that the proposal was not “supported by an examination of the actual historic retirement data on the record.”⁴⁴⁹

887. In the present proceeding, it is the evidence of Mr. Kennedy that the proposed increase to the service life of four years is based on his review of actual retirements. Based on this evidence, the Commission approves the application of the 56-L5 life-curve parameters for this account as proposed.

8.2.2 Account 352 – structures and improvements

888. AltaLink did not propose a change to its life-curve combination for this account from the previously approved 50-R2 life-curve and Mr. Kennedy did not provide any narrative for this account in the depreciation study. AltaLink stated in Part IV, at pages 5 through 6, that the continued recommendation of the 50-R2 life-curve was based on the fit of the Iowa curve to the observed life table data. Peer asset information provided by Mr. Kennedy in his additional working papers indicated average service lives ranging between 25 and 65 years for this account.

889. Mr. Pous based his recommendation for a 61-S0.5 life-curve on placing less reliance on fitting the tail portion of the survivor curve and on applying a magnified approach to curve fitting. He also identified a lack of categorization of the investment in this account which would have otherwise pointed to the existence of long-lived assets within the account. Examples of these long-lived assets included parking lots and driveways. Mr. Pous also argued that the sale of the St. Albert office in 2007 was an outlier event and either should have been eliminated or given less weight in evaluating historical data.

890. In argument, Mr. Kennedy pointed to a short term expectation of approximately \$3 million of retirements to occur in this account as a result of AltaLink’s large capital build, which Mr. Pous failed to take into account.⁴⁵⁰ Further, Mr. Kennedy indicated that, with respect to the retirement of the St. Albert office, he gave it virtually no weighting in his life-curve selection.

891. During the hearing, the Commission questioned whether there had been a misclassification of specific assets between Account 352 – structures and improvements (transmission) and Account 390 – structures and improvements (general). Account 390 was described during the hearing by Mr. Kennedy to be related to head office type assets whereas Account 352 related to field offices and buildings. The Commission pointed out that, in response to a UCA IR, AltaLink had identified the “ten largest investments in account 390,”⁴⁵¹ and the list appeared to contain items such as storage yards and marshalling yards, which may have been better suited to categorization under Account 352.

⁴⁴⁹ Decision 2011-453, paragraph 736.

⁴⁵⁰ Exhibit 297.02, AltaLink argument, paragraph 502.

⁴⁵¹ Exhibit 51.01, information response, UCA.AML.20(a).

892. In response, AltaLink indicated that the discrepancy may have been due to transitioning old records to USA/MFR and that, with the issue now brought to the attention of AltaLink, it would be something that AltaLink would address.

Commission findings

893. Although AltaLink did not recommend any change to its previously approved life and Iowa curve parameter of 50-R2 for this account, Mr. Pous proposed a change to a 61-S0.5 parameter.

894. Given AltaLink's acknowledgment during the hearing that there may be some misclassification of certain plant assets between Account 352 and Account 390, AltaLink is directed to incorporate any required corrections and present its recommendations respecting depreciation parameters for each of these accounts in its next depreciation study.

895. Notwithstanding, as the two accounts represent less than 5.0 per cent of total plant in service for AltaLink, the Commission considers it is not necessary to delay making a finding respecting the service life for these accounts pending the review and directs AltaLink to maintain the existing 50-R2 life-curve parameters for Account 352 until it files its next depreciation study.

8.2.3 Account 354 – towers and fixtures

896. AltaLink proposed a small increase in the Iowa curve mode from Iowa R2 to R2.5 and retention of the currently approved 45-year average service life for this account. Peer asset information provided by Mr. Kennedy, in his additional working papers, indicated average service lives ranging between 45 and 65 years for this account.

897. Mr. Pous asserted that the proposed average service life was too short and recommended a minimum increase to a 49-R2 life-curve combination. This recommendation was based on a superior fit, a more current experience band, the type of investment at issue and peer group information.

898. Mr. Kennedy opposed Mr. Pous' recommendation because Mr. Pous had relied on the most recent 20-year experience band covering the period 1991 through 2011 which Mr. Kennedy asserted, excluded nearly 2,500 retirement transactions. These retirement transactions were worth \$21 million and had been taken into consideration in the AltaLink depreciation study.

Commission findings

899. The Commission considers that recent asset additions to this account have been subject to significant technological change and that the 20-year experience band used by Mr. Pous in his analysis is more representative of future retirement expectations for this account than the all-inclusive experience band used by Mr. Kennedy.

900. The Commission also views for this account that, in combination with the peer information indicating longer service lives, the substantial engineering improvements implicit in recent plant additions are already a component of the plant in service and will certainly be in the transmission build currently underway such that expectations going forward for this account indicate a longer service life.

901. For these reasons, the Commission directs AltaLink to incorporate the 49-R2 life-curve for Account 354 as part of its compliance filing to this decision.

8.2.4 Remaining accounts

902. AltaLink proposed changes to previously approved life and Iowa curve parameters for Account 353 – station equipment, Account 353.1 – system communication and control, Account 355 – poles and fixtures, Account 356 – overhead conductors and devices, and Account 392 – transportation equipment – fleet vehicles.

903. Mr. Pous did not raise any issues specific to the life and Iowa curve proposals of AltaLink for these accounts and recommended the same parameters as those indicated by AltaLink in its depreciation study.

904. AltaLink did not propose changes to previously approved life and Iowa curve parameters for Account 358 – underground conductors and devices, Account 390 – structures and improvements, Account 391 – office furniture and equipment, Account 391.1 – computer hardware, Account 391.2 – computer software – non SAP, Account 394 – tools, shop and lab equipment, and Account 396 – power operated equipment.

905. Mr. Pous did not raise any issues specific to the life and Iowa curve proposals of AltaLink for these accounts and recommended the same parameters as those indicated by AltaLink in its depreciation study.

Commission findings

906. The Commission has examined the evidence in the depreciation study and additional working papers with respect to the methodology used and described in Part II, the service life statistics and associated Iowa curve and retirement rate analysis provided in Part IV, and the detailed depreciation calculations provided in both parts II and VI. The Commission has also considered the responses to information requests provided by AltaLink. In addition, both depreciation expert witnesses recommended the same life and Iowa curves for these accounts.

907. The Commission finds that the evidence on record supports the recommendations made by AltaLink and the parameters for these accounts are approved as proposed.

8.2.5 Update to contribution amortization rate

908. Similar to utility capital assets, contributions made by customers towards the construction of those assets can be considered to have a useful service life, which is the basis for determining an amortization rate. Depending on how the contribution has been accounted for within the utility's books, there are several ways to recognize that the contribution is being consumed over the service life. Contribution amortization rates can sometimes mirror those of the asset class to which they are related (excluding any net salvage component), or, as in the case of AltaLink, a system-wide average contribution amortization rate has been developed and used. In either case, when the amortization rate is applied to the historic value of the contributions, it determines the allocated portion of the contribution that is an offset to depreciation expense. This section of the decision examines the contribution amortization rate used by AltaLink in this proceeding.

909. During the proceeding, AltaLink was questioned about the average amortization rate for customer contributions that was used in its application. AltaLink's response to AUC.AML.62(a),

revealed that the amortization rate used in the current application had not been updated since approximately 2004. During the hearing, AltaLink indicated that it was unlikely that the rate would have changed significantly since then and, as such, it was not necessary to change it.

Commission findings

910. The Commission considers that, while the potential change may prove to be insignificant with respect to an updated amortization rate respecting customer contributions, it is reasonable to expect that the capital cost for both plant assets and the corresponding customer contributions should be recovered similarly by the utility using current depreciation parameters.

911. For this reason, the Commission expects that, as part of any future depreciation study or technical update, AltaLink will provide an updated recommendation for its amortization rate related to customer contributions. The contribution amortization rate proposed by AltaLink is approved.

8.2.6 Additional issues not specifically identified by the UCA

912. In an IR response⁴⁵² to the Commission, Mr. Pous indicated that there were “several additional problems with the Company’s depreciation presentation”⁴⁵³ but did not identify any specific concerns.

913. When questioned, he claimed that while there were additional problems, the only problem he could recall was a concern with respect to software systems.⁴⁵⁴ Mr. Pous did not file evidence recommending different service lives for AltaLink’s software accounts despite indicating concerns “associated with the Company’s growing investment in software and the potentially short amortizations associated with such investments.”⁴⁵⁵

914. In argument, the UCA adopted Mr. Pous’ recommendation that, in future depreciation studies, the Commission should direct AltaLink “to provide a detailed listing of each software system and the corresponding dollar value of each software system...provide the date installed, the vendor, the support period provided by the vendor, the purpose of the software, and the physical removal or replacement of software systems rather than amortization levels...”⁴⁵⁶ This information would enable a meaningful analysis of the existing amortization periods.

Commission findings

915. AltaLink’s evidence includes some of the information that the UCA requested with respect to AltaLink’s software assets.⁴⁵⁷ For example, in AltaLink’s response to AUC.AML.45 respecting SAP software, AltaLink provided descriptions of the business processes and functions that the software addresses. Additionally, the response to UCA.AML.23 provided information about the development of the amortization periods, including a policy statement for intangible assets under IAS 38.⁴⁵⁸

⁴⁵² Exhibit 131.02, information response, AUC.UCA.23.

⁴⁵³ Exhibit 110.03, UCA submission, Q&A 69.

⁴⁵⁴ Transcript, Volume 10, page 2207.

⁴⁵⁵ Exhibit 110.03, UCA submission, Q&A 70.

⁴⁵⁶ Exhibit 299.02, UCA argument, paragraph 114.

⁴⁵⁷ Exhibit 50.05, information response, AUC.AML.45 and Exhibit 51.01, UCA.AML.23.

⁴⁵⁸ Exhibit 51.01, information response, UCA.AML.23(g).

916. The detailed information that the UCA has requested is found more commonly in the business case proposing the initial software acquisition and the Commission finds that a depreciation study need not include this type of detailed information.

917. The record shows that other than the non-SAP software assets, which are amortized on a 5-SQ life-curve, all other software assets of AltaLink are SAP-related and have been categorized into two, five or ten year service lives or amortization periods. If Mr. Pous has evidence that the service lives recommended by AltaLink are inadequate, then the Commission encourages Mr. Pous to place this evidence on the record in a future proceeding.

918. However, the Commission finds that the evidence placed on the record of this proceeding supports the recommended service lives of the computer software in question and the Commission approves the continued use of the SAP service lives of two, five and ten years.

919. The Commission makes no findings with respect to Mr. Pous' general, but unspecified, concerns regarding AltaLink's depreciation study.

8.3 Net salvage rate adjustments

920. In utility depreciation practices, net salvage refers to the difference between the funds the company receives as a result of the asset retirement (gross salvage) and what it anticipates it will cost to retire its assets from utility service (cost of removal). The estimate of net salvage is recovered as a component of depreciation expense. During the course of a depreciation study, an analysis is undertaken to ensure that the net salvage being collected reflects future retirement cost expectations. This section examines the adjustments proposed by parties respecting the net salvage per cent for each account.

921. Gannett Fleming based its recommended net salvage per cent estimates on its professional judgment, historical data up to 2011 and comparisons with peer electric transmission utilities.⁴⁵⁹ Net salvage expressed as a per cent of the cost of plant retired was calculated for each account on an annual basis. Mr. Kennedy's approach⁴⁶⁰ examined the three-year rolling averages, the most recent five-year average and the overall band itself.

922. AltaLink proposed salvage rate adjustments for five of its 15 depreciation study accounts. The UCA took issue with the proposed changes for four of the accounts related to salvage rate (accounts 352 to 355).

8.3.1 Account 352 – structures and improvements

923. AltaLink recommended a net salvage of -10.0 per cent for Account 352 over the test period. This proposal reflected an increase of -5.0 per cent to the currently approved net salvage per cent of -5.0 per cent and was recommended on the basis of using the traditional net salvage study provided at Part V-3 of the depreciation study.

924. Over the period 2001 to 2011, net salvage, as a percentage of the original cost of the assets retired in each year, has ranged between zero and -201.0 per cent with an overall net salvage per cent of -15.0. Three-year moving averages range from zero per cent

⁴⁵⁹ Exhibit 4, AltaLink submission, Appendix 8, Depreciation Study, Part II-28.

⁴⁶⁰ Transcript, Volume 8, page 1883.

and -221.0 per cent and the most current five-year average resulted in a net salvage of -15.0 per cent.

925. Mr. Kennedy indicated that because the most recent two year period was not consistent with historic activity, it was necessary to adjust the weighting applied to 2010 and 2011 to 50.0 per cent when compared to previous years analyzed. This adjustment resulted in a recommended net salvage of -10.0 per cent.

926. Mr. Pous recommended that the currently approved net salvage of -5.0 per cent be maintained because the change proposed by AltaLink was unreasonable and not supported.

Commission findings

927. The Commission makes no findings with respect to the net salvage proposals for Account 352 – structures and improvement, of either Mr. Kennedy or Mr. Pous, at this time, since the issues observed earlier in this decision, with respect to misclassification of plant assets between Account 352 and 390, may apply equally to the net salvage that has been recorded.

928. The Commission directs AltaLink to maintain the existing -5.0 per cent net salvage parameters for Account 352 until such time as AltaLink investigates and corrects any misclassification of plant assets between Account 352 and Account 390. The Commission directs AltaLink to provide updated recommendations for accounts 352 and 390 based on corrected data at the time of its next depreciation study.

8.3.2 Account 353 – station equipment

929. AltaLink recommended a net salvage of -15.0 per cent for Account 353 over the test period. This proposal reflects an increase of -5.0 per cent to the currently approved net salvage of -10.0 per cent and was recommended based on the use of a traditional net salvage study provided at part V-4 and V-5 of the depreciation study.

930. Over the period 1985 to 2011, net salvage, as a percentage of the original cost of the assets retired in each year, has ranged between 2.0 per cent and -181.0 per cent with an overall net salvage of -16.0 per cent. Three-year moving averages range from 13.0 per cent and -56.0 per cent and the most current five-year average resulted in a net salvage of -19.0 per cent.

931. Mr. Kennedy indicated that retirement activity in the most recent two year period is consistent with historic activity and, therefore, he applied the same weighting to 2010 and 2011 as was applied to all previous years analyzed. This resulted in a recommended net salvage of -15.0 per cent.

932. Mr. Pous recommended maintaining the currently approved net salvage of -10.0 per cent. He stated that AltaLink did not identify what assets had been retired, why there was no gross salvage and why historical transactions were a reliable indicator for estimating future retirements. Mr. Pous also asserted that, as there were almost \$20 million of asset retirements in 2009, which resulted in a -6.0 per cent net salvage reported, there might be economies of scale that can result in less negative levels of net salvage.

Commission findings

933. The Commission considers that the results presented in the net salvage analysis support the recommendations of Mr. Kennedy and that Mr. Pous did not provide an explanation of why economies of scale respecting net salvage levels in 2009 could be carried forward into future years.

934. The Commission approves AltaLink's proposal for a net salvage per cent for Account 353 of -15.0 per cent.

8.3.3 Account 354 – towers and fixtures

935. AltaLink recommended a net salvage of -7.0 per cent for Account 354 over the test period. This proposal reflects an increase of -2.0 per cent to the currently approved net salvage of -5.0 per cent and was recommended based on the use of a traditional net salvage study provided at part V-8 of the depreciation study.

936. Over the period 2005 to 2011, net salvage, as a percentage of the original cost of the assets retired in each year, has ranged between 166.0 per cent and -70.0 per cent with an overall net salvage of -7.0 per cent. Three-year moving averages range from 10.0 per cent and -19.0 per cent and the most current five-year average resulted in a net salvage of -10.0 per cent.

937. Mr. Kennedy indicated that retirement activity in the most recent two-year period is consistent with historic activity and therefore the weighting applied to 2010 and 2011 is the same as all previous years analyzed. This resulted in a recommended net salvage of -7.0 per cent.

938. Mr. Pous recommended maintaining the currently approved net salvage of -5.0 per cent since his analysis of the database did not justify the -2.0 per cent increase proposed by AltaLink. Mr. Pous was also critical of the fact that AltaLink's cost of removal is based on project managers' estimates of man hours and asserted that there was no basis for a change from the approved net salvage of -5.0 per cent.

Commission findings

939. The Commission has examined the net salvage data provided by Mr. Kennedy, and agrees with Mr. Pous that there is insufficient historical information in the analysis to support moving away from the approved net salvage of -5.0 per cent.

940. The Commission directs AltaLink to retain its current net salvage of -5.0 per cent for Account 354, and to incorporate the effects of this as part of its compliance filing in this decision.

8.3.4 Account 355 – poles and fixtures

941. AltaLink recommended a net salvage of -45.0 per cent for Account 355 over the test period. This proposal reflects a decrease of 7.0 per cent from the currently approved net salvage of -52.0 per cent and was recommended based on the use of a traditional net salvage study provided at parts V-9 and V-10 of the depreciation study.

942. Over the period 1985 to 2011, net salvage, as a percentage of the original cost of the assets retired in each year, has ranged between 17.0 per cent and -289.0 per cent with an overall

net salvage average of -31.0 per cent. Three-year moving averages range from 29.0 per cent and -112.0 per cent and the most current five-year average resulted in a net salvage of -52.0 per cent.

943. Mr. Kennedy provided a weighting of 67.0 per cent to the most recent five-year band and a weighting of 33.0 per cent to the 1985 through 2011 indications. This adjustment resulted in a recommended net salvage of -45.0 per cent and was viewed as consistent with indications provided by the Commission in the last study, where the most recent five-year rolling band supported the currently approved -52.0 per cent net salvage.

944. Mr. Pous recommended adjusting the currently approved net salvage of -52.0 per cent to -40.0 per cent based on the 10-year average of net salvage as a per cent of retirements, which provided a “level of robustness to the database yet does not incorporate data that is so old as to be considered stale.”⁴⁶¹

Commission findings

945. The Commission considers that Mr. Pous did not provide adequate evidence of why data prior to 2002 should be considered stale and therefore irrelevant for the purposes of examining historical net salvage.

946. The Commission acknowledges that, while Mr. Kennedy did consider the years 1985 to 2011, he also adjusted the weight of the older data. The Commission agrees that this is a reasonable solution and considers that this methodology captures the trend towards a less negative net salvage for this account.

947. The Commission approves AltaLink’s proposed net salvage of -45.0 per cent for Account 355.

8.3.5 Remaining accounts

948. AltaLink proposed changes to the previously approved net salvage per cent parameter for Account 353.1 – system communication and control.

949. Mr. Pous did not raise any issues specific to the net salvage per cent proposals of AltaLink for this account and recommended the same parameter as that used by AltaLink in its depreciation study.

950. AltaLink did not propose changes to previously approved net salvage per cent parameters for Account 390 – structures and improvements, Account 392 – transportation equipment – fleet vehicles, or Account 396 – power-operated equipment.

951. Mr. Pous did not raise any issues specific to the net salvage proposals of AltaLink for these accounts and recommended the same parameters as those used by AltaLink in its depreciation study.

Commission findings

952. The Commission has examined the evidence in the depreciation study and additional working papers with respect to the net salvage methodology used in Part II, and the net salvage statistics provided in Part V. The Commission also relied on the responses to information

⁴⁶¹ Exhibit 110.03, UCA submission, Q&A 34.

requests provided by AltaLink. In addition, the Commission notes that both depreciation expert witnesses recommend the same net salvage percentages as those indicated by AltaLink.

953. The Commission finds that the evidence on the record supports the recommendations made by AltaLink and the net salvage parameters for these accounts are approved.

8.3.6 Disclosure of gross salvage and cost of removal

954. The Commission observed that, in Part V of AltaLink's depreciation study, there was no separate disclosure of gross salvage and cost of retirement amounts for the most recent years of 2010 and 2011, as had been provided on a historical basis in past studies. When questioned in the hearing, Mr. Kennedy explained⁴⁶² that the information did in fact exist and thought that the information for 2010 and 2011 would be provided in future studies.

Commission findings

955. The Commission observes that the historical information contained in Part V of AltaLink's depreciation study includes the cost of removal and gross salvage components of net salvage and provides useful indications of trending with respect to the costs incurred or funds received by AltaLink as it retires its assets from service.

956. This information should continue to be available to parties in future depreciation studies, and the Commission directs AltaLink to ensure that, in addition to the years 2010 and 2011 being restated for the missing information, subsequent years be treated in a similar manner.

8.4 Alternative depreciation methodologies

957. During the proceeding, the Commission questioned the expert depreciation witnesses regarding the advantages and disadvantages of applying alternative depreciation methodologies as a means to effect rate mitigation for end-use consumers in the face of AltaLink's significant transmission build. In addition, there was a related discussion concerning depreciation expense and credit metrics between the UCA and Mr. Kennedy.

958. With regard to the impact of changes to depreciation expense and its impact on the credit metrics of the utility, Mr. Kennedy testified that, despite AltaLink's concerns regarding depreciation adjustments and their impact on credit metrics as raised in the last AltaLink proceeding, it was his mandate to undertake the development of nothing other than "a depreciation study that results in correct depreciation rates."⁴⁶³

959. AltaLink further stated that, "if there are adjustments to the depreciation numbers and that has an impact on the credit metrics, we would be looking to see the Commission make that up someplace else in the various pieces of relief that we have asked for."⁴⁶⁴

960. In response to the Commission's exploration of whether it was possible to achieve rate mitigation through the use of alternative depreciation methodologies, Mr. Kennedy agreed that, due to AltaLink's investment base continuing to grow at a fast pace, there will be corresponding increases in depreciation expense. However, when questioned about the use of an alternative methodology, such as unit of production or unit of consumption, to measure the service life of an

⁴⁶² Transcript, Volume 9, page 1939 and 1940.

⁴⁶³ Transcript, Volume 8, page 1844.

⁴⁶⁴ Transcript, Volume 8, page 1846 and 1847.

asset, Mr. Kennedy confirmed that, while the asset life itself is dictated by a number of factors influencing retirement (e.g., wear and tear and technological change), determining the correct unit of measurement for an asset's service life is a separate issue. Traditionally, the measurement unit for transmission systems has been years, which has resulted in the measurement of depreciation expense being aligned with the consumption of the service value of the asset.

961. Mr. Kennedy also discussed the challenge in determining the values for the numerator and denominator in the mathematical formula of a unit, or consumption-based approach. Mr. Kennedy cautioned against adopting a methodology that resulted in "simply deferring depreciation expense that is really accountable to today's toll payers, our customers, to tomorrow's,"⁴⁶⁵ and stressed that the examination of alternative depreciation methodologies is something that needs to be done on an industry-wide basis.

962. When asked whether other jurisdictions employed unit, or consumption-based methodologies, Mr. Kennedy said that the oil, gas and pipeline industries often use a unit of production method, but could not identify where a consumption-based approach was used by an electric transmission utility. Mr. Kennedy clarified the approach was successful in the oil, gas and pipeline industries because of the ability to reasonably estimate, for example, the total terajoules of natural gas potential in a field (denominator) and measure the movement of that gas through a pipeline (numerator).

963. AltaLink also indicated that, while it is not at a stage where it had determined how a unit of production, or unit of consumption, method would work, there had already been difficulties identified such as the fact that AltaLink has only one customer, the AESO, and that the services provided by AltaLink to the AESO are not volume-based. Further, AltaLink advised that its accounting policy with respect to depreciation is approved by the Commission and that AltaLink is prepared to be involved in a wider discussion of changes in the way that depreciation life studies are conducted.

964. Mr. Pous expressed similar concerns to that of Mr. Kennedy regarding the unit or consumption-based methodology within the context of an electric transmission utility.⁴⁶⁶ Mr. Pous was not aware of any jurisdiction that used such a methodology for electric transmission utilities.

965. In addition, Mr. Pous briefly described three other depreciation methodologies for consideration: (1) strict use of useful life where, for an asset with a 50-year life, 1/50th of its cost would be taken as depreciation expense each year; (2) using the average life group approach instead of the equal life group method; or (3) spreading any amortization of reserve differences over a shorter period of time instead of over the remaining life.

966. In argument,⁴⁶⁷ AltaLink summarized the risks associated with the application of a unit or consumption-based methodology within the context of transmission:

- (a) goals of the new depreciation methodology and process need to be clearly defined;
- (b) units must be measurable, definable, defensible and difficult to manipulate;

⁴⁶⁵ Transcript, Volume 9, page 1925.

⁴⁶⁶ Transcript, Volume 10, pages 2182 to 2189.

⁴⁶⁷ Exhibit 297.02, AltaLink argument, paragraph 513.

- (c) there must be safeguards to prevent parties from either accelerating or deferring beyond the actual consumption of the item to avoid generational equity issues;
- (d) this issue must be considered in light of the entire credit metric support package; and
- (e) any alternative depreciation process must be conducted on an industry-wide basis.

967. Neither the UCA nor Mr. Pous commented on this topic in argument or reply argument.

Commission findings

968. During AltaLink's last GTA proceeding,⁴⁶⁸ the Commission also raised the issue of exploring alternative approaches of depreciation with a view toward tariff levelization in future GTAs once AltaLink's large capital build was over.

969. During that proceeding, similar concerns to those described in this proceeding were expressed by AltaLink and the UCA, and in Decision 2011-453, the Commission clarified that it was not the intent of the Commission to institute significant changes, but to explore what future action, if any, might be considered.

970. The information provided by the parties during the hearing respecting alternative depreciation methodologies for transmission assets was helpful and added to the Commission's understanding of difficulties that may be encountered with a unit or consumption-based approach to depreciation.

9 Financial and return on rate base matters

9.1 Credit metrics

971. AltaLink raises money on the financial markets through a limited partnership structure called AltaLink L.P. or ALP. AltaLink is evaluated by credit rating agencies and obtains its credit rating through ALP.

972. AltaLink advised that its credit metrics (financial ratios) are forecast to be under continued pressure during the test period due to its unprecedented build forecast coupled with the need for AltaLink to finance its forecast build. In past applications and proceedings, the Commission has addressed the potential negative impacts to AltaLink's credit metrics arising from its robust capital program and has granted relief measures that it would be unlikely to approve in normal circumstances. For example, in Decision 2011-453,⁴⁶⁹ the Commission approved construction work in progress (CWIP) in rate base treatment and a continuation of federal future income taxes (FIT) for AltaLink. In Decision 2009-216,⁴⁷⁰ the Commission awarded a three per cent increase in common equity ratios to all electric transmission utilities, including a one percentage point increase in recognition of the impacts of the large capital additions forecast by these utilities and the resulting negative impacts on their credit metrics. As well, in Decision 2011-474,⁴⁷¹ the Commission awarded a one percentage point increase in

⁴⁶⁸ Application No. 1606895, Proceeding ID No. 1021, 2011-2013 General Tariff Application.

⁴⁶⁹ Decision 2011-453: AltaLink Management Ltd., 2011-2013 General Tariff Application, Application No. 1606895, Proceeding ID No. 1021, November 18, 2011.

⁴⁷⁰ Decision 2009-216: 2009 Generic Cost of Capital, Application No. 1578571, Proceeding ID. 85, November 12, 2009.

⁴⁷¹ Decision 2011-474: 2011 Generic Cost of Capital, Application No. 1606549, Proceeding ID No. 833, December 8, 2011.

common equity in order to maintain the level of relief contemplated in Decision 2011-453 due to a reduction in the approved return on equity (ROE) level.

973. AltaLink testified about its significant business concern regarding its credit metric situation:

A. MR. FREHLICH: You know, Ms. Wall, I would maybe like to simplify this because there's been lots of words going on here. I'm not a finance guy. I'm not a ratings guy, but this is a pretty simple business for me. We are running at a risk that's below normal for ratings. We're running at 10 percent. You know, we talk about 9.6 and 9.9 and 10.2, and I'm sitting here going we have little control over what S&P may choose to do. We won't get notice. We'll get informed. The downgrade cost and the consequence to us and the customers is much more severe than the incremental ask we have put forward to get our credit metrics moving slightly above a floor. And it's just basic business risk management, and if it was my decision, I would already have made the decision to move to the credit metric support because the consequence is substantial. So no disrespect to all the finance guys and all the ratings guys and talking around this little column of It's -- we're so far below what a normal A rating is. We've been there for five years. I don't know how we've managed to keep our A rating. And when something like the SNC situation occurs and we have been able to pull equity from SNC on an as-needed, as-requested basis and there's been no indication whatsoever that that is going to stop and out of the blue I get a call that SNC is putting us on negative outlook -- sorry, S&P is putting us on negative outlook because SNC maybe might not be able to give us equity, it is very concerning to me, because now I reflect that we have little or no control over what S&P may choose to do. So I have nothing else to say on this topic, so I just wanted to give that business context.⁴⁷²

974. The Commission continues to find it necessary to assess AltaLink's credit metrics bearing in mind the substantial capital program it has forecast. Indeed, the Commission's findings in many sections of this decision have been informed by the potential impact that these decisions otherwise may have had on AltaLink's cash flow situation. The current cost to rate payers to provide the credit metric relief previously approved by the Commission and which AltaLink continues to apply for is substantial and, as stated by AltaLink, only moves credit metrics slightly. Consequently, the Commission considers that it is in the interest of all stakeholders for AltaLink to investigate and, where it is able to do so, implement alternative business solutions to help alleviate the pressure being placed on its credit metrics.

975. In other sections of this decision, the Commission has found that an aggressive capital program in conjunction with aggressive or unachievable in-service dates are issues that need to be addressed by all stakeholders in Alberta. These issues are the principal cause of the credit metric pressure currently facing AltaLink. Examining these issues with all affected stakeholders is likely to provide the best possible solution for ratepayers and AltaLink alike, as well as to reduce the financial pressure on AltaLink and similarly-affected TFOs.

9.1.1 Credit metric support

976. AltaLink requested the following credit metric relief during the test period:

- continuation of the CWIP in rate base relief granted in Decision 2011-45

⁴⁷² Transcript, Volume 7, page 1377, line 10 to page 1378, line 16.

- continuation of the FIT method for recovering costs for federal income taxes, as granted in Decision 2011-453 and Decision 2009-151
- approval to use the FIT method for provincial taxes
- a temporary increase of two per cent in AltaLink's deemed equity ratio to 39 per cent⁴⁷³

977. AltaLink explained that the risk of a credit rating downgrade is asymmetric. If AltaLink's credit metrics fall below the required level, even by a small amount, the cost of the downgrade will be fully borne by ratepayers.

978. AltaLink stated that without the requested relief, its stand-alone FFO/debt ratio under its forecast capital base plan will be 9.6 per cent in 2013 and 9.3 per cent in 2014.⁴⁷⁴ In the past, a tax uplift of approximately 1.0 per cent has compensated for the difference between the FFO/debt ratio calculated from its capital forecast and the 10 per cent FFO/debt ratio target.⁴⁷⁵ The tax uplift reflects the fact that while AltaLink collects tax revenue, taxes are paid by the partners. The FFO/debt ratio increases accordingly. AltaLink advised that the deemed tax uplift has eroded to between 0.6 per cent and 0.5 per cent in 2013 and 2014, respectively.⁴⁷⁶ As a result, AltaLink's forecast FFO/debt ratio without any further credit metric relief, inclusive of the deemed tax uplift, is 10.1 per cent in 2013 and 9.7 per cent in 2014.

979. On May 23, 2013, AltaLink was placed on negative outlook by Standard & Poor's (S&P). AltaLink was advised and not consulted. AltaLink witnesses concluded that this knock on effect was primarily the result of AltaLink's unacceptably weak credit metrics,⁴⁷⁷ as other SNC-Lavalin Group Inc. (SNC-Lavalin) subsidiaries were not placed on negative watch at the same time.⁴⁷⁸

980. AltaLink submitted that there was no serious objection from interveners in this proceeding that the credit metric relief measures previously approved by the Commission, being CWIP in rate base and federal FIT, should be discontinued.

Commission findings

981. There is no dispute that AltaLink's accounts continue to reflect abnormally high levels of construction work in progress. In particular, updated schedules show that the direct assign related CWIP is forecast to be at 40 per cent of total rate base in 2013 and 2014.⁴⁷⁹

982. Further, the Commission agrees with AltaLink's observation that no party objected to the continuation of the credit metric relief measures previously approved by the Commission. The Commission finds that the justification for providing this relief in past test years is no less compelling for this future test period. The Commission approves continuation of CWIP in rate base and continuation of the FIT method for federal income taxes for the test years 2013 and 2014.

⁴⁷³ Exhibit 3, page 28-2, paragraph 878.

⁴⁷⁴ Exhibit 150.02, page 108, Figure 8.4-2.

⁴⁷⁵ Decision 2011-453, page 140, paragraph 791.

⁴⁷⁶ Exhibit 3, page 28-7, Figure 28.2.4.3-1.

⁴⁷⁷ Transcript, Volume 7, page 1374, line 25 to page 1375, line 4.

⁴⁷⁸ Transcript, Volume 7, page 1375, lines 4-10.

⁴⁷⁹ Exhibit 108.02, Schedule 31.2-A, lines 12 and 26.

983. The following sections address AltaLink's request for additional credit metric relief for the test period.

9.1.2 FFO to debt ratio and risk of a downgrade

984. AltaLink stressed the importance of obtaining the Commission's approval for the additional credit metric relief measures, which AltaLink claimed were necessary to enable AltaLink to maintain its A category credit rating.⁴⁸⁰ AltaLink stated that the FFO/debt ratio for an A rating should be in the 11.1 to 14.3 per cent range.⁴⁸¹

985. AltaLink has forecast direct assign capital expenditures of \$1.5 billion and \$1.7 billion in 2013 and 2014, respectively, requiring nearly \$2 billion of debt financing.⁴⁸² This represents significantly higher expenditures than AltaLink forecast in its 2011-2013 GTA. If no additional credit metric relief is granted, then AltaLink's stand-alone FFO/debt ratio would be as follows:

- 9.6 per cent in 2013 and 9.3 per cent in 2014 using the base plan capital forecast⁴⁸³
- 9.9 per cent in 2013 and 9.5 per cent in 2014 using the uncertainty adjusted capital forecast⁴⁸⁴

986. AltaLink noted that, if the deemed tax uplift that arises from the partnership structure is added to the stand-alone FFO/debt ratio, AltaLink's revised FFO/debt ratio would be as follows:

- 10.2 per cent in 2013 and 9.8 per cent in 2014 using the base plan capital forecast⁴⁸⁵
- 10.5 per cent in 2013 and 10.0 per cent in 2014 using the uncertainty adjusted capital forecast⁴⁸⁶

987. The deemed tax uplift is discussed in greater detail in Section 9.1.5 below.

988. AltaLink submitted that it would still remain at serious risk of a downgrade if the impact of provincial FIT were added to the above scenario as its FFO/debt ratios would then be as follows:

- 10.7 per cent in 2013 and 10.3 per cent in 2014 using the base plan capital forecast⁴⁸⁷
- 10.9 per cent in 2013 and 10.4 per cent in 2014 using the uncertainty adjusted capital forecast⁴⁸⁸

989. Mr. Fetter provided expert testimony on behalf of AltaLink in support of AltaLink's request for additional credit metric relief. He testified that, absent the relief requested, there was a serious risk of a downgrade and, further, there was nothing temporary about AltaLink's sustained weak credit metrics. He stated:

⁴⁸⁰ Transcript, Volume 1, page 37, lines 3-17.

⁴⁸¹ Decision 2009-216, Table 12 and paragraph 354.

⁴⁸² Exhibit 108.01, Schedule 3-2.2013(iii) and 3-2.2014(iii).

⁴⁸³ Exhibit 150.02, page 108, Figure 8.4-2.

⁴⁸⁴ Exhibit 150.02, page 108, Figure 8.4-1.

⁴⁸⁵ Exhibit 150.02, page 108, Figure 8.4-2 and Exhibit 3, page 28-7, Figure 28.2.34.3-1.

⁴⁸⁶ Exhibit 150.02, page 108, Figure 8.4-1 and Exhibit 3, page 28-7, Figure 28.2.34.3-1.

⁴⁸⁷ Exhibit 150.02, page 108, Figure 8.4-2 and Exhibit 3, page 28-7, Figure 28.2.34.3-1.

⁴⁸⁸ Exhibit 150.02, page 108, Figure 8.4-1 and Exhibit 3, page 28-7, Figure 28.2.34.3-1.

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16 Is there a distinction in your mind between "would give rise
17 to a serious risk of a downgrade" versus "credit rating
18 downgrades would be probable, rather than simply possible"?

19 A. MR. FETTER: Those two statements can be
20 correlated together. In the application, which is on its
21 face stronger language, but it assumes that a decision that
22 allows the 10 percent FFO to debt to go below or stay below
23 for a certain period of time would be viewed as a less than
24 constructive Commission decision.

25 And as I'm on record in the last GTA and in 01343
1 this GTA, this Commission, in the eyes of the investment
2 community, is viewed very positively. So if a decision were
3 to come out which was not supportive, as they have been in
4 the past, it would be the 10 percent FFO-to-debt threshold
5 coupled with a less constructive regulatory climate.
6 And so under those circumstances I think,
7 certainly, the word "probable" would be appropriate.
8 And if I could just add with regard to the
9 first statement you said, Ms. Wall, even if this Commission
10 were to provide a somewhat constructive decision here, if
11 that 10 percent FFO-to-debt level was still kind of close,
12 then a negative event of another kind could lead to a serious
13 risk of a downgrade. So that this Commission could be
14 supportive, but as long as that number stays near 10 percent
15 or slightly above -- I'd say between the 10, 11 percent
16 range, up to 12 percent, then there's a vulnerability that an
17 external impact could create the serious risk of a
18 downgrade -- could result in a downgrade.⁴⁸⁹

990. Mr. Fetter added:

Furthermore, compounding the forecasted weakness in AltaLink's FFO/debt ratio, the rating agencies are fully aware of the pressure on AltaLink's cash flow that has existed all the way back to the commencement of the 2011-2013 GTA over two years ago. Based on my experience as a bond rater tracking weaknesses in utility credit profiles on an ongoing basis, I can say with confidence that continuing forbearance on the part of rating agencies can never be counted on as a sure thing.⁴⁹⁰

991. AltaLink noted that, with all the additional credit metric relief measures it had requested, it barely met the 11.1 per cent floor, a target that first arose in the Commission's 2009 Generic Cost of Capital (GCOC) decision.⁴⁹¹ Even if the Commission's target range from that decision remains appropriate today, AltaLink submitted that it should not be right at or below the absolute floor, because the risk of a downgrade was simply too great.⁴⁹² AltaLink's FFO/debt ratio will barely reach 11.1 per cent in 2013 and will fall below 11.1 per cent in 2014:

⁴⁸⁹ Transcript, Volume 7, page 1343, line 16 to page 1344, line 18.

⁴⁹⁰ Exhibit 150.04, page 6, lines 14 through 21.

⁴⁹¹ Decision 2009-216, Table 12 and paragraph 354A.

⁴⁹² Exhibit 297.02, paragraph 521.

- 11.1 per cent in 2013 and 10.8 per cent in 2014 using the base plan capital forecast plus the tax uplift, plus provincial FIT, plus temporary increase in equity thickness⁴⁹³
- 11.4 per cent in 2013 and 11.0 per cent in 2014 using the uncertainty adjusted capital forecast plus the tax uplift, plus provincial FIT, plus temporary increase in equity thickness⁴⁹⁴

992. In addition, AltaLink stated that, when assessing the threshold of 11.1 per cent, the following key facts should be considered:

- The 11.1 to 14.3 per cent FFO/debt ratio range flowed from the 2009 GCOC proceeding. In 2009, the concept of critical transmission infrastructure (CTI) had just been established whereas, in the 2013-2014 test period, AltaLink will be in full execution of major projects including CTI.
- Mr. Fetter testified that rating agencies expect the FFO/debt ratio to trend considerably higher than 10 per cent, and that the Commission should be working towards 12 per cent. After the big build, the Commission should target 20 per cent as this is the range accepted by S&P as the level for an A level credit rating.⁴⁹⁵
- AltaLink is striving to achieve the base plan and expects to exceed the 2013 uncertainty adjusted forecast by approximately \$100 million. An additional \$100 million in expenditures would reduce the FFO/debt ratio by 0.15 per cent.⁴⁹⁶

993. AltaLink argued that there are several compounding factors that have increased the risk of a downgrade. In particular, rating agencies have become more conservative and “upfront” with investors.⁴⁹⁷ S&P has issued Requests for Comment on proposed criteria for rating corporate issuers and expects 10 per cent of the corporate debt issuers, which it rates, will experience a downgrade if its current criteria are implemented as planned. If adopted, ratings using the new criteria would be issued in Q4 2013 to Q1 2014, which occur right in the heart of AltaLink’s build.⁴⁹⁸ Other factors that put AltaLink at increased risk of a credit rating downgrade include:

- AltaLink’s credit metrics have been below A quality for a sustained period and will deteriorate further, without credit support, over the test period.⁴⁹⁹
- The Commission’s finding in the 2012 GCOC regarding responsibility for stranded costs is a significant issue for utilities and rating agencies.

994. The CCA argued that credit rating agencies are fully aware of the temporary nature of the decline in AltaLink’s FFO/debt ratio and that, further, the FFO/debt ratio is only one of the factors considered by rating agencies.⁵⁰⁰ The CCA submitted that the balancing nature of how credit standing is assessed is exemplified in the following statement by S&P:

The ratings on ALP reflect Standard & Poor's opinion of the company's excellent business risk profile and significant financial risk profile. In our view, supportive

⁴⁹³ Exhibit 150.02, page 108, Figure 8.4-2 and Exhibit 3, page 28-7, Figure 28.2.34.3-1.

⁴⁹⁴ Exhibit 150.02, page 108, Figure 8.4-1 and Exhibit 3, page 28-7, Figure 28.2.34.3-1.

⁴⁹⁵ Transcript, Volume 7, page 1349, lines 5 to 10.

⁴⁹⁶ Transcript, Volume 7, page 1359, line 23 to page 1360, line 4.

⁴⁹⁷ Transcript, Volume 7, page 1374, lines 24 to 25.

⁴⁹⁸ Exhibit 297.02, paragraph 53 and 54.

⁴⁹⁹ Exhibit 4, Appendix 17, page 2.

⁵⁰⁰ Exhibit 302.01, paragraph 60.

regulation, predictable cash flows and monopoly electricity transmission assets, with a favorable market framework for transmission companies in the Province of Alberta support the ratings. We believe ALP's credit metrics (which are at the low end of the range for the ratings), large capital program, and large equity requirements from the ultimate owner offset these strengths.⁵⁰¹

995. The CCA argued that the excellent business risk profile of AltaLink had not been adequately factored into AltaLink's request for credit metric enhancement. Further, any change in the deemed uplift in credit metrics from AltaLink's tax treatment as a limited partnership should be effectively offset if provincial FIT treatment were approved. The CCA also noted the final determination on stranded costs and how this principle would be applied to utilities will not be made until the Commission issues its ruling in the Utility Asset Disposition Proceeding ID No. 20.⁵⁰²

996. The UCA stated that in Decision 2011-453, the Commission agreed with AltaLink that a FFO/debt ratio of 10 per cent should be considered the floor below which a downgrade in AltaLink's credit rating is possible. However, the Commission did not consider that this one metric was the only consideration or that any deviation below 10 per cent, even a relatively small or temporary one, would necessarily lead to a downgrade.⁵⁰³ Rather, the Commission stated:

795 ...the Commission reaffirms its opinion, expressed in Decision 2009-151 that no one factor in isolation can determine the effect on company's credit rating. In that regard, the Commission agrees with the UCA witnesses that small deviations from the ten per cent FFO/debt target are unlikely to trigger a downgrade.⁵⁰⁴ [footnote omitted]

997. The UCA noted that in the 2011 GCOC proceeding, the Commission confirmed that the range set for credit metrics in 2009 remained appropriate. In her evidence, Ms. Radway reviewed the credit metrics for AltaLink and observed that the only metric that did not meet the Commission metric threshold established in Decision 2009-216 and confirmed in Decision 2011-474 is the FFO/debt ratio.⁵⁰⁵ Further, Ms. Radway noted that the Commission had recognized that a drop in the FFO/debt metric below 10 per cent for a short duration does not necessarily mean a downgrade will occur.⁵⁰⁶

998. The UCA submitted that the Commission's finding with respect to the attention paid by credit rating agencies to overall favourable regulatory treatment and sustained regulatory support is a critical one. The UCA contended that DBRS Limited (DBRS) supported this view in its most recent rating report⁵⁰⁷ of March 19, 2013 (March DBRS report).⁵⁰⁸ In that report, DBRS confirmed the A rating for AltaLink, L.P., the Alberta-regulated transmission business of which accounts for 100 per cent of its earnings.⁵⁰⁹ The UCA asserted that the March DBRS report revealed that:

⁵⁰¹ Exhibit 157.01, Appendix C.

⁵⁰² Exhibit 307.01, paragraph 22.

⁵⁰³ Exhibit 299.02, paragraph 180.

⁵⁰⁴ Decision 2011-453, paragraph 795.

⁵⁰⁵ Exhibit 110.02, A10, page 6.

⁵⁰⁶ Exhibit 110.02, A13, page 9, and Decision 2011-453, paragraph 795.

⁵⁰⁷ Exhibit 160.

⁵⁰⁸ Exhibit 299.02, paragraphs 188 and 189.

⁵⁰⁹ Exhibit 160.00, page 1.

- So long as the existing credit metric relief measures (CWIP in rate base and federal FIT) remain in place for this GTA, DBRS does not anticipate a downgrade.
- Regulation in Alberta has remained supportive for AltaLink L.P.
- Although DBRS is aware that AltaLink has asked for additional credit metric relief measures, it does not indicate that it expects those measures to be granted or that its continued A rating for AltaLink L.P. depends on that relief being granted.
- After specifically identifying the existing measures of CWIP in rate base and federal FIT, its ratings assume that these measures will continue to remain in place to support AltaLink L.P.'s financial risk profile until its high capital expenditures (capex) level off.
- It expects AltaLink to maintain its leverage in line with the prescribed regulatory structure of 63 per cent debt and 37 per cent equity. It does not state that it expects the requested increase to 39 per cent equity to be granted.⁵¹⁰

999. The UCA submitted that this evidence supports its position that the additional credit metric relief measures are not required. With respect to the issue of credit metric relief, DBRS expects precisely what the UCA recommends, that is, the continuation of existing measures, but not the addition of provincial FIT or a further increase of two per cent in equity thickness.⁵¹¹

1000. AltaLink contended that Ms. Radway confused the 9.3 per cent FFO/debt ratio from Decision 2011-453 as being the approved FFO/debt ratio ultimately emanating from that Decision.⁵¹² The WATL facilities application was suspended on October 21, 2011, while Decision 2011-453 was issued on November 18, 2011. This timing indicated that the Commission knew that the WATL project expenditures would not be incurred in 2012 and, therefore, the pressure on FFO/debt in the 2011 to 2012 period would be less than previously expected.⁵¹³ The Commission further directed AltaLink to submit a compliance filing to reflect the findings in Decision 2011-453 and, thus, the capital project forecast on which the FFO/debt ratio of 9.3 per cent was based was subject to change during the refiling.⁵¹⁴ The Commission subsequently approved AltaLink's second compliance filing in Decision 2013-023 and approved a stand-alone FFO/debt ratio of 10.6 per cent and 10.1 per cent in 2011 and 2012, respectively.⁵¹⁵ Including the tax uplift of approximately 1.0 per cent in both of these years, AltaLink's FFO/debt ratios as approved in Decision 2013-023 were 11.6 per cent and 11.1 per cent in 2011 and 2012, respectively.⁵¹⁶

1001. The ADC also took issue with AltaLink's request for additional credit metric relief measures and argued that credit rating agencies recognize that AltaLink's credit metrics will be stressed during the peak period of this construction program, but will soon recover. Credit analysts, in reviewing AltaLink's projected credit metrics through the peak period of its construction program, noted the likelihood of the credit metrics stress, and the need for careful review of credit metrics during this peak period, but also found that the support provided to

⁵¹⁰ Exhibit 299.02, paragraph 191.

⁵¹¹ Exhibit 299.02, paragraph 193.

⁵¹² Transcript, Volume 11, page 2180, line 10 to page 2193, line 17.

⁵¹³ Transcript, Volume 11, page 2180, line 10.

⁵¹⁴ Decision 2011-453, page 169, paragraph 968.

⁵¹⁵ Decision 2013-023, Schedule 31.1-E.

⁵¹⁶ Exhibit 297.02, paragraph 545.

AltaLink's credit metrics from the Alberta rate-setting standards is adequate and benefited from supportive regulatory treatment.⁵¹⁷

1002. The ADC, citing the same excerpt from the S&P report as did the CCA pointed to S&P's emphasis on the supportive nature of the Alberta regulatory and business environment as well as the favourable market framework in Alberta for transmission companies, all of which augur well for AltaLink's credit metrics during this GTA period.

The ratings on Alberta based AltaLink (AltaLink or ALP) reflect Standard & Poor's Ratings Services' opinion of the company's excellent business risk profile and significant financial risk profile. In our view, supportive regulation, predictable cash flows and monopoly electricity transmission assets, with a favorable market framework for transmission companies in the Province of Albert (AAA/Stable/A-1+) support the ratings. We believe AltaLink's weak credit metrics for the ratings, a large capital program, and large equity requirements from the ultimate owner offset these strengths.⁵¹⁸

1003. Further, the ADC cited the assumptions S&P incorporated into its ratings all of which presuppose continued supportive regulatory treatment for AltaLink's credit rating during its major construction program as follows:

Key assumptions we have incorporated into our ratings include the following:

- We include in our forecasts regulatory approval of both ongoing CWIP in the rate base and the FIT method of tax calculation for the period of high growth.
- SNC-Lavalin's credit strength will not deteriorate significantly and it continues to provide equity injections on a timely basis and AltaLink's leverage remains in line with the deemed regulatory structure. We also assume the partnership continues to 100% equity-fund goodwill on the balance sheet.
- The company will continue collecting income tax in its revenue requirement but does not pay taxes at ALP or AILP.
- Allowed depreciation rates will remain steady.
- The allowed ROE and deemed equity content the regulator uses to determine ALP's revenue requirement will remain about in line with current levels to support credit metrics, and we expect the partnership to continue to earn its allowed ROE or better.⁵¹⁹

1004. The ADC took note of S&P's observation that during the peak of AltaLink's capital expenditure program its credit metrics will come under stress and, further read into this observation that S&P expected the credit metrics to improve later:

Forecast credit metrics have limited headroom at the current ratings. Forecast credit metrics for 2012 are 11%-12% adjusted funds from operations (AFFO)-to-debt, but drop to about 10% in 2013. The downward pressure is primarily the result of large amounts of capital spending, in particular higher levels of construction work in progress (CWIP) in the rate base.⁵²⁰

⁵¹⁷ Exhibit 296.01, paragraph 33.

⁵¹⁸ Standard & Poor's RatingsDirect: "AltaLink L.P.," June 15, 2012 at 2, provided by AltaLink as Attachment ADC.AML-030, emphasis added.

⁵¹⁹ Standard & Poor's RatingsDirect: "AltaLink L.P.," June 15, 2012 at 3, provided by AltaLink as Attachment ADC.AML-030.

⁵²⁰ Standard & Poor's RatingsDirect: "AltaLink L.P.," June 15, 2012 at 3, provided by AltaLink as Attachment ADC.AML-030.

1005. The ADC stated that S&P placed AltaLink on credit watch on June 19, 2013 because of changes in the bond rating of its ultimate parent company, SNC-Lavalin. In the ADC's view, the change in the credit rating outlook for AltaLink from stable to negative was driven by S&P's concern about SNC-Lavalin's willingness and ability to continue making equity contributions to maintain AltaLink's deemed regulatory capital structure. According to the ADC, credit rating agencies did not change their finding that the Commission's credit metric treatment in AltaLink's last GTA was credit supportive nor that it helped to stabilize AltaLink's investment grade bond rating.⁵²¹

1006. The ADC further noted that DBRS's credit rating review of AltaLink also found its credit rating to be stable, and observed the following in its credit update for AltaLink.

Rating Update

DBRS has confirmed the ratings of AltaLink, L.P. (ALP or the Partnership) as listed above. The confirmations of the ratings are based on its low-risk regulated transmission business, a supportive regulatory environment in Alberta and the Partnership's adequate financial profile. ALP's regulated transmission business in Alberta accounts for 100% of total earnings.

Regulation in Alberta has remained supportive for ALP. The Alberta Utilities Commission (AUC) has continued to allow ALP to use the future income tax method for calculating the federal component of income taxes and include construction work in progress (CWIP) in its rate base for Alberta Electric System Operator (AESO) direct-assigned capital projects (since 2011). These credit relief measures have allowed ALP's cash flows and credit profile to remain reasonable for its current rating category. The ratings assume that (1) these measures will continue to be in place to support ALP's financial risk profile until its high capital expenditures (capex) level off and (2) ALP's rate base will continue to grow favourably to support its high level of capex. Execution risk for these projects is expected to be manageable given ALP's past success in completing large projects on time and within budget.⁵²²

As a result of the ongoing high investment commitment, DBRS expects a temporary weakening of ALP's coverage and cash flow ratios in the 2012-2014 period. However, these ratios are expected to gradually recover when substantial capex projects are completed.⁵²³

1007. The ADC maintained that AltaLink's plan was found to be credit supportive in its last rate proceeding, and its outlook was stable based on the Commission's regulatory treatment.⁵²⁴

1008. AltaLink contended that interveners make two fundamentally incorrect assertions. First, they dismiss any risk of a credit rating downgrade if the FFO/debt ratio is in excess of 10 per cent by even a slight amount and second, they assert that even if the FFO/debt ratio is below 10 per cent, ratings agencies will forebear because the dip below 10 per cent is temporary.⁵²⁵ In so asserting, these interveners ignore the evidence of Mr. Fetter and ignore or misstate the

⁵²¹ Exhibit 296.01, paragraphs 37 and 38.

⁵²² DBRS Rating Report: "AltaLink, L.P.," March 19, 2013.

⁵²³ DBRS Rating Report: "AltaLink, L.P.," August 17, 2012.

⁵²⁴ Exhibit 296.01, paragraph 40.

⁵²⁵ Exhibit 297.02, paragraph 46.

Commission's previous findings.⁵²⁶ Further, AltaLink stated that although credit rating agencies take into account other quantitative and qualitative factors, the Commission has found that the FFO/debt ratio is the most critical credit metric considered by credit rating agencies.⁵²⁷

Commission findings

1009. AltaLink currently has an A category credit rating. In Decision 2009-216 and Decision 2011-474, the Commission observed the following minimum credit metrics associated with a low A-range credit rating:⁵²⁸

- earnings before interest and taxes (EBIT) coverage of 2.0 times
- funds from operations (FFO) coverage of 3.0 times
- FFO/debt ratio of 11.1 per cent to 14.3 per cent

1010. Although these minimum credit metrics were known at the time of AltaLink's last GTA, AltaLink submitted in that proceeding that based on ratings agencies' reports, an FFO/debt ratio of 10 per cent could be considered the floor below which a downgrade in AltaLink's credit rating is possible.⁵²⁹ Paragraph 764 of Decision 2011-453 states:

Furthermore, AltaLink noted that while all three key financial ratios (or credit metrics) examined by the Commission in Decision 2009-216 are important, the funds from operations to debt ratio (FFO/debt) is the single most critical aspect of all credit rating determinations. Moreover, AltaLink highlighted that in their most recent rating reports, both DBRS Limited (DBRS) and Standard & Poor's (S&P) have identified the 10 per cent FFO/debt level as a minimum threshold for a downgrade.

1011. In this proceeding, AltaLink has argued that an FFO/debt ratio of 11.1 per cent is the floor or threshold for it to be able to maintain its A category credit rating. Mr. Fetter stated that the Commission should be working towards a 12 per cent ratio and, eventually, a 20 per cent ratio because S&P indicates that, for this rating level, a 20 to 30 per cent FFO/debt ratio would be the norm.⁵³⁰ Mr. Fetter further contended that, as AltaLink's FFO/debt ratio has hovered around 10 per cent for several years now, this, in itself, in his expert opinion, presents a serious risk of a downgrade.⁵³¹

1012. AltaLink stated that it is the credit rating agencies that ultimately will determine whether AltaLink's credit ratings should be downgraded.⁵³² The Commission agrees with this and finds that, because it is the credit ratings agencies themselves that determine whether or not to downgrade an entity, the best indication of any floor or threshold below which a downgrade is possible should come from credit rating reports.

⁵²⁶ Exhibit 304.02, paragraph 266.

⁵²⁷ Decision 2011-453, page 140, paragraph 785.

⁵²⁸ Decision 2009-216, Table 12 and paragraphs 348, 354, and 356 and Decision 2011-474, paragraph 194.

⁵²⁹ Decision 2011-453, paragraphs 764 to 766.

⁵³⁰ Transcript, Volume 7, page 1349, lines 5 to 10.

⁵³¹ Exhibit 150.04, page 6, lines 14 through 21.

⁵³² Exhibit 157.01, paragraph 525.

1013. In its report dated May 23, 2013, S&P stated the following:

While we don't expect it, if we forecast credit metrics below the 10% adjusted funds from operations-to-debt threshold at ALP we associate with the ratings we could take a negative rating action.⁵³³

1014. This was the same credit ratings report in which S&P revised its outlook on ALP from stable to negative.⁵³⁴ This revised outlook is discussed in greater detail below in Section 9.1.4 of this decision. S&P issued a similar statement during AltaLink's 2011-2013 GTA proceeding:

Based on timely equity support, we expect adjusted FFO-to-debt at AltaLink to remain above 10%. A negative rating action is possible if the company doesn't meet these targets.⁵³⁵

1015. S&P has been aware of AltaLink's weakening credit metrics for some time and even though AltaLink has contended that circumstances now reflect heightened conservatism by credit rating agencies,⁵³⁶ S&P continues to maintain that the 10 per cent FFO/debt ratio is the threshold below which negative action is possible. The most recent DBRS credit ratings report did not discuss a floor or threshold for AltaLink's FFO/debt ratio.

1016. Based on a review of recent credit rating reports on this record, the Commission reaffirms its observation expressed in Decision 2011-453 that a 10 per cent FFO/debt ratio is the threshold below which negative action is possible. The Commission is not approving an FFO/debt ratio for AltaLink. It uses this credit metric as a measure to assist it in determining whether credit relief measures are required to support AltaLink's credit rating.

1017. As stated earlier, other factors, in addition to the FFO/debt ratio, are considered by credit rating agencies when establishing the credit rating of a firm. The S&P May 23, 2013 update is illustrative of a credit rating agency taking a large number of factors into account. Therefore, the Commission once again reaffirms its determination that no one factor in isolation can determine the effect on a company's credit rating and, in that regard, small deviations from the 10 per cent FFO/debt target combined with overall favourable regulatory treatment are unlikely to trigger a downgrade.⁵³⁷

1018. Based on a review of recent credit rating reports, the Commission observes that credit rating agencies are aware that AltaLink's credit metrics will be strained during the period of high capital expenditures, and that DBRS expects these metrics to improve once this period has passed.⁵³⁸ Further, both S&P and DBRS have cited that the supportive regulatory environment continues to influence ratings.⁵³⁹

9.1.3 Cost of a downgrade

1019. AltaLink submitted that the consequences of a downgrade are severe. Debt will be more expensive, investors whose mandates prohibit or otherwise limit their ability to hold BBB-

⁵³³ Exhibit 157.01, Attachment C, page 4.

⁵³⁴ Exhibit 157.01, Attachment C, page 2 overview.

⁵³⁵ Decision 2011-453, paragraph 788 (footnote omitted).

⁵³⁶ Transcript, Volume 7, page 1371, lines 24 to 25 and Exhibit 4, Appendix 17, page 8.

⁵³⁷ Decision 2011-453, paragraphs 795 and 967.

⁵³⁸ Exhibit 160.01, DBRS March 19, 2013, page 1 and Exhibit 48.01, ADC-AML-30, S&P June 15, 2012, page 3.

⁵³⁹ Exhibit 160.01, DBRS March 19, 2013, page 1 and Exhibit 48.01, ADC-AML-30, S&P June 15, 2012, page 2.

category debt instruments will be forced to sell and other existing investors may choose to reduce their holdings. Investors who sell their holdings were AltaLink's credit to be downgraded may suffer losses on their investments and this may dampen demand for future bond issues. On the buy side, mandates will restrict or prohibit investors from increasing their holdings, irrespective of the discounted prices at which AltaLink bonds might be offered. Other investors may choose not to invest until yields increase to their threshold levels.⁵⁴⁰

1020. Moreover, according to AltaLink, it makes no sense to stop providing the necessary relief just when AltaLink is in the heart of the mandated capital build. A downgrade now will not only cause significant harm to ratepayers but it will largely unravel the benefits that ratepayers have achieved through the credit metric support provided over the last two AltaLink GTAs.⁵⁴¹ In addition to the immediate and longer-term cost of a downgrade, a downgrade could also limit AltaLink's access to debt capital markets during this period of high construction.⁵⁴²

1021. AltaLink indicated that the cost of a downgrade would be close to \$300 million.⁵⁴³ In response to a Commission request, AltaLink provided amended schedules showing the impact of a one notch downgrade using a downgrade cost of 50 and 25 basis points, respectively, in AUC-AML-084.⁵⁴⁴

1022. Ms. Radway testified that the evidence filed by AltaLink in Exhibit 224 (Undertaking 47), which indicated the cost of a downgrade to be close to \$300 million, may give an exaggerated impression of the impact because it showed the cost of a downgrade of three notches. Moreover, Ms. Radway pointed out that if the cost of a downgrade of one notch was weighed against the impact of the requested additional credit relief, it was not clear that imposing the costs of the additional credit metric relief on customers was a better alternative on a NPV basis than taking the risk of a downgrade.⁵⁴⁵

1023. The UCA submitted that a downgrade is by no means certain even if the FFO/debt ratio dips below the 10 per cent level.⁵⁴⁶ The UCA added that there is a very real cost to providing credit metric relief, and that the costs and benefits must be carefully weighed especially as the projected costs of relief begin to approach, much less exceed, the estimated cost of the downgrade the relief seeks to avoid.⁵⁴⁷ Further, even AltaLink has acknowledged that it is difficult to predict the cost of a credit rating downgrade.

⁵⁴⁰ Exhibit 297.02, paragraph 50.

⁵⁴¹ Exhibit 297.02, paragraph 55.

⁵⁴² Transcript, Volume 1, page 30, lines 21 to 25.

⁵⁴³ Exhibit 224.01.

⁵⁴⁴ Exhibit 287.02.

⁵⁴⁵ Transcript Volume 11, page 2438, line 10 to page 2441, line 21.

⁵⁴⁶ Exhibit 287.02.

⁵⁴⁷ Exhibit 299.02, paragraph 201.

Commission findings

1024. AltaLink estimated the cost of a credit rating downgrade using various scenarios summarized as follows.

Table 42. Estimated cost of credit rating downgrade⁵⁴⁸

	Undiscounted (\$M)	Discounted at 5% (\$ million)
Downgrade cost at 78 bps	538.2	295.3
Downgrade cost at 50 bps	345.0	189.3
Downgrade cost at 25 bps	172.5	94.7

1025. AltaLink also provided the following table showing the net present value of credit metric relief measures.

Table 43. Net present value of credit metric relief⁵⁴⁹

Assumptions:

A. Revenue requirement extracted from 2013-2014 GTA schedules re-filed on March 15, 2013.

B. Present Value (PV) assumes 5% discount rate. CWIP and FIT assumed to be repaid on a straight-line basis over 30 years (approximate asset life of a constructed asset).

	2013			2014			2013 & 2014	
	Revenue Requirement	Incremental	PV @ 5%	Revenue Requirement	Incremental	PV @ 5%	Incremental	PV @ 5%
No relief	373.0	-	-	424.2	-	-	-	-
CWIP	451.7	78.7	40.3	576.1	151.9	77.8	230.6	118.2
Federal FIT	471.9	20.2	10.4	606.3	30.2	15.5	50.4	25.8
Provincial FIT	485.4	13.5	6.9	626.4	20.1	10.3	33.6	17.2
2% equity	491.8	6.4	6.4	636.2	9.8	9.8	16.2	16.2
Total		118.8	64.0		212.0	113.4	330.8	177.4

1026. The Commission considers that it is highly unlikely in any scenario presented in the application that AltaLink will be downgraded by three notches as shown in Exhibit 224.01, where the estimated cost of a downgrade was evaluated at 78 basis points. Mr. Fetter testified that:

S&P's initial assessment is that only about 10% of corporate ratings will be subject to change if the criteria are implemented as currently proposed. In addition, of the expected ratings changes, S&P assesses that a vast majority would be within one notch of existing ratings, with even distribution between upgrades and downgrades. Once the criteria are finalized and published, S&P will communicate rating actions as quickly as possible, with a target of late fourth quarter of 2013 or first quarter of 2014.⁵⁵⁰

1027. With regard to the cost of a downgrade at 50 basis points and 25 basis points, the Commission agrees with the UCA that when the costs of credit metric relief measures begin to exceed or even approach the cost resulting from a credit rating downgrade, the costs and benefits must be carefully weighed. As more credit metric relief measures are approved and the costs of these measures to ratepayers are considered, it becomes less clear where the balance lies.

⁵⁴⁸ Exhibit 244.01 and Exhibit 287.02, Appendix 1 and 2.

⁵⁴⁹ Exhibit 287.02, Appendix 3.

⁵⁵⁰ Exhibit 287.02, page 3.

However, the Commission must also take into consideration the consequences of a downgrade beyond its financial cost. AltaLink is in the middle of its capital program and is statutorily mandated to complete the capital program assigned to it unless doing so would put at risk its employees, the public, its facilities or the environment.⁵⁵¹ The ability to obtain the necessary financing from the market in the face of a downgrade is one such consideration. Further, the Commission agrees with AltaLink that the calculations summarized above in tables 42 and 43, do not consider that relief granted in the form of CWIP in rate base or FIT is revenue neutral.⁵⁵²

9.1.4 Ratings action by S&P

1028. On May 23, 2013, S&P issued a research report (May 23, 2013 update) where it placed AltaLink on negative outlook. AltaLink was of the view that this knock on effect was largely the result of AltaLink's unacceptably weak credit metrics,⁵⁵³ because other SNC-Lavalin subsidiaries were not placed on negative watch at the same time.⁵⁵⁴

1029. The CCA contended that the S&P May 23, 2013 update appeared to be more concerned about AltaLink's parent, SNC-Lavalin's credit standing than about the potential for a temporary decline in AltaLink's FFO/debt ratio.⁵⁵⁵ The CCA submitted that Mr. Bronneberg's interpretation that the negative outlook report issued by S&P was the result of unacceptably weak metrics for AltaLink is contradicted by the S&P report itself.⁵⁵⁶ According to S&P:

The negative outlook reflects that on ultimate unit holder SNC and AltaLink's reliance on timely equity injections from its parent. We continue to expect timely equity injections from SNC sufficient to maintain the consolidated balance sheet at its current level. Any change in SNC's ability or willingness to provide equity injections could result in a downgrade. Given this reliance on the ultimate owner, a drop in our ratings on SNC below the 'bbb' notional consolidated credit quality assessment of AILP could affect the ratings on both AILP and ALP.⁵⁵⁷

1030. The CCA argued that the negative outlook from S&P was not triggered by weak credit metrics but rather by concerns about AltaLink's parent SNC-Lavalin's ability to provide equity capital on a timely basis.⁵⁵⁸ Further, the CCA stated:

CCA also has not seen any documentary evidence that would support the statement that other SNC-Lavalin subsidiaries were not placed on negative outlook. Further if other SNC-Lavalin subsidiaries were not as dependent on the parent for equity injections on a timely basis as AML, the question of negative outlook for other SNC-Lavalin subsidiaries would not even arise. Hence CCA submits no weight should be placed on AML's statement that other SNC-Lavalin subsidiaries were not placed on negative outlook.⁵⁵⁹

⁵⁵¹ Section 36(2) of the *Electric Utilities Act*.

⁵⁵² Exhibit 287.02, page 3.

⁵⁵³ Transcript, Volume 7, page 1374, line 25 to page 1375, line 4.

⁵⁵⁴ Transcript, Volume 7, page 1375, lines 4 to 10.

⁵⁵⁵ Exhibit 302.01, paragraph 61.

⁵⁵⁶ Exhibit 307.01, paragraph 16.

⁵⁵⁷ Exhibit 157.01, Appendix C.

⁵⁵⁸ Exhibit 307.01, paragraph 18.

⁵⁵⁹ Exhibit 307.01, paragraph 19.

1031. The UCA submitted that S&P revised its outlook for these entities (AILP and ALP) from stable to negative and that this action “follows our downgrade of parent SNC-Lavalin Group Inc.” and that it is maintaining a negative outlook on SNC-Lavalin because of, *inter alia*, ethics issues affecting the company’s competitive position.⁵⁶⁰ Further, the S&P update goes on to state: “The negative outlook reflects that of ultimate unit holder SNC[-Lavalin] and AltaLink’s reliance on timely equity injections from SNC[-Lavalin].”⁵⁶¹ The UCA noted that the evidence from AltaLink witnesses was clear that there is no reason to expect that SNC-Lavalin lacks the ability or willingness to make timely injections of capital as needed.⁵⁶²

1032. Furthermore, the UCA argued that in applying the stand-alone principle, any increase in the debt cost arising from a credit downgrade to AltaLink which can be attributed to its relationship with SNC-Lavalin should not be reflected in the recoverable debt costs for AltaLink.⁵⁶³

1033. The ADC also contended that S&P’s downgrade action was a reflection of S&P’s concern that SNC-Lavalin may be unable to continue making equity infusions into AltaLink as and when required in order to maintain AltaLink’s deemed regulatory capital structure.⁵⁶⁴

Commission findings

1034. In Decision 2011-453, the Commission stated:

794. The Commission agrees with AltaLink that its ability to maintain an existing A-credit rating must be independent of the credit rating of its owners. [...]

1035. The Commission continues to hold this view.⁵⁶⁵

1036. Based on its review of S&P’s May 23, 2013 update, the Commission considers that S&P revised its outlook on AILP and ALP primarily based on AltaLink’s reliance on timely equity injections from its parent. AltaLink has acknowledged that S&P’s concern, as stated in its May 23, 2013 update, for AltaLink’s credit rating is based on its parent company’s ability or willingness to make the necessary equity infusions in AltaLink to maintain its stated capital structure.⁵⁶⁶ AltaLink testified that it is not concerned about SNC-Lavalin’s ability or willingness to make these equity injections:

Q. So you certainly had no sense from SNC itself that there was any risk of, you know, guys, we may not be able to fulfil our equity commitment?

A. MR. BRONNEBERG: No. Absolutely not. No. And certainly I've never had anybody at SNC signal to me that they would have problems making those obligations. mean, this is one of their most critical or most strategic investments. They've said that in their shareholder address at the annual general meeting, and this and Highway 407. And

⁵⁶⁰ Exhibit 157.01, Attachment C, page 2.

⁵⁶¹ Exhibit 157.01, Attachment C, page 4.

⁵⁶² Transcript, Volume 1, page 75, line 18 to page 77, line 1.

⁵⁶³ Transcript, Volume 11, pages 2403-2404.

⁵⁶⁴ Exhibit 296.01, paragraphs 37 and 38.

⁵⁶⁵ This was also the Commission’s opinion in Decision 2011-453 at paragraph 794.

⁵⁶⁶ Transcript, Volume 7, page 1377, line 10 to page 1378, line 16.

if they have -- you know, if there's one investment that would be in the best interest to finance, my belief, this is what I tell investors, AltaLink would be the one.⁵⁶⁷

9.1.5 Tax uplift

1037. AltaLink noted that notwithstanding the Commission's adherence to the stand-alone principle, in previous years a tax uplift of approximately 1.0 per cent has been achieved in the FFO/debt ratio arising from AltaLink's structure as a limited partnership.⁵⁶⁸ Although AltaLink collects tax revenue, taxes are paid by the partners, and the FFO/debt ratio increases accordingly. The evidence in this proceeding clearly demonstrates that the deemed tax uplift has been eroded to between 0.6 per cent and 0.5 per cent in 2013 and 2014, respectively.⁵⁶⁹

1038. In past GTAs, interveners have asked the Commission and its predecessors to focus on credit metrics that reflect the uplift provided by the deemed income taxes that result from AltaLink's limited partnership ownership structure and the financial strength of AltaLink's ultimate parent, which provided reasonable assurance of the availability of equity funding as and when needed. As the Commission has consistently found,⁵⁷⁰ it is AltaLink's stand-alone credit metrics that must be the critical consideration for the Commission.⁵⁷¹

Commission findings

1039. AltaLink's FFO/debt ratio, as measured by the credit rating agencies, includes the tax uplift. Accordingly, for credit metric purposes, the Commission will continue to assess the risk of a downgrade using AltaLink's stand-alone FFO/debt ratio plus any deemed tax uplift.

1040. The Commission accepts AltaLink's evidence that the tax uplift to its FFO/debt ratio for 2013 and 2014, respectively, is approximately 0.6 per cent and 0.5 per cent.

9.1.6 Base capital plan versus uncertainty adjusted plan

1041. AltaLink contended that its base capital plan is vitally relevant to the assessment of risk since it is with respect to this plan that AltaLink must use commercially reasonable efforts to achieve the in-service dates mandated by the AESO.⁵⁷² AltaLink testified that for 2013 "we're likely to exceed our uncertainty adjusted forecast by probably at least 100 million"⁵⁷³ and "that if AltaLink exceeds its uncertainty adjusted forecast by \$100 million, this will negatively impact FFO/debt ratio by about 0.15 per cent."⁵⁷⁴

1042. The UCA argued that AltaLink had forecast the revenue requirement in its application based on the uncertainty adjusted direct assign capital forecast which takes into account the probability that some of the projects it has been assigned to build will be delayed. Ms. Radway's evidence was that it was inconsistent for AltaLink to base all other aspects of its application on the uncertainty adjusted forecast, while resting its claim for additional credit metric relief on the

⁵⁶⁷ Transcript, Volume 7, page 1372, lines 6 to 18.

⁵⁶⁸ Decision 2011-453, page 140, paragraph 791.

⁵⁶⁹ Exhibit 3, page 28-7, Figure 28.2.4.3-1.

⁵⁷⁰ Decision 2011-453, pages 138 and 139, paragraphs 791 through 794.

⁵⁷¹ Exhibit 297.02, paragraph 515.

⁵⁷² Exhibit 150.02, page 112, paragraph 565.

⁵⁷³ Transcript, Volume 7, page 1360, lines 12 to 15.

⁵⁷⁴ Transcript, Volume 7, page 1359, line 23 to page 1360, line 4.

base case forecast.⁵⁷⁵ If the uncertainty adjusted forecast were used, the credit metrics would improve, particularly the FFO/debt ratio.⁵⁷⁶

1043. The ADC noted that although AltaLink's filing is based on its uncertainty adjusted capital plan, the greatest stress to its financial ratios appears to be under its base capital plan during the 2013-2014 GTA. The ADC submitted that AltaLink had assured the Commission that it would assume the additional risk of increasing the size of its capital plan from its uncertainty adjusted capital plan to its base capital plan.⁵⁷⁷ Therefore, the Commission should concern itself with the forecast credit metrics under the uncertainty adjusted capital plan not the base plan.⁵⁷⁸

Commission findings

1044. AltaLink's reliance on its uncertainty adjusted forecast throughout its application is inconsistent with its request for additional credit metric relief using the base capital plan forecast. Additionally, in Section 6.1.2, the Commission approved the use of AltaLink's uncertainty adjusted capital forecast.

1045. Regardless of which plan is used, the Commission considers that small deviations in the FFO/debt ratio from the 10 per cent target are unlikely to trigger a downgrade and the evidence on the record clearly shows that FFO/debt ratio variances between the base capital plan and the uncertainty adjusted plan are small. Indeed, AltaLink itself has confirmed that "the difference in the FFO/debt ratio between the uncertainty adjusted forecast and the base plan is small."⁵⁷⁹

1046. For these reasons, the Commission has used the uncertainty adjusted forecast in its assessment of the additional credit metric relief measures requested.

9.1.7 Additional credit metric relief requested by AltaLink

9.1.7.1 FIT method for provincial taxes

1047. The Commission approves AltaLink's request to use the FIT method for provincial taxes during the test period. This credit metric relief reflects the Commission's ongoing commitment to provide reasonable and justifiable regulatory support, especially during the intensive phase of AltaLink's mandated construction program. In making its determination the Commission considered the following:

- Both S&P and DBRS have indicated that regulation in Alberta has remained supportive for AltaLink and that this supportive regulation is one of the key factors they have taken into account in maintaining AltaLink's current credit rating.⁵⁸⁰
- AltaLink's FFO/debt ratios with no additional credit metric relief measures under its uncertainty adjusted forecast are projected to be 9.9 per cent in 2013 and 9.5 per cent in 2014. Based on recent credit rating reports, the Commission remains of the view that an FFO/debt ratio of 10 per cent is the threshold below which a downgrade is possible.

⁵⁷⁵ Exhibit 299.02, paragraph 185.

⁵⁷⁶ Exhibit 110.02, A11 and Q and A12, pages 7-8.

⁵⁷⁷ Exhibit 150.02, paragraph 567.

⁵⁷⁸ Exhibit 296.01, paragraph 37.

⁵⁷⁹ Exhibit 297.02, paragraph 548.

⁵⁸⁰ Exhibit 160.01, DBRS Ratings Report, March 19, 2013, page 1; Exhibit 48.01, ADC-AML-30, DBRS Ratings Report, August 17, 2012, page 1; Exhibit 157.01, Attachment C, S&P Research Update, May 23, 2013, page 2, and Exhibit 48.01, S&P Ratings Report, June 15, 2012, page 2.

- The Commission has considered that the cost of a credit downgrade cannot be determined in isolation by only looking at one factor and, therefore, it must take into account other consequences should a downgrade occur.
- The use of the FIT method for provincial taxes is a revenue-neutral credit metric relief measure. Therefore, customers are not harmed; they pay for this cost now rather than later.
- All interveners agreed that if the Commission determined that additional credit metric relief was warranted their preference would be to approve the use of the FIT method for provincial taxes.⁵⁸¹

9.1.7.2 A temporary increase of two per cent in AltaLink's equity thickness

1048. The Commission does not approve AltaLink's request for a temporary increase of two per cent in AltaLink's deemed equity ratio to 39 per cent for the test period. In making its determination, the Commission considered the following:

- S&P continues to maintain that the 10 per cent FFO/debt ratio is the threshold below which negative rating action is possible.⁵⁸²
- The Commission has observed that credit rating agencies are aware that AltaLink's credit metrics will be strained during the period of high capital expenditures, and DBRS (the major Canadian credit rating agency) expects these metrics to improve once this period has passed.⁵⁸³
- The Commission has observed that no one factor in isolation can determine the effect on a company's credit rating and, in that regard, small deviations from the 10 per cent FFO/debt target combined with overall favourable regulatory treatment are unlikely to trigger a downgrade.⁵⁸⁴
- The Commission considers that it is highly unlikely in any scenario presented in the application that AltaLink will be downgraded by three notches as shown Exhibit 224.01, where the estimated cost of a downgrade was evaluated at 78 basis points.⁵⁸⁵
- As more credit metric relief measures are approved, the costs of these measures to ratepayers increase.⁵⁸⁶ Equity is not a revenue-neutral credit metric relief measure, and because equity is the most expensive form of financing to ratepayers, the Commission prefers to exhaust all other credit metric relief support mechanisms before awarding a higher equity ratio for this purpose.

9.1.8 Implications from credit metric relief approved

1049. In its rebuttal evidence, AltaLink provided the following figure showing its stand-alone projected FFO/debt ratios under the uncertainty adjusted capital plan, using its March 15, 2013 update.⁵⁸⁷

⁵⁸¹ Exhibit 299.02, paragraph 205, Exhibit 305.01, paragraph 42 and Exhibit 302.01, paragraph 62.

⁵⁸² Exhibit 157.01, S&P Research update, May 23, 2013, page 4.

⁵⁸³ Exhibit 160.01, DBRS March 19, 2013, page 1 and Exhibit 48.01, ADC-AML-30, S&P June 15, 2012, page 3.

⁵⁸⁴ Exhibit 160.01, DBRS Ratings Report, March 19, 2013, page 1 and Exhibit 48.01, S&P Ratings Report, June 15, 2012, page 2.

⁵⁸⁵ Exhibit 244.01.

⁵⁸⁶ Exhibit 287.02, Appendix 1, Appendix 2 and Appendix 3.

⁵⁸⁷ Exhibit 150.02, Figure 8.4-1.

Figure 8.4-1: Stand-Alone FFO/Debt Ratio Uncertainty Adjusted Capital Plan - Proposed Relief (using March 15, 2013 Update)



1050. In the scenario above, AltaLink's stand-alone FFO/debt ratio including the FIT method for provincial taxes is 10.3 per cent in 2013 and 9.9 per cent in 2014. When the deemed tax uplift is added to this, AltaLink's FFO/debt ratio, as seen by the credit rating agencies under this proposed scenario, is 10.9 per cent in 2013 and 10.4 per cent in 2014.

1051. Based on the record of this proceeding, the Commission finds that granting the above relief to AltaLink is prudent and in the public interest. In the event that the measures adopted in this decision do not result in circumstances where AltaLink's credit metrics remain at or above acceptable levels and, as a consequence, the Commission remains concerned about a downgrade, the Commission is prepared to consider additional measures to support AltaLink's credit rating during the anticipated large capital program. Further, if circumstances change resulting in a potential material impact to the credit rating of AltaLink, additional credit relief may be warranted. In that eventuality, the Commission would consider any such request for additional credit relief at the time such an application were put before it.

9.2 Financing plan

1052. AltaLink's long-term debt forecast is driven by its overall capital forecast. AltaLink presented its financing plan in Section 28.3 of the application. On March 15, 2013, as part of its application update, AltaLink recalculated its forecast embedded cost of debt to reflect revised lower interest rates for debt offerings anticipated during the test period. It did not revise the

timing or amount of new debt it had forecast in the application. AltaLink's forecast of long-term debt issues is shown in Table 44 below.

Table 44. 2013-2014 AltaLink's forecast long-term debt issues⁵⁸⁸

Issue date	Maturity date	Term in years	Principal amount (\$M)	Application all-in yield (%)	Updated all-in-yield (%)
April 1, 2013	April 1, 2043	30	300	5.02	4.00
June 1, 2013	June 1, 2023	10	325	4.22	3.12
Nov 1, 2013	Nov 1, 2043	30	350	5.51	4.27
Mar 1, 2014	Mar 1, 2021	7	300	4.43	3.19
July 1, 2014	July 1, 2044	30	325	5.72	4.77
Nov 1, 2013	Nov 1, 2024	10	350	5.11	4.19

1053. AltaLink indicated that all of its forecast 2013-2014 long-term debt issues will be issued on an agency basis under AltaLink's medium term note program in order to achieve cost savings. In particular, AltaLink noted that the cost savings for an agency transaction relative to an underwritten debt issue range from 0.15 per cent for terms under three years to 0.40 per cent for terms in excess of 16 years. AltaLink also noted that in addition to reduced dealer fees, a medium term note program will result in lower internal labour costs, reduced legal fees and improved market access.⁵⁸⁹

1054. With respect to forecast medium term note interest rates, AltaLink indicated that its projections were based on estimates of future government of Canada bond yields (prepared by AltaLink's primary investment dealers) and forecast new issue credit spreads.⁵⁹⁰ Updated credit spreads were provided in its March 15, 2013 update. Average credit spreads from AltaLink's initial application and those from its March 15, 2013 update are shown in Table 45.

Table 45. Average forecast credit spreads⁵⁹¹

	7-year	10-year	30-year
June 6, 2012	120.4	134.8	165.8
February 22, 2013	92.4	110.4	145.2
Variance	28.0	24.4	20.6

1055. AltaLink submitted that its selection of term will provide for better matching between the average life of the underlying asset base and AltaLink's debt portfolio, since it is generally accepted that the term of a debt issue should be consistent with the life of the asset being financed. In addition, AltaLink noted that these issues will serve to diversify AltaLink's interest rate risk and reduce refinancing risk by having a series of staggered maturities. Furthermore, with fixed rate debt, AltaLink will minimize the variability of interest costs over time, resulting in a reduction in the volatility of transmission costs to customers.⁵⁹²

⁵⁸⁸ Exhibit 31.02, Schedule 28-2 and Exhibit 108.02, Schedule 28-2.

⁵⁸⁹ Exhibit 3, paragraph 960.

⁵⁹⁰ Exhibit 3, paragraph 968.

⁵⁹¹ Exhibit 4, Appendix 5 and Exhibit 108.01, Appendix C.

⁵⁹² Exhibit 3, paragraph 961.

1056. AltaLink indicated that depending on market conditions at the time of debt issuance, it may substitute a 20-year, 40-year or 50-year medium term note in place of any of the forecast 30-year debt issues. AltaLink stated that its rationale for this was to further diversify its debt maturity schedule and reduce rollover risk.⁵⁹³

1057. AltaLink also requested an exemption order for certain long-term debt transactions. The Commission has addressed the exemption request in Section 9.4 of this decision.

1058. AltaLink's forecast short-term borrowing rates were as follows.

Table 46. Forecast short-term borrowing rates⁵⁹⁴

	3-month Treasury bill rate	Treasury bill/CP spread	Forecast commercial paper rate	Add: commission and fees	All-in short-term borrowing rate
2013	1.96%	0.22%	2.18%	0.11%	2.29%
2014	2.58%	0.22%	2.80%	0.11%	2.91%

1059. The interest rates on short-term borrowing were derived in much the same fashion as long-term rates. AltaLink explained that it started with the same interest rate forecasts provided by its primary dealers and added 22 basis points for AltaLink's forecast of the government of Canada treasury bill/commercial paper credit spread. For GTA purposes, AltaLink assumed all short-term borrowing was represented by its lowest cost short-term borrowing vehicle, which is commercial paper.⁵⁹⁵

1060. The CCA noted that AltaLink's parent, SNC-Lavalin, had recently received a credit downgrade and expressed a concern about the ability of SNC-Lavalin to provide equity injections as and when required. The CCA rejected any suggestion that ratepayers should be responsible for any increased costs that AltaLink might experience due to higher debt spreads as a result of this downgrade. The CCA submitted that in its May 23, 2013 research update,⁵⁹⁶ S&P revised its outlook on Alberta-based AltaLink Investments L.P. (AILP) and subsidiary AltaLink L.P. (ALP; collectively, AltaLink) to negative from stable. At the same time, S&P affirmed its ratings including its A- rating for AltaLink.⁵⁹⁷

1061. The CCA stated that S&P stated:⁵⁹⁸

The outlook revision follows our downgrade of parent SNC-Lavalin Group Inc. We maintain a negative outlook on SNC because of ethics issues affecting the company's competitive position, potential effects on leverage, and execution risk associated with its new strategic plan.

⁵⁹³ Exhibit 3, paragraph 962.

⁵⁹⁴ Exhibit 3, paragraph 974.

⁵⁹⁵ Exhibit 3, paragraph 974.

⁵⁹⁶ Exhibit 157.01, Appendix C.

⁵⁹⁷ Exhibit 302.01, paragraph 64.

⁵⁹⁸ Exhibit 302.01, paragraph 65.

1062. And further S&P stated:⁵⁹⁹

The negative outlook reflects that on ultimate unitholder SNC and AltaLink's reliance on timely equity injections from its parent. We continue to expect timely equity injections from SNC sufficient to maintain the consolidated balance sheet at its current level. Any change in SNC's ability or willingness to provide equity injections could result in a downgrade. Given this reliance on the ultimate owner, a drop in our ratings on SNC below the 'bbb' notional consolidated credit quality assessment of AILP could affect the ratings on both AILP and ALP.

1063. When questioned by the CCA on the impact of the negative outlook due to SNC-Lavalin's problems on AltaLink's cost of new debt, AltaLink's witness stated:

And so at best -- or, sorry, at worst, sir, the issues related to SNC-Lavalin would be neutral to customers, to ratepayers.⁶⁰⁰

1064. The CCA stated that despite AltaLink's assurances, the negative outlook due to SNC-Lavalin's problems did result in a downgrade for AltaLink from stable to negative. Although, at this time, there is no evidence that the downgrade affected the forecast spreads for new debt issues, in CCA's submission, the possibility of higher debt spreads due to SNC-Lavalin's standing in the credit markets cannot be discounted. The CCA recommended that the Commission provide notice to AltaLink that if the debt spreads were to widen due to SNC-Lavalin's problems, all else being equal, the actual debt rates would be adjusted to reflect AltaLink's stand-alone status as a low business risk utility.⁶⁰¹

Commission findings

1065. The Commission has reviewed AltaLink's financing plan. The Commission considers it reasonable for AltaLink to continue to forecast its medium term note interest rates based on estimates of future government of Canada bond yields (prepared by AltaLink's primary investment dealers) and to forecast new issue credit spreads (prepared by AltaLink's principal underwriter, Scotia Capital). The Commission approves AltaLink's financing plan as filed subject to any directions in this decision that would require AltaLink to adjust its forecast debt issues.

1066. With respect to the CCA's recommendation that the Commission provide notice to AltaLink that, if debt spreads were to widen due to SNC-Lavalin's problems, all else being equal, AltaLink's actual debt rates be adjusted to reflect its stand-alone status as a low business risk utility, the Commission finds that issuing such notice would be premature. The Commission notes that AltaLink operates as a stand-alone entity and, therefore, its credit rating is established separately from that of SNC-Lavalin. AltaLink raises its own money on the financial markets through a limited partnership structure called AltaLink L.P. Earlier in this decision, at Section 9.1, the Commission found that there is no evidence that suggests SNC-Lavalin will not be able to make equity injections in AltaLink as required. The Commission will address any issues regarding an increase in financing costs due to SNC-Lavalin's problems if, as and when, such issues arise.

⁵⁹⁹ Exhibit 302.01, paragraph 66.

⁶⁰⁰ Transcript, Volume 2, page 297, line 22.

⁶⁰¹ Exhibit 302.01, paragraph 68.

9.3 Credit facilities and other costs associated with short term debt

1067. AltaLink indicated that for the test years it will be using S&P's guidelines in its determination of the forecast credit facility requirements. S&P had issued updated guidelines in a September 28, 2011 report. In this report, S&P maintained the A/B ratio of 1.2 as a standard for adequate liquidity. However, S&P made changes to the definition of sources and uses of funds.⁶⁰² These changes increased AltaLink's sources of funds by the projected equity contributions from AltaLink's owner, which reduced the required credit facilities and the related credit facility costs.⁶⁰³

1068. In order to meet S&P guidelines on credit facility requirements,⁶⁰⁴ ensure sufficient liquidity, and finance its capital expenditures through 2013 and 2014,⁶⁰⁵ AltaLink increased its available mid-year credit facilities to \$1.5 billion in 2013 and forecast a decline to \$1.3 billion in 2014 on the assumption that by 2014 many of its major capital projects would have been added to rate base.⁶⁰⁶

1069. AltaLink indicated that this change directly addressed an issue identified by the Commission in Decision 2011-453 and repeated in CCA's argument in this application.⁶⁰⁷ In Decision 2011-453, the Commission had stated that "the CCA's argument that the cost of backstopping the equity portion of financing should be borne by AltaLink's shareholders is worth further consideration in future proceedings."⁶⁰⁸

1070. The forecast liquidity requirements using the September 28, 2011 S&P guidelines are as follows.

Table 47. 2013-2014 forecast credit facility amounts⁶⁰⁹

	2012	2013	2014
Available credit facilities (mid-year)	\$1,250 million	\$1,500 million	\$1,300 million

1071. In Decision 2009-151,⁶¹⁰ in response to concerns from interveners about the extremely high costs of short-term debt at that time, the Commission approved the use of a deferral account to capture AltaLink's costs associated with short-term debt. Decision 2011-453 approved continuation of deferral account treatment for other costs associated with short-term debt.⁶¹¹ In this application, AltaLink has sought approval to continue deferral account treatment for its other costs associated with short-term debt.

⁶⁰² Exhibit 3, paragraphs 979 and 980. See also Decision 2011-453 at paragraph 1005 for an explanation of A/B ratio.

⁶⁰³ Exhibit 297.02, paragraph 577.

⁶⁰⁴ Exhibit 3, paragraph. 982.

⁶⁰⁵ Exhibit 3, Section 28.3.6 and 28.3.7.

⁶⁰⁶ Exhibit 3, paragraph. 982.

⁶⁰⁷ Exhibit 3, paragraphs 979 to 983.

⁶⁰⁸ Decision 2011-453, paragraph 1029.

⁶⁰⁹ Exhibit 3, paragraph 982.

⁶¹⁰ Decision 2009-151: AltaLink Management Ltd., and TransAlta Corporation 2009 and 2010 Transmission Facility Owner Tariffs, Application No. 1587092, Application No. 1594573, Proceeding ID No. 102, pages 112 and 113.

⁶¹¹ Decision 2011-453, paragraph 1035.

1072. In Exhibit 108.02, AltaLink updated the other costs associated with short-term debt. In Exhibit 4 Appendix 5C, AltaLink provided the calculation of the required backstop credit facilities and the corresponding other costs associated with short-term debt.⁶¹²

The required backstop credit facility is, in essence, a bank credit facility including commercial paper backstop providing additional security in terms of meeting AML's short term cash flow requirements in the event of a liquidity crunch in the long term debt markets; In other words, a form of insurance.

1073. The CCA argued that although AltaLink indicated that the level of credit backstop it requested (calculated in Appendix 5C) is currently supported by S&P, it would appear from the following exchange that while the guidelines issued by S&P have not changed since they were issued in 2008,⁶¹³ market conditions have changed since that time.

Q. I wasn't going there, sir. I wanted to sort of look to the future of that. Is the change in the investment climate and borrowing climate since 2008, should it continue, something that is likely to result in Standard & Poor's guidelines changing; that is, the level of the backstop changing?

A. MR. BRONNEBERG: If Standard & Poor's were to revise their published guidelines, then we would, at the next renewal of our credit facilities, make the appropriate adjustments up or down as required.⁶¹⁴

1074. The CCA took issue with the continued deferral account treatment for other costs associated with short-term debt. The CCA stated that AltaLink agreed that market liquidity is significantly improved in 2013 and 2014 compared with 2008.⁶¹⁵ As such, the CCA submitted that AltaLink has little incentive under a deferral account mechanism to reduce the level of back stop credit facilities, notwithstanding that a reduced level of credit facilities from that based on S&P's guidelines, which flowed from the tight money conditions of 2008, may be acceptable under current market conditions.⁶¹⁶

1075. When questioned on whether it is necessary to continue deferral account treatment for other costs associated with short-term debt, AltaLink stated:

It's something that, I think, is certainly well forecastable, well manageable, and a risk we're willing to take. But, you know, we're willing to continue that OCASTD if it's the customers' preference.⁶¹⁷

1076. The CCA submitted that AltaLink would have greater incentives to minimize the level of backstop credit facilities if the deferral account were discontinued. Accordingly, it recommended that the other costs associated with short-term debt (OCASTD) deferral account be discontinued effective as of the 2013 and 2014 test years.⁶¹⁸

⁶¹² Exhibit 302.01, paragraph 70.

⁶¹³ Exhibit 302.01, paragraph 71.

⁶¹⁴ Transcript, Volume 2, page 321, line 18.

⁶¹⁵ Transcript, Volume 2, page 322, line 7.

⁶¹⁶ Exhibit 302.01, paragraph 73.

⁶¹⁷ Transcript, Volume 2, page 327, line 3.

⁶¹⁸ Exhibit 302.01, paragraph 75.

Commission findings

1077. The Commission agrees that conditions have changed since Decision 2009-151 was issued and that the costs of short-term debt have declined significantly. AltaLink itself has stated that the costs of maintaining the credit facility have declined since 2008 when the deferral account was first implemented. With respect to continuing to apply deferral account treatment to the OCASTD account, AltaLink testified that this deferral account was put in place because of the cost associated with maintaining the credit facility in 2008:

A. MR. BRONNEBERG: The cost of maintaining the credit facility cost have declined significantly since 2008 when we first implemented the deferral account. And if you recall at that time, the cost of bank credit went through the roof because the banks were all under significant amount of pressure, and a lot of companies were having credit discontinued. And for us it was a question of, you know, the need, our cost increased. And the deferral account was put in place so that as bank situation improved that customers would get the benefit of any reductions in the other costs associated with short-term debt.⁶¹⁹

1078. AltaLink further indicated that, in today's market, it does not believe that a deferral account for these costs is necessary.

Q. From Exhibit 3 at paragraph 1060, pdf 427, we understood AML is requesting continuation of the OCASTD deferral account, and I just wanted to get from you an explanation why AML should not assume forecast risk with respect to that item.

A. MR. BRONNEBERG: We thought it was in best interest of customers to continue with it. It was something we put in place at the request of the customers. Just like with the income tax deferral account that we had before and the long-term debt deferral account discussion, I think as we stand today, you know, this was starting from scratch, I wouldn't ask for a deferral account on it. It's something that, I think, is certainly well forecastable, well manageable, and a risk we're willing to take. But, you know, we're willing to continue that OCASTD if it's the customers' preference.⁶²⁰

1079. The Commission finds that the OCASTD deferral account is no longer necessary to protect customers as the market has changed considerably since 2008. Further, the Commission notes that the CCA has recommended that this deferral account be discontinued and that AltaLink had stated that other costs associated with short-term debt are considered to be well manageable within its forecasts. The Commission directs AltaLink to discontinue its deferral account for OCSTD. However, in an effort to continue to mitigate possible volatility in customer rates, the Commission also directs AltaLink, at the time of its refiling, to provide an update to credit facility amounts consistent with the direction issued in Decision 2011-453, at paragraph 1036.⁶²¹

9.4 Request for exemption order respecting certain long term debt transactions

1080. AltaLink requested an order under Section 101(4) of the *Public Utilities Act*, declaring that Section 101(2)(ii) does not apply to a class of long-term debt transactions as part of its 2013-2014 GTA (exemption order application). AltaLink requested an order declaring that Section 101(2)(a)(ii) of the *Public Utilities Act* does not apply to AltaLink in respect of the

⁶¹⁹ Transcript, Volume 2, page 323, line 12-23.

⁶²⁰ Transcript, Volume 2, page 326, line 16 to page 327, line 6.

⁶²¹ Decision 2011-453, paragraph 1036.

issuance, from time to time during the exempt financing period (as defined in its exemption order application), of medium-term notes having maturities of not less than one year from the date of issue (the Notes) in an aggregate principal amount of up to \$2.5 billion. AltaLink also requests a declaration pursuant to Section 101(4) of the *Public Utilities Act*, that Section 101(2)(d)(i) of the *Public Utilities Act* does not apply to AltaLink in respect of its granting security to its lenders for the Notes, in the form of a first floating charge over the present and future property, assets and undertaking of AltaLink.⁶²² AltaLink discussed its exemption order application in Section 28.3.5 and Appendix 20 of the application.⁶²³

1081. AltaLink submitted that granting the exemption order posed no risk to ratepayers and will provide AltaLink with the necessary flexibility to manage its capital requirements in a timely and efficient manner. AltaLink further stated that this flexibility will ensure that ratepayers incur the lowest reasonable cost to raise debt capital under AltaLink's capital markets platform. AltaLink submitted that if it cannot issue debt quickly, and at the most reasonable rates, there will be a detrimental impact on ratepayers.⁶²⁴

1082. The CCA supported AltaLink's exemption order application. The CCA stated that AltaLink had indicated that the exemption would give AltaLink the flexibility to issue required debt capital to meet the optimum market conditions and will ensure that ratepayers incur the lowest reasonable cost to raise debt capital under the company's capital markets platform.⁶²⁵

1083. The CCA cited AltaLink's evidence that typically about four to five months elapse from the time it prepares a debt application until it is approved. In the past, AltaLink has endeavoured to file its debt applications early enough to accommodate the Commission's process. This entails forecasting capital market conditions four to six months prior to the planned timing of the debt issue. Given the continuing volatility in the capital markets, the current process could limit AltaLink's flexibility to issue the debt earlier than planned or to modify the term to maturity.⁶²⁶

1084. The CCA noted that AltaLink's request for exemption is for \$2.5 billion. CCA also noted that the exempt financing period is the 2013 and 2014 test period. The total amount of debt forecast to be raised during the test period is \$1.95 billion. The CCA agreed that the exemption order would provide greater flexibility for AltaLink to access capital markets on a timely basis. The CCA recommended that the exemption order be granted for \$2.5 billion to be applied during the 2013 and 2014 test years.⁶²⁷

Commission findings

1085. Section 101(2)(a) of the *Public Utilities Act* provides:

101(2) No owner of a gas utility designated under subsection (1) shall

(a) issue any

(i) of its shares or stock, or

⁶²² Exhibit 3, Section 28.3.5 and Exhibit 4, Appendix 20.

⁶²³ Exhibit 3, Section 28.3.5 and Exhibit 4, Appendix 20.

⁶²⁴ Exhibit 297.02, paragraph 581.

⁶²⁵ Exhibit 302.01, paragraph 78.

⁶²⁶ Exhibit 302.01, paragraph 79.

⁶²⁷ Exhibit 302.01, paragraph 80.

- (ii) bonds or other evidences of indebtedness, payable in more than one year from the date of them,

unless it has first satisfied the Commission that the proposed issue is to be made in accordance with law and has obtained the approval of the Commission for the purposes of the issue and an order of the Commission authorizing the issue, ...

1086. Section 101(2)(a)(ii) of the *Public Utilities Act* sets out two explicit requirements a utility must fulfill prior to the Commission authorizing a debt issue: (1) the debt must be issued in accordance with the law, and (2) the Commission must approve the purposes for which the debt is to be issued.

1087. With respect to the requirement that the debt must be issued in accordance with the law, the Commission has generally relied on an opinion from legal counsel from the applicant stating that the issue will be compliant with (or exempt from) any applicable corporate and securities laws of the province(s) in which the issuances are to be made.

1088. With respect to the requirement that the Commission must approve the purposes of the issue, most requests are for the purpose of replacing existing debt or to finance forecast capital projects. In some cases, utilities indicate that the purpose of the debt issue is to maintain the deemed capital structure approved by the Commission for ratemaking purposes.

1089. While the Commission approves debt issues under Section 101 of the *Public Utilities Act*, the Commission has generally examined the debt costs forecast for a given test period in a utility's general rate or tariff application. Any issues related to long-term debt are typically addressed in a general rate or tariff application and include, but are not limited to, the rate of interest on debt instruments, the timing of the issue(s), the term of the issue(s) and issuance costs.

1090. There is precedent for granting the relief requested by AltaLink as evidenced by the decisions referenced in Appendix 20 of the application. Similar relief has been granted to other utilities from time to time for certain periods including: NOVA Gas Transmission Inc.,⁶²⁸ AltaLink Investment Management Ltd.,⁶²⁹ UtiliCorp Networks Canada Ltd.,⁶³⁰ AltaGas Utility Group Inc.,⁶³¹ FortisAlberta Inc.,⁶³² and Aquila Networks Canada Ltd.⁶³³

⁶²⁸ Exhibit 4, Appendix 20-E, Decision [U96059](#): NOVA Gas Transmission Limited, Application for a Section 25.1(4) Declaration, File 6640-103, June 17, 1996.

⁶²⁹ Exhibit 4, Appendix 20-F, Decision [2004-024](#): AltaLink Investment Management Ltd., Request for Relief Under Section 101(2) of the PUB Act, Application No. 1282388, March 16, 2004.

⁶³⁰ Exhibit 4, Appendix 20-G, Order [U2001-097](#): In the matter of an Application for Exemption from Certain Sections of the Public Utilities Board Act by UtiliCorp Networks Canada Ltd., Application No. 2001081, File No. 6640-190, April 30, 2001.

⁶³¹ Exhibit 4, Appendix 20-H, Order [U2006-106](#): AltaGas Utility Group Inc., Relief from Section 26(2) of the Gas Utilities Act and Section 101(2) of the Public Utilities Board Act, Application No. 1444969, April 24, 2006.

⁶³² Exhibit 4, Appendix 20-I, Decision [2006-099](#): FortisAlberta Inc., 2006/2007 Distribution Tariff, Phase II and Other Matters, Application No. 1434992, October 16, 2006.

⁶³³ Exhibit 4, Appendix 20-J, Decision [2004-035](#): Aquila Networks Canada Ltd. (ANCL) and Aquila Networks Canada (Alberta) Ltd. (ANCA), ANCL's Sale of all of the Outstanding Shares of ANCA to Fortis Alberta

1091. Moreover, CU Inc. currently has an exemption from Section 26(2)(a)(ii) of the *Gas Utilities Act* which is an equivalent provision to Section 101(2) of the *Public Utilities Act*. As ATCO Electric and ATCO Gas and Pipelines Ltd. do not access capital markets on their own, all market and financing activities for these two entities are performed by CU Inc. Under Order U99115⁶³⁴ CU Inc. has received an exemption that allows it to avoid requesting prior approval from the Commission before going to the financial markets on behalf of its regulated utilities. This exemption allows CU Inc. to monitor closely the capital markets and address the financing needs of its subsidiaries in a timely and effective manner.

1092. The Commission considers AltaLink's request for an exemption to be reasonable on the basis that such an exemption will provide AltaLink with the necessary flexibility to manage its capital requirement in a timely and efficient manner. Granting the request is in the public interest as it will allow for prompt access to capital markets when conditions are favourable, thereby facilitating flexibility in obtaining the lowest cost blend of borrowing terms to meet capital expenditures and refinancing requirements. The Commission approves AltaLink's request for an exemption, for the years 2013 and 2014, as outlined in the application.

9.5 Discontinuance of long-term debt deferral account

1093. AltaLink applied for Commission approval to discontinue its long-term debt deferral account (LTDDA) beginning with the 2013-2014 GTA test period. AltaLink submitted that while the LTDDA has served its purpose by mitigating capital market risk exposure during AltaLink's early years, AltaLink's cost of debt capital is now comparable to that of its peers, and AltaLink is now able to withstand the capital market risk associated with interest rate movements. As such, AltaLink no longer requires the unique treatment provided through the LTDDA and its revenue requirement should be determined on a basis consistent with its peer utilities, none of which utilize the LTDDA approach in their tariffs and rates. Further, AltaLink submitted that the elimination of the LTDDA will benefit ratepayers by removing tariff uncertainty.⁶³⁵

1094. This deferral account was originally put in place by the Alberta Energy and Utilities Board (EUB) when AltaLink was created because AltaLink had never issued debt and could not provide forecast bond yield evidence. AltaLink now asserts that interest rates can be forecast with reasonable certainty using third party economic forecasts from Canada's major chartered banks.⁶³⁶ Further, AltaLink contends that the risk of significant variations is reduced because its long-term debt deferral account only provides for deferral of rate differences while volume variance is addressed by the DACDA. As well, AltaLink advised that it will update its long-term debt issuance rates as part of a future compliance filing.

1095. In response to the Commission's request,⁶³⁷ AltaLink provided a consolidated table of all forecast (and subsequently approved) debt issuances and the corresponding actual issuances for 2010 to 2012.

Holdings Inc., (Fortis Alberta), Application No. 1317233, File No. 6418-3; Fortis Alberta and ANCA, Financing the Acquisition of the ANCA Shares, Application No. 1318425, File No. 6420-1, April 29, 2004.

⁶³⁴ Order U99115: CU Inc. Application regarding Exemption from Certain Sections of the Public Utilities Board Act and the Gas Utilities Act, issued November 23, 1999.

⁶³⁵ Exhibit 3, paragraph 1062.

⁶³⁶ Exhibit 150.02, paragraph 687.

⁶³⁷ Exhibit 50.04, attachment AUC-AML-074 (c).

Table 48. Forecast and actual long-term debt issues, 2010-2012⁶³⁸

Related proceeding (forecast issuance)	Issue date	Maturity date	Term in years	Principal amount (\$M)	Coupon rate (%)	Embedded cost (%)
GTA 2009-2010	July 1, 2010	July 1, 2030	20	175	6.95	6.97
GTA 2009-2010	July 1, 2010	July 1, 2040	30	175	7.24	7.25
GTA 2011-2013	April 1, 2011	April 1, 2021	10	200	4.63	4.68
GTA 2011-2013	Oct 1, 2011	Oct 1, 2041	30	300	5.41	5.41
GTA 2013-2014	July 1, 2012	July 1, 2042	30	300	3.99	4.00
GTA 2013-2014	Nov 1, 2012	Nov 1, 2022	10	275	3.70	3.75
Actual issuance						
Series 2010-1	Mar 25, 2010	Mar 26, 2040	30	125	5.38	5.39
Series 2010-2	Nov 15, 2010	Nov 15, 2040	30	150	4.87	4.88
Series 2011-1	Nov 8, 2011	Nov 8, 2041	30	275	4.46	4.47
Series 2012-1	June 29, 2012	June 30, 2042	30	300	3.99	4.00

1096. AltaLink had requested discontinuation of the LTDDA in its last GTA. The Commission denied the request because interest rates had fallen significantly below the forecast interest rates after the conclusion of the oral hearing and the Commission determined that it would not be in the public interest to discontinue the deferral account treatment during a time of volatile debt market conditions.⁶³⁹

1097. AltaLink advised that had its LTDDA not been in place during the 2010-2012 period, debt costs borne by customers would have been higher by the following amounts:

Table 49. 2010-2012 customer debt costs in the absence of a LTDDA⁶⁴⁰

2010	\$4.3 million
2011	\$1.8 million
2012	n/a

1098. In argument, the UCA submitted that the LTDDA should be continued.⁶⁴¹ The UCA argued that the evidence on the record of this proceeding reveals that forecast interest rates have continued to drop from the time that AltaLink filed its application.⁶⁴² The UCA summarized its concerns as follows.⁶⁴³

- Absent a deferral account, the UCA is not aware of any recourse that would be available to AltaLink in the event of a credit rating downgrade under a prospective forward test year method of regulation.

⁶³⁸ Exhibit 50.04, attachment AUC-AML-074 (c).

⁶³⁹ Decision 2011-453, paragraph 1051.

⁶⁴⁰ Exhibit 50.04, AUC-AML-074(b).

⁶⁴¹ Exhibit 299.02, paragraphs 33-36, and 206-215.

⁶⁴² Exhibit 110.02, Q and A17 pages 12 and 13 and Transcript Volume 11, page 2447, line 1 to page 2450, line 4.

⁶⁴³ Exhibit 110.02, Q and A17, pages 12 and 13.

- The fact that AltaLink is no longer seeking to retain this deferral account, is inconsistent with its evidence regarding the necessity of additional credit metric relief, and speaks to AltaLink's confidence that a credit rating downgrade is unlikely to occur.
- The deferral account should be maintained, as the risk is not symmetrical, and the best available evidence suggests that there is a good chance that the actual interest rates will be lower than forecast.⁶⁴⁴

1099. The UCA argued that although AltaLink had applied to discontinue its LTDDA, which protected both customers and AltaLink from interest rate risk in the event of a credit rating downgrade during the test period, AltaLink had expressed an intention to seek relief from the Commission.⁶⁴⁵ Ms. Radway, the UCA's expert witness, expressed concerns with the materiality of the impact of a downgrade on AltaLink if the deferral account was not in place. Ms. Radway stated:

Q. Okay, perfect. You sensed where I was going. In your evidence, you indicate that: (as read) "The fact that AML no longer seeks to retain the protection of the long-term debt deferral account speaks to the level of confidence that AltaLink has that a downgrade is likely to occur." As the long-term debt deferral account only covers the difference in interest rates, can you help us understand how the request of AltaLink to take on this forecast risk serves as an indication that the risk of a downgrade is unlikely to occur?

A. Yes. I can help you with that. AltaLink -- and this is from the Undertaking 047 that you had just -- we just went through.

Q. Right.

A. They show that they plan for these two test years to issue debt, \$975 million. These are more than they've ever done before. These are significant, and the interest rate differential is high. We can even see it from their own calculation. And they use midyear convention. I understand from the testimony of Mr. Lomore that this deferral account does not use midyear, but it's a full year. So when you see that on a 78 basis point that means 3,800 -- or 3.8 million, well, that's double that. So that's the numbers we're talking about. For 2014, you see the 11 million, approximately, number there. That would be what you would get, and, of course, that is on other midyear rate base. It would be double that. So it is significant in this particular test years because it's the amount that they're going to be issuing for the new -- the new debt. So in the past, they wouldn't have had so much debt. They didn't issue as much, but certainly in these test years they are. So any type of differential that would be significant. And so if there's a downgrade, they would be bearing that. They would be having to absorb that cost, because of the interest costs, other than what that would be -- go through on their volume, which is, of course, the other part. So I wasn't concerned about whether they -- by "volume," I mean for the other deferral account. I wasn't concerned about that if they don't build or they do build, which is what -- how much they're going to the issue. I was more concerned about the basis differential. So that's what was at risk.⁶⁴⁶

⁶⁴⁴ Exhibit 110.02, Q and A17, page 12.

⁶⁴⁵ Exhibit 3, paragraph 559.

⁶⁴⁶ Transcript, Volume 11, page 2445, line 4 to page 2446, line 25.

1100. With respect to the lack of symmetry of risk, Ms. Radway noted the downward movement in interest rates since the application was filed, and concluded as follows:⁶⁴⁷

Q. And in that same UCA response, I note that there's a statement in there that the risk is not symmetrical, and in the testimony that I referred you to from Mr. Frehlich, certainly AltaLink, in their testimony, is describing a symmetrical relationship on that risk. So again, can you help me understand your view that the risk isn't symmetrical?

A. Generally, for most times I would agree with you it is symmetrical. It can go up and down either way. In this particular instance, and this case -- and that's why I'm specific about this case -- and this point in time, we've had a -- from everything I can tell -- and I follow interest rates -- we've been waiting for the Bank of Canada to actually act and increase their 1 percent. They haven't. And so repeatedly economists are revising their forecasts because it's just not happening. I would be quite comfortable with letting AltaLink take the risk if I was as confident that this was actually going to be happening in the near term and it wasn't priced into the existing forecast. The downside risk of keeping the deferral account is small. But I think as long as this continually gets delayed, these are the best forecasts that have been provided by the financial institutions, but they have to price it in. And what I've noticed is a trend -- because I've been updating the charts -- that every single time they keep updating and they have to -- it keeps coming down. The closer I get to the point like Q4, the closer I get to it, that number just keeps coming down. So the actual interest rate costs are coming down.⁶⁴⁸

1101. In reply, AltaLink stated that although Ms. Radway has suggested that interest rates will continue to fall,⁶⁴⁹ it had provided an independently developed forecast of interest rates in support of its application, and the fact remained that interest rates could be either higher or lower than they currently are forecast.

1102. The CCA was also opposed to the discontinuance of AltaLink's LTDDA. Unlike its peers, AltaLink plans to issue debt with a variety of maturity terms ranging from seven years to 30 years. AltaLink's TFO peer, ATCO Electric, typically does not issue a mix of short- and long-term debt.

1103. The CCA argued that if the term or the timing of the debt issue changes relative to the forecast, there could be a gain or loss relative to forecast.⁶⁵⁰ Because the debt rates on shorter term instruments are lower than those on longer term debt instruments, if AltaLink were to substitute shorter term debt for longer term debt, based on market conditions, the interest rate costs would be materially different from forecast. The LTDDA would capture any gains or losses from term substitution and given the very significant amount of debt to be raised during the test period, the potential for forecast error in relation to the cost of debt is significant. In view of this, the CCA recommended that the LTDDA be continued for the 2013 and 2014 test years.⁶⁵¹

Commission findings

1104. AltaLink's long-term debt deferral account was implemented in Decision 2005-019 primarily because AltaLink had proposed, as a placeholder, the issuance of three senior

⁶⁴⁷ Transcript, Volume 11, page 2240, line 1 to page 2450, line 1.

⁶⁴⁸ Transcript, Volume 11, page 2447, line 1 to page 2448, line 6.

⁶⁴⁹ Exhibit 110.02, page 12.

⁶⁵⁰ Transcript, Volume 2, page 311, line 21.

⁶⁵¹ Exhibit 302.01, paragraph 84.

debenture bonds of \$50 million each at 7.21 per cent in each of the years 2005, 2006 and 2007 with a 30-year term for each of the three debentures.

1105. In that proceeding, AltaLink indicated that the use of three \$50 million dollar bond issues was intended to track the forecast of capital expenditures rather than imply that AltaLink would actually issue three separate bonds and confirmed that the forecast yield for the proposed long-term debt issue was simply a placeholder and had no bearing on the final rate for the ratepayer (which would be the actual rate at the date of issue).⁶⁵²

1106. In AltaLink's last GTA, the Commission determined that it would be in the public interest to continue deferral account treatment for the cost of AltaLink's long-term debt issues because of volatile debt market conditions at the time. However, the Commission stated that it would be prepared to revisit the need to continue the long-term debt deferral account once debt markets had normalized.⁶⁵³

1107. In this proceeding, when asked to explain if there were any specific market conditions that have changed since AltaLink's last application that supported AltaLink's request to discontinue its long-term debt deferral account, AltaLink responded that it did not base its request for discontinuance of the long-term debt deferral account on any changes in market conditions. Rather, AltaLink submitted that its size and capacity to raise debt have changed since the long-term debt deferral account was first established. Moreover, it added that, whereas there was a benefit to AltaLink and ratepayers in the debt deferral account during AltaLink's formative years, AltaLink has since demonstrated its capacity to raise significant amounts of debt capital.⁶⁵⁴

1108. AltaLink has forecast long-term debt issues of \$975 million in each of 2013 and 2014.⁶⁵⁵ AltaLink explained that its long-term debt deferral account only provides for deferral of rate differences as the volume variance is addressed by the DACDA and, further, AltaLink committed to update its long-term debt issuance rates as part of a future compliance filing. Therefore, AltaLink submitted that the risk of significant variances is reduced.

1109. The Commission recognizes that volume variances of forecast long term debt issues are addressed by the DACDA. Nevertheless, the debt forecast for this test period significantly exceeds any amount AltaLink has ever raised. The Commission is concerned that, given the large amount debt to be raised in 2013 and 2014, even small variances in debt costs (either positive or negative) could have a significant impact on either AltaLink or ratepayers. The Commission finds that, for the duration of AltaLink's capital program, it would not be in the public interest to discontinue the deferral account treatment for the costs of AltaLink's long-term debt issues. AltaLink's long-term debt deferral account should continue to be determined as approved in prior Commission decisions.

⁶⁵² AltaLink's position is summarized on page 104 of Decision 2005-019.

⁶⁵³ Decision 2011-453, paragraphs 1051 and 1052.

⁶⁵⁴ Exhibit 50.04, AUC-AML-77 (b).

⁶⁵⁵ Table 44 in this decision.

10 Income taxes

10.1 Timing/temporary difference calculations

1110. AltaLink explained in its application that certain revenues and expenditures that are recognized under income tax legislation may differ from revenues and expenditures that are recognized for regulatory accounting purposes. In most cases, the different treatment was a matter of the timing when the revenues and expenditures were recognized. This gave rise to accounting income being temporarily different from taxable income. To the extent a utility follows the FIT method of accounting for income tax for the purposes of deriving the income tax component of its revenue requirement, these differences are revenue-neutral to the utility and to its ratepayers.

1111. AltaLink prepared a forecast of timing differences for its income tax expense for approval by the Commission.⁶⁵⁶

Commission findings

1112. The Commission has reviewed the timing forecast. The Commission considers the forecast to be reasonable and in the public interest, particularly as timing differences are revenue-neutral, as noted above. Subject to any adjustments necessary as a result of findings elsewhere in this decision, AltaLink's forecast is approved as filed.

10.2 Treatment of directly attributable, indirectly charged (DAIC) costs for income tax purposes

1113. AltaLink stated in its application that under Canadian Generally Accepted Accounting Principles (GAAP), AltaLink had the option of capitalizing indirect overhead costs for accounting purposes, while deducting them as an expense for income tax purposes. However, following its transition to IFRS, indirect overhead costs could only be capitalized for accounting purposes if AltaLink could demonstrate that they were directly attributable to capital projects.

1114. AltaLink conducted a review of its indirect overhead costs and the relationship between its capital activities and how those costs are incurred. From this review, AltaLink determined that almost all of its indirect overhead costs are directly attributable to capital activities even though they are not directly charged to capital projects. Instead, they are indirectly charged. AltaLink refers to these costs as directly attributable, indirectly charged (DAIC) costs.

1115. AltaLink's determination was accepted by its external auditors, who issued a clean opinion on AltaLink's financial statements for 2011, its first set of IFRS-compliant annual audited financial statements. AltaLink submitted that electricity customers received a significant benefit from this determination and its acceptance by AltaLink's auditors, as it avoided a significant increase in operating costs that would otherwise be funded by customers in the test years.

1116. AltaLink noted the comments of the Commission in Decision 2011-453 in which the Commission stated the overheads in question have been deducted in the past for income tax purposes and it would be reasonable for AltaLink to continue to deduct such costs in the future. Notwithstanding the Commission's finding in Decision 2011-453, AltaLink stated that as a result

⁶⁵⁶ Exhibit 3, page 7-3, paragraph 523.

of the thorough review of DAIC costs undertaken during the IFRS conversion, these costs are no longer characterized as indirect costs. As a result of being directly attributable to capital projects, these costs may not be deductible as period expenses. Therefore, the Canada Revenue Agency (CRA) could reassess AltaLink's owner accordingly.

1117. AltaLink noted that the CRA provided its position on the tax treatment of overhead costs in Interpretation Bulletin (IT) 285R2 (Capital Cost Allowance-General Comments)⁶⁵⁷ and Technical Interpretation 9812566 (Capitalized Expenses in Regulated Industry).⁶⁵⁸ The CRA's opinion was that any costs that are reasonably attributable to the improvement or creation of a fixed asset should be capitalized for the purposes of the *Income Tax Act*. Moreover, the CRA noted that overhead costs should be treated as current expenses for income tax purposes where they are regularly incurred in the normal course of the taxpayer's business, and (i) they cannot be attributed to the improvement or creation of a capital asset, or (ii) they are not incurred principally for the purpose of earning a specific and identifiable item of revenue.

1118. Because all of AltaLink's costs charged to capital are directly attributable to capital, AltaLink maintained the CRA position was clear that these costs must be capitalized for income tax purposes thereby making them eligible for capital cost allowance treatment.

1119. AltaLink submitted that, if the Commission directs it to deduct indirect overhead costs for the purposes of calculating the income tax recovery to be included in revenue requirement, as the Commission did in the 2011-2012 compliance filing, there is a very strong possibility that the CRA will not accept this treatment. Accordingly, AltaLink submitted that it should be shielded from this risk.

1120. AltaLink requested the Commission approve the establishment of a deferral account to ensure that AltaLink recovers its costs. The forecast placeholder DAIC amounts expensed for income tax purposes for the test years 2013 and 2014 are \$19.1 million and \$40.2 million respectively. The deferral account would include recovery of: (1) a reassessment arising from AltaLink's income tax filing and all associated costs, such as penalties, interest and legal fees, and (2) the operating expense impact under IFRS arising from AltaLink's auditors' re-assessment if any.

1121. In argument, the UCA noted that AltaLink does not file income tax returns on its own behalf, but "is required to file information with the Canada Revenue Agency regarding the taxable income of the partnership."⁶⁵⁹ The UCA also noted AltaLink had applied for the establishment of a deferral account to keep it whole in event that the tax return filed by any of its income tax return-filing affiliates within SNC-Lavalin was reassessed by the CRA with respect to the tax deductions claimed on behalf of AltaLink activities.

1122. The UCA took the following positions on this issue:

- AltaLink should take the risk of its tax filings, and a deferral account was not appropriate;
- The Commission has directed other utilities to make the same deductions, and has not approved deferral account treatment in these instances;

⁶⁵⁷ CRA IT-285 R2, March 31, 1984.

⁶⁵⁸ Technical interpretation 9812566, September 24, 1998.

⁶⁵⁹ Exhibit 299.02, UCA argument, page 9.

- Alternatively, if the Commission is inclined to view a deferral account as appropriate, access to the deferral account should be conditional on a direction that in the event of any disallowance, AltaLink be required to produce on the public record the tax schedules related to AltaLink as filed, the tax ruling from the CRA and all steps taken by SNC-Lavalin to challenge or appeal the ruling;
- The UCA recommended AltaLink be required to file its most recent tax schedules publicly in the compliance filing for this proceeding, annually as part of its Rule 005 filing, and, as timing permits, in subsequent regulatory proceedings in which the Commission is reviewing or considering AltaLink's costs relating to income tax.⁶⁶⁰

1123. In its argument, the CCA stated that only directly attributable indirect costs could be capitalized under IFRS. The Commission has also adopted this rule under AUC Rule 026.⁶⁶¹ For income tax purposes, the CCA noted the Commission has previously ruled the DAIC-related costs should be expensed in the year incurred.⁶⁶² The CCA suggested AltaLink missed the fact that the DAIC costs were still, for all intents and purposes, indirect costs. To suggest otherwise, as AltaLink has done, was wrong. Simply because AltaLink moved from Canadian GAAP to IFRS did not change the underlying character of these costs; these costs were still indirect. Also, the fact that AltaLink refers to these costs as “directly attributed” and “indirectly charged” leaves no doubt the costs in question are indirect.

1124. The CCA noted that the Commission, in Decision 2011-453, recognized these indirect capital costs were, prior to the adoption of IFRS in 2011, deductible for income taxes in the year incurred while, for accounting purposes, these costs were capitalized. Neither IFRS nor AUC Rule 026 speaks to the tax treatment of these costs and the Commission has treated these costs, for rate-making purposes, as being deductible for income taxes.

1125. The CCA also noted that industry practice also treats these DAIC-type costs as current expenses for income tax purposes. For example, both ATCO Electric⁶⁶³ and FortisAlberta Inc.,⁶⁶⁴ the two other electric utilities subject to income taxes in Alberta, also follow a similar approach to that prescribed by the Commission in Decision 2011-453 for AltaLink. Unlike AltaLink, neither ATCO Electric nor FortisAlberta Inc. have applied for a deferral account with respect to these indirect costs.

1126. The CCA disputed AltaLink's assertion that the Commission's prescribed treatment was very aggressive.⁶⁶⁵ The costs in question were essentially the same or similar to costs previously (i.e., prior to IFRS) considered to be indirect overhead costs.⁶⁶⁶ In the past, such costs were, for tax purposes, deducted as current expenses. For accounting purposes, AltaLink, with the approval of its external auditors, has treated these indirect overhead costs as capital. In the CCA's view, AltaLink was incorrectly mixing the accounting treatment with the tax treatment. Unlike the significant change that took place for accounting purposes (i.e., from Canadian GAAP to IFRS), there was no such change for tax purposes in respect of these indirect overhead costs. Technical Interpretation 9812566 is still relevant to the manner in which indirect costs are to be

⁶⁶⁰ Exhibit 299.02, UCA argument, pages 9 to 10.

⁶⁶¹ Rule 026: *Rule Regarding Regulatory Account Procedures Pertaining to the Implementation of the International Financial Reporting Standards*, (Rule 026).

⁶⁶² Decision 2011-453, paragraphs 1104-1105.

⁶⁶³ ATCO Electric 2013-2014 GTA, Exhibit 3, Schedule 7-3, lines 40 and 71.

⁶⁶⁴ FortisAlberta Inc. 2012-2013 GTA, Exhibit 42.02, Schedule 17-3, line 7.

⁶⁶⁵ Exhibit 3, paragraph 534.

⁶⁶⁶ Exhibit 49.01, CCA.AML-17 (b).

treated for income tax purposes. In particular, the CCA submitted the indirect costs at issue meet the criteria of Part C of Technical Interpretation 9812566.

1127. The CCA noted that AltaLink, in its 2011-2012 Compliance Filing to Decision 2011-453 and 2011-474, proposed placeholder treatment in respect of the 2011-2012 DAIC using essentially similar arguments as those in the current 2013-2014 GTA. That request was rejected by the Commission.⁶⁶⁷ The CCA submitted that no new evidence has been adduced to warrant approval of a deferral account now.

1128. In argument, AltaLink reiterated its request that the Commission recognize that its current approach to DAIC costs was very aggressive and carried significant risk, and therefore, a deferral account was necessary to shield it from any consequences arising from the indirect overhead costs directive within Decision 2011-453.

1129. If deferral account treatment is granted, AltaLink noted the UCA has suggested that AltaLink must be compelled to file SNC-Lavalin's tax returns with the Commission to support the deferral account reconciliation. AltaLink argued that it was not appropriate to predetermine the documents that should be filed in the event of a reassessment by the CRA. Instead, AltaLink would provide the appropriate documentation to support its claim for relief in the event of a reassessment, including any relevant correspondence from the CRA.

1130. AltaLink also noted the UCA requested that AltaLink file its detailed tax schedules as part of Rule 005. AltaLink submitted this was not a requirement and maintained that any consideration of making this a requirement could only be determined following a full consultation with other TFOs and affected parties.

Commission findings

1131. The Commission finds that the grounds raised in support of AltaLink's request for a deferral account are similar to those presented by AltaLink during its last GTA and refiling application.

1132. At that time, the Commission stated:

131. The position advanced by AltaLink in the refiling, specifically that the CRA would not accept this deduction, was also advanced and rejected by the Commission as unsupported in Decision 2011-453. AltaLink has not provided any new or additional evidence that the Commission's finding is in contravention of the *Income Tax Act*. Therefore, the Commission denies AltaLink's proposal to treat the \$14.6 million and \$16.7 million amounts as placeholders and add the amounts of \$1.5 million and \$1.7 million for 2011 and 2012 respectively to a renamed Rainbow and Capitalized G&A Tax Reserve account. Should the CRA at some point disallow the tax treatment, the Commission will consider the impact of any such disallowance in the next AltaLink GTA following the disallowance.⁶⁶⁸

1133. The Commission finds that the evidence presented in this proceeding does not persuade it to alter its previous determination. AltaLink's request for a deferral account is denied. Should

⁶⁶⁷ Decision 2012-221, paragraph 131.

⁶⁶⁸ Decision 2012-221, paragraph 131.

AltaLink be reassessed by the CRA, the Commission will review the financial implications and consider what relief, if any, is necessary at that time.

10.3 Other income tax matters – amount of DAIC costs

1134. In argument, the CCA stated:

The forecast placeholder DAIC amounts expensed for income tax purposes for the test years 2013 and 2014 are respectively \$19.1M and \$40.2M. However the total ES&G costs - also referred to by AML as DAIC costs - are \$41.5M in 2013 and \$46.1M in 2014. It was not clear why the DAIC costs for income tax purposes are significantly less than those for rate base purposes. Subject to further clarification from AML, the CCA recommends the [DAIC] costs for income tax purposes should be \$41.5M in 2013 and \$46.1M in 2014.⁶⁶⁹

Commission findings

1135. The Commission acknowledges the concern of the CCA. The Commission considers that the DAIC amount may change as a result of directions made elsewhere in this decision. AltaLink is directed to address this matter in its refiling.

11 Other deferral account reconciliations

11.1 Taxes other than income tax

1136. AltaLink presented its reconciliation of taxes other than income taxes for the years 2010 and 2011 in Section 4 of Appendix 1 to the application. No parties raised an issue with respect to the reconciliation.

Table 50. Taxes other than income taxes – 2010-2011

	Approved placeholder (\$M)	Actual cost (\$M)	Variance (\$M)
January 1 – December 31, 2010	19.0	18.1	(0.9)
January 1 – December 31, 2011	21.5	21.5	0.0
Totals	40.5	39.6	(0.9)

Source: Appendix 1, tables 4.1 and 4.2.

Commission findings

1137. The Commission has reviewed the information filed by AltaLink with its application. AltaLink's reconciliation is approved as filed.

11.2 Annual structure payments

1138. AltaLink discussed its reconciliation of annual structure payment amounts for the years 2010 and 2011 in Section 5 of Appendix 1 to the application.

⁶⁶⁹ Exhibit 302.01 at paragraph 86.

Table 51. Annual structure payments – 2010-2011

	Approved placeholder (\$M)	Actual cost (\$M)	Variance (\$M)
January 1 – December 31, 2010	6.7	4.8	(1.9)
January 1 – December 31, 2011	5.6	6.0	0.4
Totals	12.3	10.8	(1.5)

Source: Appendix 1, tables 5.1 and 5.2.

1139. The CCA challenged AltaLink's forecast annual structure payments over the test period but did not comment on the proposed disposition of the deferral balance for 2010-2011.

Commission findings

1140. The Commission approves AltaLink's proposed disposition of the deferral balance.

11.3 Other costs associated with short-term debt deferral account

1141. In the 2010-2011 deferral accounts reconciliation application, AltaLink stated that it had a credit balance in the deferral account of \$1.7 million in 2010 relating to its other costs associated with short-term debt (OCASTD) account. AltaLink submitted that the primary reason that actual costs were lower than forecast costs in 2010 was because it had experienced lower than forecast credit facility volumes and fees.⁶⁷⁰

1142. With respect to the costs in its OCASTD account in 2011, AltaLink had been directed in Decision 2011-453 to provide an update to credit facility amounts at the time of its refiling in order to mitigate possible volatility in customer rates.⁶⁷¹ In the 2010-2011 deferral accounts reconciliation application, AltaLink re-forecast the costs in its OCASTD account as part of its compliance filing and therefore, its actual costs were \$2.8 million, leaving a balance of zero in the deferral account.⁶⁷²

1143. AltaLink submitted that its request to refund the \$1.7 million difference from 2010 be approved as filed.

Commission findings

1144. The Commission has reviewed the materials provided by AltaLink on the reconciliation of its 2010 and 2011 OCASTD account and accepts the deferral amounts as being correct. AltaLink is directed to refund the \$1.7 million difference between its actual and forecast costs for this account as requested in its application.

11.4 2010 long-term debt deferral account

1145. In the 2010-2011 deferral account reconciliation application, AltaLink submitted that it had incurred \$16.5 million of costs related to incremental long-term debt in 2010 and that its related forecast in the 2010 GTA was \$20.8 million. AltaLink stated that the \$4.3 million credit

⁶⁷⁰ Exhibit 4, Appendix 1, Section 6.1.

⁶⁷¹ Decision 2011-453, paragraph 1036.

⁶⁷² Exhibit 4, Appendix 1, Section 6.2.

balance was primarily due to the timing of long-term debt issues and effective cost rate variances.⁶⁷³

1146. For 2011, AltaLink submitted that it had incurred \$4.2 million of actual costs in incremental long-term debt and that its 2011-2013 GTA forecast of costs was \$6.1 million. As a result, there was a \$1.8 million balance in its 2011 long-term debt deferral account payable to the AESO.⁶⁷⁴

1147. AltaLink requested that its long-term debt deferral account balance should be approved for settlement by the Commission as filed.

Commission findings

1148. The Commission has reviewed the materials provided by AltaLink for the reconciliation of its 2010 and 2011 long-term debt deferral account and accepts the deferral amounts as being correct. AltaLink is directed to refund the \$1.8 million difference between its actual and forecast costs for this account as requested in its application.

11.5 2010 income tax deferral account reconciliation

1149. AltaLink's deferral account reconciliation for the year 2010 was presented in Section 7.0 of Appendix 1 to the application. This account captures revenue requirement variances arising from the differences between actual and forecast statutory income tax rates and those between actual and forecast capital cost allowance rates. The reconciliation results in a payment of \$0.4 million to the AESO.

1150. No parties raised any issues respecting this account.

Commission findings

1151. The Commission has reviewed the details of the reconciliation and it is approved as filed.

11.6 Reconciliation of USA/MFR implementation project costs

1152. In Section 9 of Appendix 1 to the application, AltaLink discussed its compliance with directions set out in Decision 2007-017⁶⁷⁵ in respect of projects to implement a USA and MFR for utilities falling under the jurisdiction of the Commission's predecessor.

1153. AltaLink noted that while the actual final total cost of this project was \$13.8 million, only \$9.5 million had been included in the 2007-2008 GTA and 2009-2010 GTA capital forecasts, leaving it with a shortfall.

⁶⁷³ Exhibit 4, Appendix 1, Section 3.1.

⁶⁷⁴ Exhibit 4, Appendix 1, Section 3.2.

⁶⁷⁵ Decision 2007-017: EUB Proceeding, Implementation of the Uniform System of Accounts and Minimum Filing Requirements for Alberta's Electric Transmission and Distribution Utilities, Application No. 1468565, March 6, 2007.

Commission findings

1154. The Commission has examined the information contained in Section 9.0 and, in particular, Table 9.0 which has been reproduced below.

Table 52. Proposed reconciliation of USA/MFR project deferral account

	2004-2006 GTA	2007-2008 GTA		2009-2010 GTA		
Forecast	2006	2007	2008	2009	2010	Total
Capital expenditures		2.0	7.2	0.3	-	9.5
Additions to rate base				9.5	-	9.5
Revenue requirement						
Returns				0.3	0.6	0.9
Depreciation				0.5	1.0	1.4
Income taxes				0.0	0.0	0.1
Total				0.8	1.6	2.4
Actual	2006	2007	2008	2009	2010	Total
Capital expenditures		4.0	6.1	2.7	0.7	13.8
Additions to rate base		1.3	0.0	11.9	0.7	13.8
Revenue requirement						
Returns		0.0	0.1	0.4	0.8	1.4
Depreciation		0.1	0.1	0.4	0.8	1.4
Income taxes		0.0	0.0	0.0	0.1	0.1
Totals						
Rev. req. (refund)/shortfall		0.1	0.2	0.4	0.6	1.3

Source: Appendix 1, tables 5.1 and 5.2.

1155. The Commission notes that in paragraph 65 of Section 9 of Appendix 1 to AltaLink's application, actual expenditures were \$13.8 million but only \$9.5 million was included in its GTA filings. This yields a difference of \$4.3 million. However, Table 9.0 indicates a difference of only \$1.3 million. The Commission can find no explanation for this discrepancy and, therefore, directs AltaLink to provide a schedule showing the correct amount in its refiling. The Commission will dispose of the correct balance in this deferral account at that time.

11.7 IFRS deferral account

1156. At Section 10 to Appendix 1 of the application, AltaLink requested continuation of its IFRS deferral account. AltaLink stated that while it had not included any specific items in the deferral account at this time, it had some items under consideration for inclusion during the 2013-2014 test period.

1157. In argument, the CCA noted that IFRS had re-started its deliberations in some areas including whether the non-recognition of regulatory assets and liabilities continued to apply and the capitalization of overheads. Given these major items were back on the table, the CCA agreed that the deferral account should be continued.

Commission findings

1158. Given the evidence on the record, the Commission finds that it would be prudent to continue the operation of the deferral account over the test period. AltaLink's request is approved.

12 Other matters

12.1 Performance statistics

1159. AltaLink provided its operational performance statistics in Section 1.9 of the application. It measures its reliability performance in relation to the following performance indices:

- system average interruption frequency index (SAIFI)
- system average interruption duration index (SAIDI)
- system average restoration index (SARI)

1160. AltaLink indicated that, as a result of several initiatives and programs it has implemented, its SAIFI and SAIDI performance statistics have bettered Canadian Electricity Association (CEA) composite indices of these measures for a number of years.

1161. AltaLink also tracks the following safety performance measures

- all injury frequency rate (AIFR)
- lost time severity rate (LTSR)
- vehicle accident frequency rate (VAFR)

1162. AltaLink stated that its safety performance measures are stable and consistently below the CEA composite index.

Commission findings

1163. AltaLink's performance reliability and safety performance raises no concerns for the Commission at this time. AltaLink is directed to provide similar reliability and safety performance reporting in its next GTA.

12.2 Accounting policies

1164. AltaLink's accounting policies are found in section 31.5 of the application. AltaLink indicated that it had made no material changes to its major accounting policies, and submitted that no material changes were proposed to its accounting policies in the GTA proceeding.

Commission findings

1165. The Commission has reviewed AltaLink's accounting policies and, as there have been no material changes, approves them as filed.

12.3 Compliance with directives

1166. AltaLink provided a table in Appendix 1, Section 2 of the application which set out its responses to Commission directives due at the time of filing. AltaLink submitted that it was compliant with all prior Commission directives due at the time of the filing of this GTA.

Commission findings

1167. The Commission has reviewed Appendix 1, Section 2 of the application regarding AltaLink's compliance with Commission directions. The Commission confirms that each direction referenced in Table 2.0 of Appendix 1, Section 2 of the application is no longer outstanding.

12.4 Deferral mechanisms

1168. The ADC, in its ADC Meyer evidence, proposed that AltaLink not be granted full deferral mechanism recovery if it is earning above the authorized return established in a GTA.⁶⁷⁶ In its argument, the ADC submitted that its proposed consumer protection procedure was intended to ensure that a utility could not collect past expenses through a deferral mechanism if it was generating excessive earnings during the deferral period.

1169. In reply, AltaLink submitted that the ADC's suggestion that it not be granted full deferral account recovery if it "over earns on its authorized return" is contrary to the Commission's practice with respect to deferral accounts and should be rejected.

1170. AltaLink noted that the Commission's predecessor set the following guidelines for establishing deferral accounts:

- the utility is not able to accurately forecast the cost
- the cost or revenue cannot be reasonably controlled
- the potential variance is material⁶⁷⁷

1171. AltaLink submitted that the ADC's proposal is an attempt to create a deferral account for return on equity which not only violates the principle of prospective rate-making, but also the Commission's guidelines for establishing a deferral account.

1172. AltaLink submitted that prospective rate-making is a fundamental principle of the cost of service model used in Alberta. If efficiencies are gained in a test period, the cost savings are passed through and implemented in the following test year period, not retro-actively adjusted against past-approved test years. Further, AltaLink submitted that the ADC's suggestion would be inconsistent with the principle that a TFO is to be allowed a reasonable opportunity to earn a fair return.

Commission findings

1173. The Commission agrees with AltaLink that deferral accounts may be authorized by the Commission if the conditions referenced above by AltaLink are met, and also agrees that most operating expenses not meeting these conditions are treated on a forward-test year basis. Under this approach, AltaLink may earn greater than the return on equity approved by the Commission if its actual costs are less than approved forecasts but, if so, the Commission may take such over-earnings into account in assessing AltaLink's forecasts for future GTAs.

1174. The ADC's proposal is denied.

13 Rate mitigation

1175. The ADC filed evidence prepared by Mr. Gorman in which he proposed a "Balanced Regulatory Plan." The ADC stated the purpose of this proposal was to mitigate credit concerns

⁶⁷⁶ Exhibit 112.02, page 21.

⁶⁷⁷ EUB Decision [U96001](#): NOVA Gas Transmission Ltd., 1995 General Rate Application – Phase I, File 1600-1, January 4, 1996., at page 167, EUB Decision [2003-100](#): ATCO Pipelines, 2003/2004 General Rate Application – Phase I, Application No. 1292783, December 2, 2003., pages 119 to 120.

during the major build cycle and to mitigate rate impacts after the build cycle was completed. The proposal was follows:

- Customers would provide extra payments above traditional ratemaking to support AltaLink's credit metrics during its major construction program.
- AltaLink's revenue requirement after the major construction program is completed will be mitigated by lowering the revenue requirement for the in-service assets relative to traditional ratemaking for the first 10 years of operation. During this period of mitigated revenue requirement, AltaLink will track its under-recovered portion of its revenue requirement which will be largely consistent with the amount of allowance for funds used during construction (AFUDC) it would have recorded during the construction period if it had not included CWIP in rate base.
- After the 10-year phase-in, AltaLink would fully recover its previously unrecovered direct expenditures on its transmission investments and all phase-in credit accruals approximately equal to the amount of AFUDC that would have been accrued during the construction period, and its revenue requirement for the remaining term of the assets will be set to fully recover these cost items.⁶⁷⁸

1176. The ADC claimed that the effect of this proposed plan resulted in customers paying more during the construction period to support credit metrics, paying less during the first 10 years of operation of these assets, and paying the same revenue requirement that they would have paid under traditional ratemaking had the extraordinary credit metric cost of service support not been adopted and used.

1177. The ADC recognized that credit analysts may have a concern with the implementation of the second stage of its plan because they may consider the regulatory liability to be akin to utility debt. The ADC indicated that its proposal did not result in the regulatory liability being akin to utility debt because if a utility failed to make debt service obligations, the holder of the debt could declare the utility in default and seek full payment from the utility irrespective of the financial impact on the utility. However, if the Commission's regulatory plan was specifically designed to support credit metrics, then the return of the regulatory liability to customers via reduced revenue requirement would only be accomplished if it did not erode a target or acceptable level of credit metrics as outlined in the regulatory plan. Hence, the regulatory liability associated with a regulatory plan will have at best, very weak debt-like characteristics because it would be highly unlikely that the liability would force the utility to accept revenue requirements which do not support adequate credit metrics and support the utility's ability to meet its financial obligations. Since ratepayers could not declare a utility in default if it did not return the regulatory liability to customers via revenue requirement reductions, the regulatory liability was unlikely to be perceived by credit analysts as a debt equivalent.

1178. As an example of the application of this plan, the ADC stated that Kansas City Power and Light (KCPL) in the state of Missouri had a regulatory plan in place to support credit metrics during the major build of a generating unit in Missouri and Kansas. The ADC explained KCPL accrued a regulatory liability which reflected the amount of construction period cash flows that were provided to the utility in its revenue requirement to support its credit metrics. The utility then accrued this balance of regulatory amortization to use as a rate base offset after the plant was placed in service. The ADC stated that in evaluating KCPL's credit metrics, S&P did not

⁶⁷⁸ Exhibit 112.04 at page 25.

reflect that regulatory liability as a debt-like equivalent in measuring KCPL's credit metrics despite the fact that the regulatory liability was a significant component of KCPL's balance sheet.⁶⁷⁹

1179. The ADC maintained that its plan was consistent with the stated objectives of the government of Alberta⁶⁸⁰ and an illustration of their mitigation plan was provided at Schedule MPG-3 of the evidence.

1180. In its rebuttal evidence, AltaLink stated that the ADC's proposal and example from KCPL had been considered and dismissed by the Commission in AltaLink's last GTA decision. AltaLink noted the Commission had considered the question of intergenerational equity in approving credit metric relief in prior GTAs for both AltaLink⁶⁸¹ and ATCO Electric.⁶⁸² The Commission's decisions on these matters were consistent with U.S. practice regarding CWIP in rate base, and situations like KCPL were the exception rather than the general rule.

1181. AltaLink submitted that if Mr. Gorman's balanced regulatory plan contemplated that the benefits to customers should accrue over the remaining life of the assets, as is the case under both KCPL scenarios, it was clear from AUC Decision 2011-453 that this objective was already being accomplished through the CWIP in rate base approach approved by the Commission. By not capitalizing AFUDC under the CWIP in rate base approach, the benefits accrue to customers over the remaining life of the assets by reducing the depreciation component in future revenue requirements.

1182. Although Mr. Gorman had described these amounts as regulatory liabilities, in AltaLink's view, it was very hard to see how a credit rating agency would take the position that an amount which is clearly characterized as a liability should be reclassified as funds from operations. The question of how credit rating agencies would view regulatory liabilities arising under Dr. Rosenberg's proposal was extensively debated in AltaLink's 2011-2013 GTA. AltaLink maintained Mr. Gorman's position on the treatment of regulatory liabilities was inconsistent with the Commission's findings at page 162 of Decision 2011-453.

Commission findings

1183. The Commission has reviewed the evidence filed by the ADC and considers this proposal to be similar to that filed in the previous GTA by Dr. Rosenberg. The Commission continues to have the same concerns⁶⁸³ with the current proposal as it did with the previous proposal developed by Dr. Rosenberg. For these reasons, the proposal of the ADC is rejected.

1184. The Commission also notes that Proceeding ID No. 2421 has been initiated to review rate mitigation options. Parties can present their concerns and proposals in that forum.

⁶⁷⁹ Standard & Poor's Ratings Direct: "Kansas City Power & Light Co.," September 27, 2007 and April 30, 2010.

⁶⁸⁰ Gorman evidence, page 24.

⁶⁸¹ AUC Decision 2011-453, at page 155, paragraph 880.

⁶⁸² AUC Decision 2011-134, at page 106, paragraph 554.

⁶⁸³ AUC Decision 2011-453, at paragraphs 923-924.

14 2010-2011 direct assign capital deferral account (DACDA)

14.1 Prudence principles

1185. AltaLink and the RPG provided submissions in their arguments and reply arguments regarding the application of the prudence test in determining whether the costs incurred by AltaLink in its direct assign projects should be approved for inclusion into AltaLink's rate base.

1186. AltaLink referenced the direction of the board in Decision 2001-110, which established the prudence test that has been subsequently upheld by the court of appeal in *ATCO Gas and Pipelines Ltd. v. Alberta (Energy and Utilities Board)*.⁶⁸⁴ As well, AltaLink referred to previous findings of the board regarding the application of the prudence test to AltaLink's direct assign project costs in Decision 2005-120. In that decision, the board stated:

The Board's prudence review will assess if the actions undertaken by AltaLink were reasonable, demonstrated good judgment, and were undertaken with the best interests of customers in mind. An examination of these issues requires AltaLink to fully explain and support overall project costs and project cost components. The Board must ensure that this onus is met, particularly if there are project components that have large differences between forecast and actual costs, appear to be high relative to industry norms, or involve affiliate transaction.

1187. In its argument submissions, the RPG accepted that the prudence test is as set out in Decision 2001-110 and the Court of Appeal. However, the RPG strenuously asserted that AltaLink had failed to meet this test for the SW project.

1188. The Commission's findings regarding the SW project are provided in Section 14.2.

Commission findings

1189. The rates of Alberta TFOs are not charged directly to customers but rather to the AESO, which, in turn, flows the cost of TFO rates to either directly connected industrial customers or to regulated distribution facility owners through its tariff.⁶⁸⁵ Further, the AESO, and not the TFO, is responsible for planning and bringing forward need applications for new transmission facilities, and the TFO must respond to the direction of the AESO to construct new facilities when asked, unless doing so would put its facilities or the safety of the TFO's employees or the public at risk. The TFO includes an aggregate capital addition estimate when it develops its revenue requirement forecast for its transmission tariff and the Commission is responsible for approving the tariff that the TFOs propose to charge to the AESO for the use of their transmission facilities.

1190. The tariffs of most TFOs are set prospectively by relying on forecasts of revenue required to provide utility service. Within TFO tariff applications, the TFO will normally forecast the capital investment amounts it will require for the construction of assets to provide transmission service. These amounts are trued-up to reflect actual costs, once they are known, and after the investments have been made and the facility is in service, and to the extent the investments are considered prudent.

1191. Commission approval of the prudence of transmission project costs is sought after the investments have been made and the facility is in service. The current procedure is largely a

⁶⁸⁴ *ATCO Gas and Pipelines Ltd. v. Alberta (Energy and Utilities Board)* 2005 ABCA 122.

⁶⁸⁵ Section 37 of the *Electric Utilities Act*.

backward-looking, after-the-fact assessment for future rate-making purposes with the consequential difficulty of denying a major investment after the investment has occurred.

1192. Although the TFO provides change orders to the AESO as required by ISO Rule 9.1.3.4, it appears that, in some instances, the AESO has indicated an acknowledgement rather than an express approval of the change described in a specific change order.

1193. Further legislative direction is provided under the *Transmission Regulation* as it pertains to the recovery of costs for transmission projects. Section 25(1) permits the AESO to develop rules regarding cost reporting, while Section 25(3) expressly confirms that the TFO must demonstrate that its tariff is just and reasonable and that the Commission retains responsibility to determine a TFO's or other person's prudence in managing a transmission facility project. The Commission is restricted by Section 25(5) of the *Transmission Regulation* from requiring the AESO to comment on the TFO's prudence in managing a transmission project. Instead, the AESO, the only entity that is receiving and reviewing cost estimates and cost variances in real time, has the legislative discretion, pursuant to Section 25(5) of the *Transmission Regulation*, to notify the Commission of any concern or issue that the AESO has with respect to the costs of a transmission project.⁶⁸⁶

1194. As well, until July 25, 2013, Section 46(1) of the *Transmission Regulation* required the Commission to consider specified transmission costs incurred by the TFO to be prudent, unless an interested party satisfied the Commission that the costs were unreasonable. These stakeholders, and not the TFO, had to demonstrate that the costs captured pursuant to Section 46 of the *Transmission Regulation* were imprudent, and the Commission was required to exercise forbearance unless an interested party had demonstrated that these costs were unreasonable.

1195. Effective July 25, 2013,⁶⁸⁷ the government passed an amendment to Section 46(1) of the *Transmission Regulation* that removed this legislative presumption of prudence for project costs incurred by the TFOs.

1196. The prudence test developed by the Commission's predecessor, the Alberta Energy and Utilities Board, was approved by the Court of Appeal in *ATCO Gas and Pipelines Ltd. v. Alberta (Energy and Utilities Board)* 2005 ABCA 122. Decision 2001-110⁶⁸⁸ was the decision under appeal and the prudence test set out in Decision 2001-110 has been relied on in several decisions by the board and the Commission since that time and bears repeating:

The Board will set out its general views on prudence in this section.

In Decision 2000-01, in the context of an application by an electric utility, the Board noted that:

⁶⁸⁶ On March 13, 2012, the Commission received notification from the AESO pursuant to Section 25(5)(b) of the *Transmission Regulation* that certain ATCO Electric projects had exceeded the accuracy tolerances in their PPS. The AESO was clear in its letter that it was not commenting on the prudence of the revised budgets. This was the first time the AESO had sent such a notification to the Commission.

⁶⁸⁷ Alberta Regulation 145/2013.

⁶⁸⁸ Decision 2001-110: Methodology for Managing Gas Supply Portfolios and Determining Gas Cost Recovery Rates Proceeding and Gas Rate Unbundling Proceeding, Part B-1: Deferred Gas Account Reconciliation for ATCO Gas, Application No. 2001040, File No. 5680-1, December 12, 2001.

In most cases [prudence] involves an evaluation of whether or not a decision reflects good judgment and discretion and is reasonable in the circumstances which were known, or reasonably should have been known, when the decision was made.

The concept of prudence is used to determine whether, at a particular time in question, an arrangement is or was appropriate and reasonable given the circumstances known or which ought to have been known.

The Board earlier applied this test in the context of a prudence review for gas utilities in Decision E95079, concerning Nova Gas Transmission Ltd. In that decision the Board determined that, in addition to the usual concept of prudence, additional elements could be part of the prudence standard to address the particular circumstances at hand.

The Board considers that there are particular circumstances to consider when assessing the prudence of actions carried out by the owner of a public utility. Given the unique relationship between a public utility and its customers, the Board believes there is an additional element to consider in a prudence review. The Board agrees with the CCA that a prudent owner of a public utility must not only exercise good judgment and act in a reasonable and appropriate manner, but must do so in light of a duty to act in the best interests of its customers, while being entitled to a fair return on its capital and a return of its capital.

The Board agrees with ATCO that a prudence review ought not to be based on hindsight. Webster's Dictionary defines hindsight as "perception of the nature and demands of an event after it has happened." Applying this definition to the current context, the Board ought not to impute knowledge to the owner of a utility that the owner of the utility could not reasonably have known at the time the utility made the decision being reviewed. The Board notes that two American public utilities commissions have also held that a prudence review should not be made on the basis of hindsight.

In summary, a utility will be found prudent if it exercises good judgment and makes decisions which are reasonable at the time they are made, based on information the owner of the utility knew or ought to have known at the time the decision was made. In making decisions, a utility must take into account the best interests of its customers, while still being entitled to a fair return.⁶⁸⁹ [underlining added] [footnotes removed]

1197. The Court of Appeal stated in *ATCO Gas and Pipelines Ltd. v. Alberta (Energy and Utilities Board)* 2005 ABCA 122 as follows:

72 The Board's broad discretion to set just and reasonable utilities rates must be exercised in the public interest, which requires consideration of both sides of the rate paying equation: ATCO Electric, *supra* at 132. That process implicitly entails scrutiny of management decisions. With respect to negotiated settlements Fraser C.J.A. held in ATCO Electric at para. 145 that the Board "is entitled to assume that what the utility has negotiated and agreed to is in fact in the utility's best interests." However, in the context of rate setting, the starting point for scrutinizing management decisions is the presumption that it is in the utility's interest to make prudent decisions which also reflect the interests of its customers, by avoiding needless expenditure. That presumption will matter only when the scales are evenly balanced.

⁶⁸⁹ Decision 2001-110, pages 9 and 10.

73 In this case, in determining to uphold ATCO's decision unless satisfied ATCO had acted unreasonably, the Board correctly acknowledged the presumption of prudence. The test it articulated to be applied in reviewing the prudence and reasonableness of ATCO's decisions is reasonable.[emphasis added]

1198. The Commission will apply these principles when assessing whether the costs incurred by AltaLink for its direct assign projects were prudently incurred.

14.2 SW project variances

Overview

1199. AltaLink requested approval of its Southwest (SW) project expenditures as part of its 2010-2011 DACDA deferral account reconciliation provided at Appendix 1 of the application. The SW project was discussed in Attachment 8 of this Appendix.

1200. The major components of the SW project were as follows:

- construct the new 240-kV/138-kV Goose Lake 103S substation
- expand the Peigan 59S and North Lethbridge 370S substations
- construct approximately 30 kilometres of new double-circuit 240-kV transmission line between Goose Lake 103S substation and Peigan 59S substation
- construct approximately 60 kilometres of new double-circuit 240-kV transmission line between Peigan 59S substation and North Lethbridge 370S substation
- complete associated improvements to the existing 138-kV transmission system, including a new 138-kV transmission line between Goose Lake 103S and Pincher Creek 396S substations
- remedial action scheme modifications at various substations.

1201. In its 2007 facilities application, AltaLink estimated the cost of the SW project to be \$133.3 million, assuming an in-service date of February 2009. The final cost for the project as set out in the current application was \$216 million with an in-service date of November 2010.

1202. AltaLink acknowledged this significant variance and attributed it to protracted delays and routing changes necessary to meet the objections of affected stakeholders. In particular, AltaLink stated it was obliged to undertake two major route changes on the Blood reserve and one consequential route change on the Piikani reserve. AltaLink also stated that it frequently encountered resistance from band members to the proposed routing on First Nations land with access being either restricted or completely disrupted, resulting in AltaLink being unable to carry out construction in an efficient and linear progression. Standby charges were incurred as construction teams were forced to stop work until landowner or occupant disputes could be resolved. To mitigate lengthy disruptions and costs, AltaLink accommodated First Nation route changes, re-mobilized around various land segments and altered construction plans. AltaLink also incurred concomitant engineering, design, procurement and overhead costs during this period.

1203. In addition, AltaLink noted that project schedule delays caused by re-routing and access restrictions moved construction to the difficult 2010 winter and spring conditions. The project variances reflect the various mitigation measures AltaLink undertook to ensure that construction progressed in a safe and environmentally responsible manner including installation of protective

access mats, use of helicopters, heating/hoarding and snow removal.⁶⁹⁰ Additional construction delays were necessary in spring 2010 as southern Alberta experienced significant precipitation and flooding. The project was delayed further in 2010 by environmental restrictions related to the *Endangered Species Act* which ultimately obliged AltaLink to de-mobilize completely from May to August 2010 and to stop work during the bird nesting period. AltaLink continued to accrue costs during this period to keep the project enabled.

Views of the RPG

1204. In its intervenor evidence, the RPG indicated that the SW project was proposed in 2004 to have an estimated cost of \$70 million with an in-service date of April 2006. The final cost of \$245 million with an in-service date of October 2010 was 3.5 times the original estimated cost and 4.5 years after the originally scheduled in-service date. These results raised grave concerns with respect to the performance of AltaLink's project management and its prudence with respect to this project.

1205. The RPG noted that TFOs were required to comply with ISO Rule 9.1.3 with respect to project reporting and that the AESO used the trend/change authorization (TCA) form to document and approve variances from budgeted costs. The RPG noted that AltaLink filed 25 TCAs for the SW project. Of these, the AESO "approved" TCAs 1 through 12 and "acknowledged" TCAs 13 through 25.

1206. The cumulative effect of TCAs 1 through 23 increased the cost of the SW project to \$153 million and extended the in-service date to February 2009. TCA 24 sought approval to further increase project costs to \$199 million and to extend the in-service date to May 2010. Of this \$46 million increase, only \$13 million was related to scope changes, route changes or siting work. The balance was caused by vaguely descriptive drivers including market conditions, estimating accuracies, variances and dwell time.

1207. The RPG asserted that there was no satisfactory explanation for these cost increases of \$33 million and that the \$20 million increase attributed to market conditions was especially troubling given that it occurred during a period of world-wide economic slowdown post-September 2008. Describing the impacts on costs in approximately the same timeframe, ATCO Electric claimed in its 2013-2014 GTA an improvement in "the economic climate" and that the "ensuing climate for project execution was significantly different in terms of contractor availability and therefore favorable contractor pricing."⁶⁹¹ The RPG submitted that it was reasonable to expect that the market conditions for both TFOs would be similar and that the improvement in costs reported by ATCO Electric raised grave concerns with the project management conducted by AltaLink in this same period.

1208. TCA 25 was filed in August 2010 and sought approval to increase project costs from \$199 million to \$245 million and to extend further the in-service date to October 2010. The final cost estimates in the monthly project reports had been indicating cost increases as early as January 2010. The RPG submitted that from January 2010 until August 2010, when TCA 25 was filed with the AESO, AltaLink was not in compliance with ISO Rules 9.1.3.2 and 9.1.3.3 as AltaLink apparently did not properly notify the AESO of the impending cost scope, trend and costs increases.

⁶⁹⁰ Application, Appendix 1 Attachment 8 at page 8-6.

⁶⁹¹ ATCO Electric 2013-2014 GTA, Exhibit 116, page 50, paragraph 164.

1209. The RPG explained that the AESO, stakeholders and the Transmission Facilities Cost Monitoring Committee (TFCMC) rely on the TCA reports to understand the potential for cost increases. Moreover, the ISO rule is designed to be forward-looking in order to allow for cost mitigation whenever possible. If the AESO and stakeholders are not provided with timely reporting, there is no reasonable manner for them to react to prevent unreasonable and imprudent cost increases. In the case of the SW project, it was clear that AltaLink failed to provide the TCA requests in a timely manner such that the AESO could potentially mitigate, or partially avoid, the cost increases of \$91.8 million dollars as it related to TCA 24 and 25. Moreover, it prevented stakeholders, including ratepayers, from intervening to potentially mitigate these cost increases.

1210. With respect to project execution, the RPG reviewed the final line item costs from the monthly reports for the SW project. This review revealed that the greatest cost increase related to transmission line labour (i.e., construction labour). The forecast costs tripled from early 2009 to late 2010, a period when ATCO Electric indicated that conditions provided “favourable contractor pricing.” During this same period, substation labour costs doubled for AltaLink.

1211. Another troubling aspect of AltaLink’s project execution was its inflexible preference for the preferred route. AltaLink knew or ought to have known at the time that the preferred route would result in cost increases due to the additional approvals required from entities with interests in that route. Development of the SW project over First Nations lands required a federal environment impact assessment; approval from Indian and Northern Affairs Canada (INAC); approval from the chiefs-in-counsel of both the Piikani and the Blood tribes; and approval from the respective bands and individual band members.

1212. AltaLink should have been fully aware of the time constraints and requirements necessary to address federal, INAC and First Nations issues as well as the environmental issues with the preferred route. As early as March 2007, well before the facilities application was filed with the Commission for approval, which was done in August 2007, AltaLink knew the preferred route included construction constraints on 20 per cent to 47 per cent of the route.⁶⁹² Given these constraints, AltaLink should have chosen one of the alternate routes.

1213. As it became more evident that the development timeline and final forecast costs were to increase on the preferred route, AltaLink could have changed to one of the two alternate routes it had considered. In TCA 22⁶⁹³ (March 2007), AltaLink estimated the cost to by-pass all federal lands at \$39.6 million, which would have resulted in a final cost forecast of \$185.4 million (taking into account all previous TCAs to that point in time).

1214. If AltaLink had applied for an alternate route from the beginning, it was reasonable to assume that the final costs for the SW project would have been appreciably lower than \$185.4 million. However, even assuming that AltaLink acted reasonably in initially applying for the preferred route, AltaLink should have reconsidered its position after the time delays and additional costs of the preferred route became known.

1215. AltaLink awarded construction contracts for right-of-way preparation and substation work in May 2009 and for the line construction in June 2009. When awarding these contracts, AltaLink knew that the work would require construction in sensitive environments. As noted above, they would not be able to construct for about half the year in nesting areas. Therefore, it

⁶⁹² Exhibit 52.04, D.0024 Southwest 2007 03.

⁶⁹³ Exhibit 75.02, IPCAA.AML-002(g) SUPP2.

was only reasonable to assume that when AltaLink increased its forecast labour cost after awarding the construction contracts, it did so with the knowledge and understanding that construction would be in environmentally sensitive areas, which included constraints related to native grasslands and species-at-risk.

1216. After awarding the contracts, AltaLink increased its forecast labour costs for transmission line construction to \$51.6 million and for substation labour to \$20.6 million. After the contracts were awarded, transmission labour costs continued to climb by a further \$37 million before project completion. The monthly reports⁶⁹⁴ noted these cost increases and minimally documented the activity during the transmission line construction period.

1217. After reviewing the information from the monthly reports with the forecast final costs, the RPG concluded that the bulk of the increased transmission labour costs was due to AltaLink's decisions to accelerate construction activity, especially through the use of helicopters (winter 2009) and doubling construction crews (Q3-2010). These are the periods when the final forecast costs advanced considerably, and not during the spring, when the rainfall was extensive.⁶⁹⁵ AltaLink knew for some time that it was constructing the line in an environmentally sensitive area, and it should have been prepared for all eventualities in such an area, including being prepared for warm winters in an area known to experience Chinooks, the sensitivity of native prairie to ground disturbances and the restrictions relating to species-at-risk.

1218. The RPG suggested that when it encountered a slower pace of progress in the early winter of 2009/2010, AltaLink could have (a) decided to accelerate progress with high-cost practices or (b) adjusted the schedule and settled for low-cost practices. Likewise, in Q3-2010, after resuming construction in August 2010, it could have adjusted the in-service date to moderate the pace of construction labour costs. It chose instead to double down on construction crews. AltaLink's execution of the project contributed considerably to the increased final project costs when an alternate viable option, to extend the in-service date, probably would have avoided the sizeable increase in transmission labour costs. Although AltaLink identified mobilization and de-mobilization as a major cause of cost overruns, it provided no evidence to confirm that the mobilization and de-mobilization of construction resources on the SW project were unavoidable through proper construction planning and management.

1219. With respect to project tendering, the RPG noted that AltaLink tendered transmission line construction work in the spring of 2009, a period of favourable contractor pricing according to ATCO Electric. Despite this climate, the AltaLink contract was awarded and the final forecast cost was increased to \$51.6 million from \$29 million, or an increase of 78 per cent.⁶⁹⁶ The RPG submitted that AltaLink's construction costs nearly doubled due to the approach AltaLink and its EPCM provider took to the tendering of the construction for the line. If AltaLink packaged its work in a way that prevented economies of scale for the construction suppliers, then the bid costs may have been higher than necessary. Alternatively, if the bid packages were unattractive to some key suppliers, then the number of bidders could have been reduced potentially resulting in higher costs. The RPG found the dichotomy between ATCO Electric's statement and the

⁶⁹⁴ Exhibit 119, RPG evidence, page 1-10.

⁶⁹⁵ In its presentation to the TFCMC in February 2011, AltaLink made no mention of helicopters and double work crews. In the presentation, under the title of "Environmental Challenges" it simply noted record rainfall and the constraint from species at risk. Exhibit 52.01, PDF 67 of 763.

⁶⁹⁶ Exhibit 52.04, PDF page 484.

doubling of AltaLink's transmission line labour costs disconcerting and requested further investigation through a cost and performance audit.

1220. In argument, the RPG noted that the information provided in the project trend/change authorization (TCA) forms, the monthly progress reports, and AltaLink's testimony led to concerns with respect to (a) the adequacy of the public consultation conducted by AltaLink; (b) the plans and preparations made for construction in an environmentally sensitive area, on First Nations lands, and in a region prone to wind and temperature variability; and (c) AltaLink's conduct when executing the construction of the project.

1221. The RPG noted that in its rebuttal evidence, AltaLink asserted TCA 24 reflected incremental scope changes and costs commensurate with the revised construction plan as well as market conditions for labour and material.⁶⁹⁷ While AltaLink's comments described the nature of the costs, these comments did not explain the forces and factors that led to the costs and, more importantly, whether there was or should have been an opportunity to avoid or mitigate them.

1222. The RPG stated that the scope and re-route changes in TCA 24 included changes to tower design and route in the Lethbridge area and re-routing of significant portions of the lines across First Nations lands, and, in the case of the Blood Lands, as much as 50 per cent of the initial route. These changes indicate concerns with the adequacy of AltaLink's planning and public consultation process, including whether AltaLink took appropriate measures to become aware of landowner concerns and whether it responded to those concerns appropriately in the preparation of its facility application.

1223. The RPG argued that the prudence of AltaLink's planning and public consultation process was particularly troubling as it related to the Blood and Piikani First Nations lands. The primary element of the consultation process on First Nation lands consisted of AltaLink's interaction with Band Councils.⁶⁹⁸ Approximately four to eight weeks after the close of record for the SW project facility application, concerns with the route on First Nations lands were sufficiently vocal that the project manager was compelled to make an initial notation in the January 2009 monthly progress report (in the unplanned/emerging issues section).⁶⁹⁹ This initial notation, however, does not shed any light on whether AltaLink knew or ought to have known of these concerns earlier in the development lifecycle, especially as it was preparing its facility application before August 2007, or after it filed its facility application and continued its discussions to secure the INAC permits in September 2008. Concerns with the First Nations route went beyond issues resolved in consultation with Band Councils.⁷⁰⁰

1224. The RPG submitted the referenced circumstances underscored the concern that AltaLink's planning and public consultation process was inadequate, imprudent and failed to distinguish between the interests of the band council and the band members when conducting its consultation.

1225. The RPG noted that in the facility application, AltaLink stated that it intended to use "... standard transmission line construction practices that were developed through years of

⁶⁹⁷ Exhibit 150.02, AltaLink rebuttal, paragraphs 705 and 706.

⁶⁹⁸ Exhibit 298.01, RPG argument, pages 25 and 26.

⁶⁹⁹ Attachment IPCAA-AML-02(d); Exhibit 52.04, PDF page 421.

⁷⁰⁰ Exhibit 298.01, RPG argument, page 27.

experience focused on effective environmental and safety management ...”⁷⁰¹ However, in its opening statement in this proceeding, AltaLink now described the SW project as the first major line constructed in southern Alberta in over 30 years.⁷⁰² The RPG argued that it was clear that construction costs significantly exceeded the various cost estimates presented with each TCA, including TCA 24, which “anchors the most appropriate and updated view of costs,”⁷⁰³ as of July 2009. If the construction plan underpinning the 2009 procurement process was developed by AltaLink (and its contractors) based on years of experience but was not attuned to the conditions and environment of southern Alberta, then AltaLink did not act prudently in the development of the project, and ratepayers should not be compelled to pay for AltaLink’s lack of due diligence.

1226. The RPG presented specific argument regarding TCA 25 with respect to three general areas: site access, weather conditions and construction scheduling. The most significant incremental costs itemized in TCA 25 related to land access restrictions and environmental mitigation. While the restricted site access due to First Nations issues has drawn the most attention in this proceeding, AltaLink was now indicating it also experienced site access restrictions on private lands and that these constraints contributed substantially to the incremental costs in TCA 25.

1227. The RPG noted the private lands related to the 10 tracts of land for which AltaLink needed right-of-entry orders from the Surface Rights Board (SRB).⁷⁰⁴ The RPG argued that it was not until the oral hearing that AltaLink attributed any of the incremental costs in TCA 25 to site access restrictions associated with private lands. No mention was made in the SW project variance report; in the presentations to the AESO and the TFCMC; in the information provided in responses to IPCAA-AML-12; in the SW project monthly progress reports; in the project change notices to the AESO (trend/change authorizations); or in AltaLink’s rebuttal evidence. The RPG recommended that the Commission direct further inquiry into the forces and factors that were now alleged by AltaLink to have contributed to the costs related to the private land access restrictions and whether AltaLink knew or ought to have known of these factors and whether the costs now claimed to have arisen due to these factors could have been avoided or mitigated.

1228. With respect to access restrictions on First Nations lands, the RPG argued that AltaLink’s explanations were self-serving and lacked credibility. In the RPG’s view, the stoppages appeared to be more purposeful rather than sporadic and random. The RPG stated that if the concerns of band members on First Nations lands were genuine and reasonable, it stood to reason that the concerns should have been identified in AltaLink’s public consultation process and steps taken early on to address the concerns; apparently, however, they were not. For example, in facility applications, the applicant summarizes the most commonly heard concerns of landowners. However, in this case, AltaLink’s facility application did not identify impacts to reserve lands or traditional land use impacts amongst the most commonly heard concerns from landowners.⁷⁰⁵ The RPG argued that the conflicting accounts of First Nations concerns and actions should be

⁷⁰¹ Exhibit 52.01, information responses, IPCAA.AML.12(e), SW project 240-kV facility application, page 6 (PDF page 89 of 763).

⁷⁰² Exhibit 156.02, AltaLink opening statement, page 2 (PDF page 2 of 3).

⁷⁰³ Exhibit 150.02, AltaLink rebuttal evidence, paragraph 705 (PDF page 152 of 170).

⁷⁰⁴ Exhibit 239.01, response to undertaking 20 at Transcript, Volume 3, page 613, restricted sites access issues, (PDF pages 5 and 7).

⁷⁰⁵ Exhibit 52.01, information responses, IPCAA.AML.12(e), SW project 240- kV facility application, Section 9.2, pages 66-70 (PDF page 149-153).

reviewed in greater detail by the Commission as AltaLink has provided no credible evidence suggesting that the actions of the First Nations were other than reasonable and genuine.

1229. With respect to weather impacts, the RPG noted that in AML-RPG-21, the RPG raised concerns regarding AltaLink's claims that wet weather and Chinooks affected its construction efficiencies in the November and December 2009 period. After reviewing the historical weather data for the Pincher Creek and Lethbridge area, the RPG concluded that the temperature variability in the winter 2009/2010 period was not out of the ordinary for the region and that any reasonable construction plan should have accounted for such temperature variability and likely Chinook conditions.⁷⁰⁶ The RPG argued that in its rebuttal evidence, AltaLink did not refute the RPG's assessment of the normal weather conditions for winter construction. Rather, it pointed to various incidences of weather, such as, Chinooks, winter storms, an early warming in the spring and high winds in the region, to rationalize its actions. These rationalizations simply demonstrated that AltaLink was ill-prepared to deal with the range of weather that is normal for southern Alberta. For example, the historical weather information provided in AML-RPG-21 Attachment 2 shows that the warming pattern in the spring of 2010 was not out of the ordinary and certainly not early when compared to any of the previous four years. As well, high winds ought to have been expected, as the region is well known to experience such events. Furthermore, AltaLink failed to demonstrate that the frequency of winter storms or Chinooks were beyond the range of weather events that could reasonably be expected and planned for in this region.

1230. With respect to construction scheduling, the RPG noted that in AML-RPG-21,⁷⁰⁷ it had raised concerns with the manner in which AltaLink scheduled the construction of the SW project. As set out in its response to the information request, AltaLink's monthly progress reports from 2006 through 2008 maintained a schedule that assumed an approximate one-year cycle from P&L to in-service date. When it eventually did obtain the P&L on May 8, 2009, AltaLink's construction plan also included a one-year cycle for its target in-service date of May 28, 2010.⁷⁰⁸

1231. The RPG argued that AltaLink's unwillingness to vary from this general one-year cycle for this project was troubling for several reasons. First, as noted in AML-RPG-21, it suggested a degree of disregard for the environmental and weather circumstances probable when constructing in southern Alberta. Second, it suggested that AltaLink's construction plan was schedule-driven without proper regard to the cost-effective execution of the project, bearing in mind what should have been understood as the construction restrictions in southern Alberta.⁷⁰⁹

1232. For example, when AltaLink tendered its construction contracts in the spring of 2009 and variously awarded them from April to June 2009, concerns were being raised by land occupants (Blood) and traditional land use groups (Piikani) with respect to the route selected by the band councils. The notations in the monthly progress reports are insufficient to determine to what degree the concerns with route selection included other concerns or issues that may have been related to the factors that led to the construction access blockages. However, AltaLink's schedule was unsound and AltaLink should not have proceeded with the tendering and awarding of contracts before resolving the land occupants' concerns. Another example of site restrictions and

⁷⁰⁶ Exhibit 142.02, information response AML.RPG.21, pages 38-50; Exhibit 14.09, information response AML.RPG.21 Attachment 2.

⁷⁰⁷ Exhibit 142.02, information response AML.RPG.21, pages 38-50 (PDF pages 38-50 of 126).

⁷⁰⁸ Exhibit 150.02, AltaLink rebuttal evidence, paragraph 709 (PDF page 152 of 170).

⁷⁰⁹ Exhibit 150.02, AltaLink rebuttal evidence, paragraph 714 (PDF page 153 of 170).

delays encountered by AltaLink relates to the ten tracts of private land to which AltaLink claimed a need for right-of-entry orders from the SRB.⁷¹⁰ To the extent that AltaLink knew or ought to have known that these concerns would impact the construction schedule, it raises questions concerning AltaLink's decision to proceed and to eventually incur higher costs in order to maintain or attempt to maintain an in-service date that was imprudently set by AltaLink.

1233. The RPG submitted that AltaLink compounded the problem by designing the construction contracts so that AltaLink bore the risk of standby charges⁷¹¹ whenever there were unreasonable access delays for the construction crews. AltaLink effectively committed itself (and ultimately ratepayers) to bear the costs related to risks that it had failed to avoid or mitigate at that point in time.

1234. The RPG provided several comments regarding the monthly progress reports for this project. At the outset, the RPG noted that it was AltaLink's position in this proceeding that the Commission and interveners should rely on the monthly progress reports to ascertain the events and prudence of AltaLink's actions with respect to the SW project.⁷¹² The RPG rejected AltaLink's assertion that the RPG and the Commission could rely on these reports. The RPG submitted that the monthly progress reports were not comprehensive and did not meet a standard of sufficiency proportional to the significance of the issues and costs related to the seven-year development of the \$239 million SW project.

1235. The RPG stated the monthly progress reports were simply a consolidation of summary information of "AltaLink activities with the activities of all the subcontractors."⁷¹³ Moreover, the summary notations describing the issues faced during project development and AltaLink's response can be compiled into less than 30 pages of documentation that itself contains extensive repetition from month to month.⁷¹⁴ As well, AltaLink's testimony in the hearing acknowledged that the author(s) of the SW project monthly progress reports did not record information that was germane to this prudence review.⁷¹⁵ This testimony underscored the fact that the monthly progress reports were not designed and produced for the purpose of the Commission's prudence review. Rather, the monthly progress reports were produced as a reporting vehicle to the AESO, that, in the RPG's view, did not challenge the reasonableness or prudence of the TFOs costs and therefore, was not concerned with the necessary documentation for such reviews.

1236. The sufficiency and adequacy of information on which the Commission relies to assess the prudence of AltaLink's actions should be proportional to the impugned costs and the concerns identified in respect of those costs. The SW project monthly progress reports were insufficient and on their own created an information deficiency that hampered the Commission's efforts to balance the interests of ratepayers and the TFO. The reports must be supplemented by additional information necessary to explain the events that led to the significant cost increases related to the SW project. Consequently, the RPG submitted that the monthly progress reports for

⁷¹⁰ Exhibit 239.01, response to undertaking 20 at Transcript, Volume 3, page 613, restricted sites access issues, (PDF pages 5 and 7).

⁷¹¹ Transcript, Volume 2, page 395, line 6; page 398, line 9 and page 434, lines 15-16.

⁷¹² Transcript, Volume 3, page 501, lines 6-17.

⁷¹³ Transcript, Volume 3, page 499, lines 9-12.

⁷¹⁴ Exhibit 142.08, AML-RG-21, Attachment 1.

⁷¹⁵ See Exhibit 298.01, RPG argument, pages 44-46 for details. Refers to Transcript, Volume 3, page 620 and Transcript, Volume 4, pages 662, 686, 699 and 720.

the project were of minimum probative value and not sufficient to assess the prudence of AltaLink's actions.

1237. Finally, the RPG noted that in Decision 2005-120, the board drew a distinction between before- and after-the-fact change proposals and, for the latter, directed AltaLink to provide additional information to the AESO. The RPG submitted that TCAs 24 and 25 were, for all intents and purposes, after-the-fact change notices in that the bulk, if not all, of the costs was committed to prior to the change notice being submitted to the AESO. As a result, the RPG submitted that AltaLink should have provided additional information as directed in Decision 2005-120 including, most specifically, the additional information describing the discussions between SNC-ATP and AltaLink, but no such information was provided in support of the incremental costs related to TCA 24 and 25.

Views of AltaLink

1238. In its rebuttal evidence and argument, AltaLink responded to the RPG's claims regarding whether AltaLink acted imprudently in the management of this project.

1239. AltaLink stated the main challenges encountered by the SW project included:

- four years of procedural delays due to a number of unusual one-time events to obtain P&L
- significant First Nations route changes post-P&L, band member intervention throughout the construction phase and associated secondary effects tied to these factors
- significant market inflation conditions from 2005 through 2010
- numerous project scope changes as the project progressed

1240. AltaLink explained that these challenges can be divided into two phases:

- A pre-P&L phase (NID to May 2009 P&L receipt) with unprecedented and unforeseeable events occurring to delay the project. In this phase, costs rose primarily due to rising input prices, route changes across the Blood First Nation reserve, and the cost of ongoing project management through the extended project schedule.
- A post-P&L construction phase in which the anticipated construction risks were more severe than could have been foreseen due to access challenges by individual First Nations band members during construction on First Nations land which made up approximately 60 per cent of the route.

1241. AltaLink stated that the TCA 24 July 2009 estimate revision of \$199 million (+20/-10 per cent accuracy) with a forecast ISD of May 2010 established a new base cost and schedule after four years of procedural delays from project initiation. AltaLink states that this is a reasonable stage from which to assess its performance on this project because all procedural delays had been removed. In particular, the 2009 estimate revision (TCA 24) captured the cost of all of the changes required to address the Commission's facility decision as well as the requested First Nations route changes. This TCA was reviewed and acknowledged by the AESO. The AESO did not raise any issues and AltaLink proceeded with the intent to complete the project by the revised ISD of May 2010.

1242. AltaLink asserted that although the July 2009 cost estimate revision anchored the most appropriate and updated view of cost (\$199 million) and ISD (May 2010), TCA 24 only captured

the incremental scope changes to the project post the 2007 facility application filing. It did not capture field construction. These additional requirements included the following:

- The Commission's direction to proceed on the preferred route as planned including additional monopoles in the Lethbridge River Valley alternate segment entering the City of Lethbridge.
- The Piikani and Blood First Nation requests to re-route significant portions of the lines across their reserves. The Blood re-route represented approximately 50 per cent of the initial route.
- Appropriate contingency for reasonable delays due to weather, access and unplanned environmental challenges.

1243. TCA 24 reflected the latest market conditions for labour and material, the additional siting, engineering and project management effort for the new route segments, the additional material required for towers, monopoles and foundations for the new route segments and the additional AFUDC.⁷¹⁶

1244. On August 16, 2010, AltaLink submitted TCA 25 to the AESO. The project cost estimate was revised from \$199 million to \$245.5 million (+20/-10 per cent), representing a \$46.4 million increase from TCA 24, and the in-service date for the remaining components of the project was changed from June 10, 2010 to October 31, 2010. The AESO reviewed TCA 25 and found the execution, scope and schedule presented to be reasonable.

1245. AltaLink outlined the key facts associated with the route selection and approval process and all main procedural delays.⁷¹⁷ In particular, AltaLink noted that to progress the SW project, in August 2007, AltaLink filed a consolidated facilities application with three routes: preferred route through the Piikani and Blood First Nation reserves, a bypass of the Piikani reserve (38 per cent longer), and a bypass of both reserves (49 per cent longer).

1246. AltaLink claimed that throughout the entire period from NID approval to P&L, AltaLink actively managed mitigations to achieve cost and schedule objectives despite these unforeseen challenges and communicated all changes as they occurred to the AESO. At the end of June 2009, prior to construction mobilization, the committed costs for the SW project were \$91 million which was equal to the original 2005 PPS estimate. The increasing cost for the SW project was extensively communicated and well-known.

1247. AltaLink stated early foundation work and initial tower assembly largely progressed as expected. What could not have been foreseen as of July 2009 was that individual band members on each First Nations reserve would begin to obstruct construction. AltaLink stated it had reasonably relied on both the band council agreements⁷¹⁸ and the INAC approval it had obtained. However, individual First Nations members refused to acknowledge that the agreements were binding, and hindered construction access and demanded additional mitigation.

1248. AltaLink explained the Blood concerns were environmental and specific to the impact on reserve lands. Mitigation of leafy spurge was a significant issue. After protracted negotiations, and numerous work stoppages, AltaLink agreed in November 2009 to add truck wash stations for

⁷¹⁶ Exhibit 150.02, AltaLink rebuttal evidence, page 149.

⁷¹⁷ Exhibit 150.02, AltaLink rebuttal evidence, paragraph 703.

⁷¹⁸ Exhibit 150.02, AltaLink rebuttal evidence, paragraph 710.

equipment entering the right-of-way. This significantly affected the productivity of the work crews and did not eliminate the random work stoppages as members withheld access to the right-of-way or access roads. Every stoppage resulted in crew stand-by charges of approximately \$100,000 per day.

1249. The primary concern of the Piikani was traditional land use. In particular, even though great care had been taken to find a solution for towers around Kettle's Hill, an additional concern and second request for a re-route was brought forward. The approval for the second re-route came in late December 2009.

1250. By early December 2009, line construction progress had fallen significantly behind and all schedule float in the construction plan had been consumed. Access issues with band members increased. AltaLink assessed the available alternatives to make up lost schedule time and not be susceptible to work stand-by charges brought on by band member obstructions. AltaLink determined that in the face of these factors, the optimal mitigation plan was to amend its construction plan to use helicopters instead of cranes to erect towers.

1251. AltaLink maintained the advantages of helicopter construction were significant. First, the towers could be assembled off the First Nations lands in an assembly line fashion thus avoiding any disruption to tower assembly work that otherwise would have been done on a tower-site-by-tower-site basis. Second, tower erection for 100 towers would take five days versus the maximum capability of crane erection of 25 days. This would save 20 days of schedule. Third, the helicopter process would alleviate heavy equipment traffic on the right-of-way and reduce environmental damage to native grasslands. Overall, the use of helicopters was forecast to be a cost saving of approximately \$300,000. By the end of February 2010, all towers that could be erected by helicopter had been erected and some lost time had been recovered. Utilization of helicopters allowed AltaLink to proceed with the construction of the low-impact route approved by the Commission and to avoid more costly, higher impact alternatives.

1252. AltaLink stated the remaining towers to be assembled and erected by crane were where First Nations interaction was once again a factor. Compounding the issue was an early thaw. The soft ground conditions heightened concern from First Nations regarding rutting in the native grasslands and Kettles Hill on the Piikani reserve. As environment considerations were of significant concern to band members, work was frequently stopped and rig mats were employed to mitigate rutting. Inevitably construction progress slowed. Then, migratory birds were observed to be arriving early, and on April 14, 2010, one of the largest snow storms to hit southern Alberta also caused extra delay to the projects.

1253. During this period, Alberta Environment and Sustainable Resources Development (SRD) officers were on site to monitor project progress and to advise regarding spring shut down. AltaLink was granted an extension by the SRD and Canadian Wildlife Services after extensive discussions to shutdown 14 days later than first advised in order to energize the Peigan substation and 955 line. The substation work at Peigan, Goose and Lethbridge continued so that the 955 line could be energized on May 28, 2010. Energizing the 955 line allowed wind generating customers to be removed from existing transmission constraints implemented through remedial action schemes (RAS) for summer peak. Spring shut down took place from May and lasted until late July 2010.

1254. AltaLink stated that during June and July of 2010, the project team regrouped to plan the fall construction activity. Construction crews were remobilized in late July with a target completion of October 31, 2010. The plan was to finish the project as quickly as possible as constructors had not originally planned for availability for the fall of 2010. The work challenges through the Blood reserve continued with ongoing delays and stand downs after every rain due to rutting concerns. The 967 line was energized on October 18, 2010.

1255. AltaLink explained that the incremental variance in forecast cost of \$46 million from the \$199 million (TCA 24) to project completion of \$245 million (TCA 25) was due to four primary factors which were not foreseeable in terms of the severity to which they influenced the construction plan as first devised in July 2009:

- An additional request in October 2009 from the Piikani to reroute around Kettles Hill required INAC and AUC amendment prior to proceeding with construction. This delay caused a shift in the construction plan to build foundations in the winter in a sensitive environmental area. Winter foundation construction requires updated engineering, special materials and additional equipment such as heating and hoarding.
- Despite band council resolutions supporting the SW project, individual band members restricted access to First Nation lands without prior notice causing significant construction disruption creating unpredictable daily and weekly construction planning and execution interruptions. Over 80 crew stand-by events occurred during the construction period largely due to First Nation members preventing access.
- Construction delays were compounded by poor weather. Early thaw drove additional duration of environmental mitigation for right-of-way protection, high winds prevented tower erection and stringing. The spring of 2010 was unusually challenging with sporadic winter storms and frequent Chinooks as directly experienced by AltaLink SRD was monitoring AltaLink's worksites closely for compliance to environmental commitments.
- The delay caused by items above pushed the construction window into spring and into the restricted bird breeding season delaying completion of the project five months beyond the May ISD.⁷¹⁹

1256. AltaLink maintained that during all of these pre- and post-P&L challenges it exercised sound management discipline following both its internal processes and meeting its industry obligations. AltaLink stated the RPG has mischaracterized the project as having significant cost over-runs. In reality, the project is 20 per cent over the 2009 estimate revision. Given the significant challenges faced during construction, this result demonstrates focused and pro-active management by the SW project team. As such, there is no need for additional audits of the projects.

1257. AltaLink maintained the summary of events and the full suite of monthly reports⁷²⁰ demonstrated that AltaLink had been proactive with its reporting to the AESO the challenges it faced in completing the SW project. In particular, AltaLink noted that the RPG had suggested that some of the TCAs on the project were not submitted in a timely manner. ISO Rule 9.1.3.2 specifically states that the designated TFO shall notify the ISO as soon as reasonably practical. AltaLink explained that when challenges occur on a project, options need to be evaluated and cost and schedule estimates developed, vetted, and agreed to before a reasonable estimate can in

⁷¹⁹ Exhibit 150.02, AltaLink rebuttal evidence, page 153.

⁷²⁰ Exhibit 52.04.

turn be provided to the AESO. Additionally, when there is a schedule impact from an event such as weather, species-at-risk, or P&L delays, it is unknown at the time exactly when the event will materialize, pass or how long it will last. This can impact the timing of when the TCA is submitted. AltaLink stated that even if the cost of the change was not known, AltaLink did advise or alert the AESO in the monthly report that a TCA would be coming.

1258. AltaLink stated that the RPG has inferred that had AltaLink recommended the alternate route, and had the Commission approved the alternate route, many of these delays and costs could have been avoided. In AltaLink's view, this claim is incorrect. Many of the challenges encountered on the project would have been common to both the preferred and the alternate route. For example, both routes are located in native prairie grassland and both would have experienced similar weather conditions. It is also unreasonable to assume that the alternate route would have been void of nesting birds or species-at-risk or stakeholder challenges. Furthermore, given the next best alternate route was approximately 30 to 40 km longer than the route filed and approved by the Commission, one could reasonably assume that these issues would have been more significant on the longer alternate route.

1259. AltaLink noted that the RPG has expressed concern that after the contracts were awarded the construction costs continued to climb. Construction contracts were unit-rate contracts. The increase in costs from \$199 million at the start of construction to the forecast project completion (\$245 million) was due to the increase in time spent in construction brought on by unforeseen events driven by weather, First Nations access restrictions, an SRD directive to stop construction during bird breeding season and new foundation work required to address the additional re-route around Kettles Hill on the Piikani reserve. There were over 80 interventions or events causing standby time at \$100,000 per day. In addition, 46 crew moves⁷²¹ (relocations to other work fronts) were carried out due to access issues. Significant effort was put into environmental mitigation during very wet conditions. Rig mats were used to protect native prairie areas and top soil. Both SRD and First Nations' designates monitored AltaLink's compliance to the environmental protection plan as the construction progressed.

1260. AltaLink also noted that the RPG had referenced the acceleration in the pace of construction between August 2010 and October 2010⁷²² and suggested that this acceleration negatively affected costs. AltaLink explained the doubling of the crew size referenced in the evidence was limited to a second stringing crew. The contractor's stringing costs were competitively tendered and were based on fixed unit rates. The contractor honoured these same unit rates for the additional stringing crew. As such, the additional costs to the project for bringing on the second crew were limited to an additional crew mobilization and demobilization fee which was \$800,000. AltaLink stated this additional mobilization and demobilization fee was more than offset by the avoided project extended schedule time or monthly carrying costs, thus making the decision to bring on an additional stringing crew a prudent decision.

1261. Similarly, AltaLink maintained the benefits of using helicopters on a transmission line project the size and scale of the SW project were many, and included the following:

- Enables the assembly of towers to occur in assembly yards, and as a result, the work is less impacted by the seasons, weather, landowners issues, species at risk, etc. This leads to lower overall project costs.

⁷²¹ Exhibit 150.02, AltaLink rebuttal evidence, paragraph 730.

⁷²² Exhibit 150.02, AltaLink rebuttal evidence, page 156.

- decreases the total project construction time
- reduces environmental impact on the right-of-way
- minimizes matting on the right-of-way⁷²³

1262. AltaLink noted that, at the time helicopters were considered, AltaLink's EPCM provider performed a cost/benefit analysis that determined that the helicopters would be beneficial to the project and result in lower overall costs as compared to alternative methods. This cost/benefit analysis confirmed that the helicopter assembly process would allow 100 towers to be erected in five days versus the estimated 25 days by crane. Given the significant access issues, the cost of using helicopters offset the daily stand-by charge of \$100,000 per day.

1263. Finally, the utilization of tower assembly off of the right-of-way minimized the standby time being accumulated due to band member intervention and prevention of access. Landowner concerns were mitigated as towers were not constructed directly on the land, heavy vehicle traffic was lowered with a consequent reduction in impact to land. Thus, blockades and work stoppages were avoided.

1264. The effective construction of a transmission line, in AltaLink's submission, is not simply about cost. In AltaLink's view, the SW project was successfully constructed on the appropriate, lowest impact route due to the creative solutions utilized by AltaLink to mitigate and address valid landowner concerns.

1265. AltaLink did not agree that extending the ISD would have reduced the cost of labour or the cost of the project. AltaLink stated that had the project ISD extended into Q1 2011, the project would have incurred a sizeable AFUDC charge in excess of \$10 million. Also, the work was being completed on a unit-rate basis and delaying the project would not have changed or solved the issue of band member intervention on the right-of-way upon resumption. Moreover, completing the project by the end of October allowed a customer who was ready to commence generation to connect to the system benefitting all ratepayers. Last, AltaLink stated the AESO acknowledged that the execution schedule to October 31, 2010, was reasonable.

1266. AltaLink also claimed that the RPG suggested that the procurement economies of scale and/or terms and conditions unfavourably affected the project costs. AltaLink noted that the RPG provided no evidence nor did it make any specific recommendations in this regard. AltaLink confirmed that the procurement methods utilized for the project were consistent with standard industry practices and that the procurement terms and conditions would be considered typical EPCM terms and conditions.

1267. In argument, with respect to choice of route, AltaLink stated that upon approval by the Commission of the SW project in March of 2009, AltaLink was obligated to build the approved route. AltaLink had neither the right nor the ability to unilaterally vary an approved route. That can only be done by the Commission upon notice to all potentially adversely affected persons. AltaLink noted that the RPG appeared to suggest that AltaLink should have made the decision to go elsewhere.⁷²⁴ AltaLink maintained this suggestion was fundamentally flawed. First, AltaLink did not have the ability to unilaterally go anywhere other than as approved by this Commission. Second, and critically, AltaLink stated it had already been elsewhere and encountered very significant opposition.

⁷²³ Exhibit 150.02, AltaLink rebuttal evidence, page 157.

⁷²⁴ Exhibit 122.05, page 1-10.

1268. AltaLink maintained that the historical backdrop to the ultimate approval of the SW project by this Commission on March 10, 2009, provided important context to the challenges faced in siting and constructing a high voltage transmission line from Pincher Creek to Lethbridge. AltaLink enumerated the following:

- Following need approval in 2005, the routing and consultation process took over 27 months. The project plan started with one route option - the shortest and straightest connection between the Goose Lake Sub 103S, Peigan 59S and North Lethbridge 370S.⁷²⁵
- Approximately 60 per cent of the route crossed First Nations Reserves: the Piikani and Blood (26.5 km/25.5 km respectively). Negotiation with the First Nations was dependent on timing of Chief and Band Council elections.⁷²⁶
- In 2006, a federal investigation of Piikani band management jeopardized Piikani route negotiations prompting AltaLink to prepare alternate route options.⁷²⁷
- Federal and provincial approval processes were pursued in parallel for the Blood and Piikani.⁷²⁸
- In April of 2007, AltaLink rejected the Piikani's business proposal due to the Piikani's unacceptable compensation for the arrangement.⁷²⁹
- To keep the SW project moving forward, in August 2007, AltaLink filed the consolidated facilities application with three routes: preferred route through the Piikani and Blood First Nation reserves, a bypass of the Piikani reserve (38 per cent longer), a bypass of both reserves (49 per cent longer) to progress the project.
- The consolidated facilities application submitted in August of 2007 set forth, according to the facts known at that time, a +20 per cent/-10 per cent estimate of \$133 million. Ultimately, over 22 months passed from the filing of the consolidated application to the grant of actual permits.
- A pre-hearing meeting was held on July 23, 2008, and a decision of the Commission was issued on August 6, 2008.⁷³⁰ Numerous interventions had been received in response to the Commission's notice of application.⁷³¹ Decision 2008-071 sets forth AltaLink's preferred and alternate routes. Prior to issuance of the decision on the pre-hearing meeting, AltaLink received the required approvals under Section 28 of the *Indian Act*,⁷³² and so advised the Commission.⁷³³ In the result, the alternate routes were withdrawn with the important caveat that the Commission could assess the alternate routes in determining whether or not the preferred route was in the public interest.⁷³⁴ Importantly, AltaLink pointed out the Commission noted "with the removal of Alternative Routes 1 and 2, the majority of the remaining affected landowners who have filed interventions on this

⁷²⁵ Exhibit 150.02, page 147, paragraph 703.

⁷²⁶ Exhibit 150, page 147, paragraph 703, Transcript, Volume 4, page 660, lines 4 to 23.

⁷²⁷ Exhibit 150.02, page 147, paragraph 703.

⁷²⁸ Exhibit 150.02, page 147, paragraph 703.

⁷²⁹ Exhibit 52.04, page 154, Exhibit 52.04, page 154.

⁷³⁰ Decision 2008-071: AltaLink Management Ltd., 240-kV Transmission Lines from Pincher Creek to Lethbridge, Pre-hearing Meeting, Application No. 1521942, Proceeding ID. 19, August 6, 2008, pages 2 and 11.

⁷³¹ Decision 2008-071, page 2.

⁷³² R.S.C. 1985 c. I-5.

⁷³³ Decision 2009-028: Decision 2009-028: AltaLink Management Ltd., Transmission Line from Pincher Creek to Lethbridge, Application No. 1521942, Proceeding ID. 19, March 10, 2009, page 3. Decision 2008-071, page 5. Decision 2008-071, page 6.

⁷³⁴ Decision 2008-071, page 5.

proceeding are concentrated around a relatively short portion of the route where it approaches and enters the City of Lethbridge.”⁷³⁵

1269. The extent of the interventions and opposition to the SW project removed by dropping the alternate routes (which by-passed the First Nations lands) was readily apparent by comparing the participants and interventions at the pre-hearing meeting⁷³⁶ to those interveners that appeared and opposed the SW project at the hearing of the application as set forth in Decision 2009-028.⁷³⁷ The alternate routes were more costly and had higher impacts. Further, these routes faced significant opposition from affected landowners.⁷³⁸ The result of the agreement with the First Nations and the approval of INAC allowed the longer, higher impact alternate routes to be dropped.⁷³⁹

1270. AltaLink stated the AESO was regularly updated regarding the progress on the SW project and the changing cost profile of the project. The approved need for the project never changed.

1271. AltaLink also stated that during the need approval proceeding, the AESO informed the board it would return to the board if material changes to the need arose.⁷⁴⁰ The Commission also noted in its decision on the facility application: “The AESO also acknowledged that it had a legal obligation to respond to any material change in transmission need and an obligation to report such a change to the Commission pursuant to the terms of the need approval.”⁷⁴¹ The AESO was a participant in the facilities application hearing for the SW project.⁷⁴² At no time has the AESO asserted that updated cost information, or any other information, affected the need for the project.

1272. AltaLink noted that the RPG has made an issue of the AESO not “approving” all 25 TCAs. AltaLink observed that ISO Rule 9.1.3.5 required the AESO to (i) approve the TCA, (ii) reject the TCA, (iii) cancel the project or (iv) recommend that AltaLink apply to the Commission for an amendment to the P&L, when presented with a TCA.⁷⁴³ Where the AESO “approves” a TCA, the project is deemed to be amended.⁷⁴⁴ As the mandatory language of the rule indicates, the AESO has no authority to do anything other than these four options. AltaLink stated that the first 24 TCAs submitted by AltaLink on the SW project were “acknowledged” or

⁷³⁵ Decision 2008-071, page 6.

⁷³⁶ Decision 2008-071, page 16.

⁷³⁷ Decision 2009-028, page 46.

⁷³⁸ Decision 2008-071, page 4.

⁷³⁹ Decision 2008-071, page 5, and Decision 2009-028, paragraph 17.

⁷⁴⁰ Decision 2005-049, page 5.

⁷⁴¹ Decision 2009-028, paragraph 50.

⁷⁴² Decision 2009-028, page 46.

⁷⁴³ ISO Rule 9.1.3.5: The ISO shall review the Project Change Proposal submitted by the Designated TFO pursuant to rule 9.1.3.4. As soon as reasonably practical, and no later than 15 days following receipt of the Project Change Proposal, the ISO must do one or more of the following: a) approve such proposal, with or without amendments, in which event the Project shall be deemed amended; b) reject such proposal with or without requesting a revised Project Change Proposal; c) cancel the Project; and/or d) recommend that the TFO apply to the Commission for an amendment to any approval it may have obtained pursuant to the HEEA. (Emphasis added by AltaLink).

⁷⁴⁴ ISO Rule 9.1.3.5 [...] a) approve such proposal, with or without amendments, in which event the Project shall be deemed amended.

“approved” by the AESO.⁷⁴⁵ The AESO clearly found the changes set out in TCA 25 “relative to the execution scope and schedule” were reasonable.⁷⁴⁶

1273. AltaLink claimed it was patently incorrect to suggest AESO approval of any TCA had no impact on the later prudence review. ISO Rule 9.1.3.5 deems the project to be changed upon approval of a TCA.⁷⁴⁷ AESO approval of a TCA therefore changes the baseline against which the prudence of costs ought to be measured.

1274. AltaLink maintained it was not reasonable to suggest that AltaLink should have its cost disallowed or audited because the AESO acknowledged, rather than approved, the TCAs. The AESO did not reject the TCAs. AltaLink has clearly met its obligation to advise the AESO of changes as they happen. The TCAs were submitted, acknowledged or approved by the AESO and never challenged. AltaLink relied on the acceptance by the AESO and continued to diligently execute the SW project.

Reply of the RPG

1275. The RPG noted that AltaLink has stated that the logical point of departure for the comparison of forecast costs to actual costs of the SW project should be TCA 24 as this was when “the scope of the project was finally defined.”⁷⁴⁸ The RPG disagreed.

1276. Scope, as defined by AltaLink, is based on the technical requirements established by the AESO in its functional specifications.⁷⁴⁹ The scope of the SW project was substantially finalized when the AESO added the requirement to include the second circuit from Peigan to Lethbridge (968L) in 2006. This occurred at the time of TCAs 7 and 12, which were dated mid- 2006⁷⁵⁰ and as of mid-2006, the cost estimate for the SW project was approximately \$101 million (+20 per cent/-10 per cent).

1277. If there was a logical point of departure at which the scope of the SW project was substantively and finally defined, it was TCA 12, not TCA 24. From this point onwards, costs ran up an additional \$138 million to \$239 million (or a 137 per cent increase), of which only \$3.1 million is attributable to further AESO scope changes.⁷⁵¹ The remaining \$135 million (or 134 per cent increase) related wholly to AltaLink’s mismanagement of the project.

1278. AltaLink appeared to rely on the AESO’s establishing a need for the project to justify AltaLink’s actions.⁷⁵² The RPG maintained that contrary to AltaLink’s claims, the AESO’s comments do not support any claim of prudence on AltaLink’s part. Indeed, the AESO was clear throughout its dealings with AltaLink that (a) the AESO expected that AltaLink was taking all necessary steps to ensure its costs were prudent; (b) the AESO at no time was making an assessment concerning the reasonableness or prudence of AltaLink’s costs; and (c) questions of

⁷⁴⁵ Exhibit 52.05, pages 1 to 118.

⁷⁴⁶ Exhibit 52.05, page 118.

⁷⁴⁷ ISO Rule 9.1.3.5 [...] a) approve such proposal, with or without amendments, in which event the Project shall be deemed amended; (Emphasis added by AltaLink).

⁷⁴⁸ Exhibit 297.02, AltaLink argument, paragraph 621.

⁷⁴⁹ Transcript, Volume 2, page 367, line 8-13.

⁷⁵⁰ Exhibit 52.05, PDF pages 19-24 and 46-52.

⁷⁵¹ TCA 21 \$434, 883 due to bypass analysis, TCA 23 \$2.7 million.

⁷⁵² Exhibit 297.02, AltaLink argument, paragraph 631.

the prudence or imprudence or reasonableness or unreasonableness of AltaLink's costs would be made by the Commission.

1279. In particular, the RPG noted the AESO's handwritten comments on TCA 25 read as follows:

This acknowledgment is the AESO's confirmation that it has reviewed the Project Trend/Authorization form relative to the execution scope and schedule and finds these elements reasonable.

The AESO also notes that these changes did not result from changes in technical requirements.

The AESO is not approving or endorsing the prudence of the costs presented. [emphasis added]⁷⁵³

1280. The second sentence in the AESO's comment as quoted above makes clear that the costs in TCA 25 did not reflect changes to technical requirements. In other words, the costs were not related to AESO scope changes. And, if they are not related to scope changes, then, by default, they must have been related to AltaLink's project execution.

1281. AltaLink's claim that it was required to build the approved route is an attempt to shift its accountability elsewhere, this time to the Commission. When the Commission approved the route in Decision 2009-028, it did so based on the representation made to it by AltaLink and based on the record of the proceeding, including the cost estimates provided. The Commission cannot be held to account for AltaLink's imprudence if AltaLink failed: (a) in its duty to consult with stakeholders; (b) to prepare a proper environmental assessment; (c) to identify the necessary precautions to mitigate environmental concerns; and (d) to develop a construction project attuned to the circumstances and conditions of construction in southern Alberta and on First Nations lands.

1282. Further, the RPG noted that following Decision 2009-028, AltaLink applied and received approval to alter the route of the SW project in three different locations: (a) in and around Kettles Hill area in the Piikani Reserve;⁷⁵⁴ (b) on the west side of the Blood Reserve;⁷⁵⁵ and (c) on the east side of the Blood Reserve.⁷⁵⁶ Clearly, AltaLink was not obligated to build on the route approved in Decision 2009-028. Rather, it could, exercising proper judgment, make an amendment application, which it did, but, unfortunately, did far too late in the process.

1283. The fact that three line re-routes were required within months of Decision 2009-028, further illustrated AltaLink's imprudence. AltaLink knew or ought to have known well before Decision 2009-028 was issued that its route selection was unacceptable to stakeholders. Indeed, it should have known this before it made its facilities application. These re-routes were not minor changes, e.g., simply moving a tower a few meters. Rather, the re-routes represented significant changes to the right-of-way corridor and such changes should have been known well before Decision 2009-028 was released.

⁷⁵³ Exhibit 52.05, PDF page 118.

⁷⁵⁴ Decision 2010-013: AltaLink Management Ltd., Transmission Lines 955L and 956L, Reroute, Application No. 1605750, Proceeding ID. 448, January 8, 2010.

⁷⁵⁵ Decision 2009-143: AltaLink Management Ltd., Re-route 240-kV Double-Circuit Transmission Line 967/968L Across the Blood Indian Reserve No. 148, Applications No. 1605446, Proceeding ID. 300, September 21, 2009.

⁷⁵⁶ Decision 2009-143.

1284. AltaLink asserted the opposition it faced was unpredictable. The RPG disagreed. The opposition may have been unpredictable to AltaLink. However, the RPG maintained that was not the test of prudence. There was no evidence on the record that AltaLink faced any opposition to the SW project (or to the routing of the project) that could not have been foreseen and mitigated by a competent utility prudently planning. The construction of a transmission line is not inherently controversial and work stoppages were not inevitable. It was the duty of the utility to reduce or eliminate concerns early on in the project planning, thereby reducing costs and potential delays. Second, AltaLink's claims of unpredictable opposition are unsubstantiated by any probative evidence. That opposition beyond the norm occurred in the SW project is not in dispute. What is in dispute is the reason it occurred.

1285. In conclusion, the RPG maintained there was substantial doubt that AltaLink's management of the SW project was prudent. The RPG accepted that the Commission may wish to obtain further factual information before making a determination to disallow costs related to the SW project, and for this reason, recommended that the Commission engage an independent expert to conduct a cost and performance audit of the SW project.

Commission findings

1286. As noted above, in Section 14.1, determinations regarding prudence are to be based on the information that the TFO knew or ought to have known at the time of the decision and whether those decisions reflected the best interests of customers by avoiding needless expense.

1287. The Commission's initial findings address the following issues:

- Assessment of the magnitude of the cost over-run including determination of the date against which the baseline of the project should be assessed.
- Whether an alternate route should have been considered as progress on the project unfolded.
- The adequacy of the public consultation and planning process.
- The reasonableness of AltaLink's response to ongoing construction issues including the costs incurred by AltaLink's decision to maintain its October 2010 in-service date.

Magnitude of the cost over-run

1288. In its evidence, the RPG has claimed that the SW project, as originally proposed, was to have an estimated cost of \$70 million and a 2006 in-service date. Final cost was \$245 million with an in-service date of October 2010, three and a half times the cost and 4.5 years after the originally scheduled completion date.

1289. AltaLink has claimed that the logical point for the Commission to assess adherence to forecast cost and schedule starts with TCA 24 in 2009, which it notes was after four years of procedural delays. AltaLink explained this was the point in time when all procedural delays had been removed and the cost of all the changes, including the requested First Nations route changes, were known.

1290. The RPG countered that the scope of the project was substantially finalized at the time TCA 12 was issued, when the AESO added the requirement to include the second circuit from Peigan to Lethbridge (968L). The RPG was especially critical of transmission line labour costs, questioning the use of helicopters.

1291. The Commission notes that TCA 24 added an incremental \$46 million to the project's cost, of which only \$13 million was due to scope changes. TCA 25 adds a further \$46 million to the project's costs. The Commission has examined TCA 25⁷⁵⁷ and notes that the AESO has gone to the effort of crossing out the word "approvals" and inserting the word "acknowledge." The AESO has also stated that, while it found the scope and schedule to be reasonable, none of the changes were due to changes in technical requirements.

1292. In particular, the Commission notes that there were 80 instances of band member intervention on the First Nations portion of the route, with an estimated cost of \$8 million for standby charges. In addition to this, the EPCM contractor was paid a four per cent fee during the period that the construction crews were not working. The Commission would expect that any management time spent in planning the re-allocation of crews would be compensated for in the charges for such management time. The following exchange is informative.⁷⁵⁸

Q. -- rounding around and so times the \$100,000 by 80, the
14 \$8 million figure is more accurate. SNC would have received
15 4 percent of that \$8 million, and that would be a cost on top
16 of the 8 million?

17 A. MS. PICARD-THOMPSON: It would be appear that we
18 can't do engineering math that quickly. But SNC would have
19 gotten the markup on that. That's correct. And I believe
20 it's in the order of \$32,000. I was having my figures
21 checked just in case.

22 Q. So I can -- you know, I guess I can see that there might
23 have been ongoing construction management at the time of
24 these shutdowns, but I guess I have to question what
25 construction was going on at the time of the shutdowns?

00423

1 A. MS. PICARD-THOMPSON: In actual fact, sir, that is
2 actually when there is more activity because clearly the
3 construction managers are trying to figure out how to
4 reposition the crews, trying to look for alternatives. So
5 you kind of work doubly hard when you actually have a
6 slowdown or something that's occurring. You're trying to
7 manage and mitigate the risks.

8 Q. And that's why you get paid --

9 A. MS. PICARD-THOMPSON: To manage the contract.

10 Q. -- for every hour you spend doing construction
11 management.

12 My question is: Why would you get a markup on
13 construction labour when there is no construction labour
14 because there's a shutdown?

15 A. MS. PICARD-THOMPSON: Again, sir, it is the terms of
16 the contract, and that is the way the contract is designed.

17 Q. Actually, then, the more the work crews literally spin
18 their wheels in the mud, the more SNC makes; yes?

19 A. MS. PICARD-THOMPSON: Sir, I don't believe that that
20 inference is a proper inference.[emphasis added]

⁷⁵⁷ IPCAA-AML-002(g), Exhibit. 54.

⁷⁵⁸ Transcript, Volume 2, pages 422-423.

1293. The Commission finds that, even if one accepts that TCA 24 is the logical point from which its prudence assessment should commence, TCA 25 itself involves a variance of \$46 million for which no adequate justification has been provided. In terms of both absolute dollars and percentage of budget, the Commission considers this variance to be significant and one that warrants further investigation. The Commission particularly questions the prudence of paying \$320,000 to the EPCM service provider while the construction crews were unable to work.

Should an alternate route have been considered as progress on the project unfolded

1294. The RPG has suggested that AltaLink could have chosen one of the alternate routes, noting that, as early as March 2007, it knew that up to 47 per cent of the route would be affected by construction constraints. Even if AltaLink could be said to have acted reasonably at this point, the RPG said it should have reconsidered matters in 2009 once the time delays and additional costs of the preferred route were known.

1295. AltaLink did apply and receive approval to alter the route of the SW project in three different locations: (a) in and around the Kettles Hill area in the Piikani Reserve;⁷⁵⁹ (b) on the west side of the Blood Reserve;⁷⁶⁰ and (c) on the east side of the Blood Reserve.⁷⁶¹

1296. AltaLink proposed two alternate routes in the facilities application. Both were longer and encountered opposition. Additionally, an alternate route would require an application to the Commission for approval, and would be subject to the same weather problems and other issues encountered on the preferred route.⁷⁶²

1297. The Commission acknowledges that AltaLink would have had to receive approval to alter the route and there would have been a cost to this. However, the Commission notes that AltaLink was required to alter the route three times due to First Nations' concerns. As noted above, AltaLink experienced 80 band member interruptions, at an estimated cost of \$8 million, as well as 46 crew moves.

1298. The Commission has to question if adequate planning and consideration of all potential issues on First Nations land took place and, if it had, if an alternate route should have received greater consideration.

The adequacy of the public consultation and planning process

1299. The RPG has raised concerns with respect to AltaLink's public consultation process, particularly as it related to First Nations lands. The RPG noted that the routing through First Nations lands was subject to significant change, even after AltaLink had previously conducted several years of study and negotiations.

1300. The Commission notes that, under cross-examination,⁷⁶³ AltaLink has identified this project as being its first project on First Nations land. Given this, the Commission considers that it would have been reasonable and prudent for AltaLink to have retained expert external

⁷⁵⁹ Decision 2010-013.

⁷⁶⁰ Decision 2009-143.

⁷⁶¹ Decision 2009-143.

⁷⁶² AltaLink argument, page 139.

⁷⁶³ Transcript, Volume 4, page 673.

assistance to identify, and to assist it in consultations with, all groups and individuals whose input and/or approval might reasonably have been expected with respect to routing issues. Mr. Frehlich did identify that consultants may have been used to assist AltaLink in identifying traditional land use sites:⁷⁶⁴

We would do that with them. We'd have consultants or our people helping with that.

And later,⁷⁶⁵

A. MR. FREHLICH: Well, the fieldwork would have
11 included members from the Band that would hold the
12 traditional land use history of the Band; and then it would
13 have included potentially either consultants that we had
14 engaged.
15 For this particular one, I can't recall, but
16 I'm sure we had consultants, and it probably included at
17 least one of our AltaLink employees along with that
18 consultant and the traditional land use -- I'll call it group
19 of Band members as we would have done that fieldwork.

1301. It is unclear to the Commission, however, whether AltaLink relied on expert external resources to the full extent prudence would require given the magnitude of the problems it encountered and might reasonably have expected.

1302. The Commission notes that AltaLink appeared to have relied primarily on its own resources and to have directed those resources principally to consultations with band councils.⁷⁶⁶ Mr. Forster and Mr. Frehlich engaged in a lengthy conversation around the engagement of elders in the planning process.⁷⁶⁷ From the following exchange, it appears that the elders may not have been engaged until later on in the process.⁷⁶⁸

1 Q. You have told us, sir, that we can rely on these monthly
2 progress reports. I'm relying on it. The first discussion
3 of elders is in October 2008. I'm relying on your
4 documentation, sir.
5 A. MR. FREHLICH: Well, I think the first time it
6 was written in the monthly reports is on that date. That
7 doesn't mean that was the first discussion, Mr. Forster, so
8 I'll disagree with you there.
9 Q. It doesn't mean that, sir, and it doesn't mean that it
10 wasn't the first time.

⁷⁶⁴ Transcript, Volume 4, pages 672 to 673.

⁷⁶⁵ Transcript, Volume 4, page 677.

⁷⁶⁶ Exhibit 150.02, AltaLink rebuttal evidence, paragraph 710.

⁷⁶⁷ Transcript, Volume 4, pages 681-688.

⁷⁶⁸ Transcript, Volume 4, page 686.

1303. In addition to the above, the RPG has pointed out that during the hearing it was identified, for the first time, that there were also costs associated with access issues for non-First Nations landowners.⁷⁶⁹

1304. Finally, the Commission also notes the following exchange between Mr. Forster and Ms. Picard-Thompson which throws into question whether AltaLink adequately anticipated the environmental issues involved:

- A. MS. PICARD-THOMPSON: -- with -- let me just finish
22 my sentence, and we'll wait for the reports in a moment.
23 But we worked extensively with Alberta
24 Environment and Sustainable Development and as well as the
25 Canadian Wildlife Services to adjust our environmental
1 mitigation plans. So, yes, sir, they were known.
2 And I believe the important component here to
3 mention is the severity of the issues were not known or
4 foreseeable. And that is really what is at issue here with
5 this particular change notice, is the severity of the issues
6 that we faced during construction.
7 Q. You want to say that the severity of the environmental
8 restrictions was something that you hadn't planned for?
9 A. MS. PICARD-THOMPSON: Yes. The compounding effect of
10 intermittent access to the right-of-way. And, as has been
11 noted very specifically in our month reports, there is a
12 prime construction window in which to operate, and we were
13 very watchful of trying to complete the project within that
14 window of constructability.⁷⁷⁰ [emphasis added]

1305. Based on the record in this proceeding, and, in particular, AltaLink's testimony that this was its first project on First Nations lands, the Commission cannot determine whether AltaLink acted prudently in its public consultations and environmental impact mitigation planning. The Commission considers that these issues warrant further investigation.

Was AltaLink's response to ongoing construction issues reasonable?

1306. The RPG has also raised concerns with respect to AltaLink's construction execution. The RPG stated that its analysis of weather conditions for the winter of 2009/2010 indicated that conditions were not unusual. The RPG contended that a reasonable construction plan would have accounted for the usual variations in temperature. Similarly, the RPG noted that AltaLink's monthly progress reports consistently allowed for a one-year build cycle. The RPG stated there was no need for such a rigid schedule, especially given the land access and environmental issues of which AltaLink was aware.

1307. AltaLink countered the RPG's concerns by stating that its use of helicopters was efficient and economic. AltaLink claimed that delaying the ISD until 2011 would have resulted in significant AFUDC charges. Additionally, it was uncertain that a delay would have resolved the issue of band member intervention on First Nations lands.

⁷⁶⁹ Exhibit 239, AltaLink response to Undertaking 20.

⁷⁷⁰ Transcript, Volume 3, page 592.

1308. The Commission acknowledges AltaLink's assertions, but does not consider that AltaLink has supplied sufficient analysis to support its claims, in light of the magnitude of the variances involved. In particular, the Commission notes that, while AltaLink has claimed that the use of helicopters was cost-effective, it still incurred \$8 million in standby charges as well as the cost of the 46 crew moves. Further, and as noted above, TCA 25 added incremental costs of \$46 million, after AltaLink had claimed that TCA 24 was the appropriate point at which to start the Commission's prudence assessment of the project.

Conclusion

1309. The variances and actions identified by the RPG and acknowledged by AltaLink, with respect to cost, consultation and schedule, have not been explained or justified to the satisfaction of the Commission. Nor does the Commission consider there to be sufficiently detailed evidence on the record to make a final prudence determination. Accordingly, the Commission has decided to order an audit for the SW project.

1310. The choice of reverting to an alternate route will not be included in the scope of the audit. The Commission notes that alternate routes were considered and rejected at the facilities application stage as being costly and subject to significant landowner issues. Moreover, these routes were longer and subject to the same environmental issues as the preferred route.

1311. The scope of the audit should include identification of key milestones and potential turning points in the execution of the project, the options available to management at these turning points, the information available to AltaLink at the time it made its decisions, the content of and time at which the information was conveyed to the AESO, and the financial consequences of those decisions.

1312. As stated above in this decision, the audit will be conducted under the Commission's direction. The Commission has approved placeholder treatment for SW project costs pending its final prudence assessment.

14.3 Other 2010-2011 DACDA projects

1313. In Section 8 of Appendix 1 to the application, AltaLink sought the approval of its expenditures for 40 direct assign projects completed in 2010, including the SW project discussed in Section 14.2 above, and 16 direct assign projects completed in 2011.

1314. In support of this request, AltaLink filed detailed project data consistent with its prior DACDA application, including:

- Schedule 8.3 a description of actual variances of total project cost against:
 - GTA filed addition amounts
 - project cost estimate amounts provided at the need approval stage
 - project cost estimate amounts provided at the permit and licence (P&L) application stage
- Schedule 8.4.1 – providing a detailed cost breakdown by cost component of the estimate prepared at the proposal to provide service (PPS) stage⁷⁷¹

⁷⁷¹ PPS stage estimates are generally filed with TFO P&L applications.

- Schedule 8.4.2 – providing a detailed cost breakdown by cost component of the final expenditures using the same cost component breakdown provided in Schedule 8.4.1.

14.3.1 Projects without final cost reports

1315. In Section 1, Part 2 of the RPG general evidence, the RPG noted that AltaLink had not filed final cost reports for several projects included in the list of 2010 and 2011 completion projects described in Schedule 8.4.2. The RPG submitted that either AltaLink was delinquent in responding to information requests or it has not prepared final cost reports. If the latter, the RPG submitted that AltaLink is not in compliance with ISO Rule 9.1.3.6. However, the RPG submitted that in either case, the Commission and interveners have been prejudiced by the lack of an adequate response to information request AUC.AML-078(b),⁷⁷² and are unable to examine the costs, let alone test the prudence of the costs.

1316. The RPG submitted that final costs associated with the projects for which final cost reports have not been filed should not be allowed into rate base until the final cost reports have been filed and interveners and the Commission have had an opportunity to test that the costs were prudently incurred.

1317. In argument, AltaLink noted that while it sought approval of the prudence of its expenditures for 56 projects in its 2010-2011 DACDA application, interveners chose to challenge only the variances related to the SW project.⁷⁷³ AltaLink noted that the balance of its 2010-2011 DACDA projects was not discussed or challenged during the hearing, and that interveners led no specific evidence to suggest that costs for these remaining projects were imprudent. Accordingly, AltaLink submitted that it has demonstrated that costs for these projects were prudently incurred and that the Commission should approve the reported expenditure amounts as filed.

1318. In its argument, the RPG noted that in its response to undertakings,⁷⁷⁴ the RPG identified 14 projects listed in Schedule 8.4.2 for which 150-day final cost reports have not been provided by AltaLink. The RPG noted that the 14 projects represent a total of \$126 million in project costs which cannot be examined using the final cost report.

1319. The RPG noted that in Decision 2005-120, the Commission's predecessor discussed the potential for an information deficiency to impede a full and proper prudence review, thereby hampering the ability of the Commission to balance the interests of ratepayers and the TFO. The RPG submitted that a utility cannot be permitted to place the Commission in an information deficiency position through its own failure to provide all relevant documentation to the Commission, and then rely on a presumption of prudence. If this is allowed to occur, this would have the effect of incenting utilities to provide less and less information to limit the information available to rebut a presumption in the utility's favour.

1320. The RPG further submitted that the Commission should not tolerate an information deficiency arising from AltaLink's failure to provide information that it should have produced in the normal course of its business. In the current instance, the RPG submitted that AltaLink

⁷⁷² Exhibit 297.01, AltaLink argument, paragraph 716.

⁷⁷³ Exhibit 4, Section 8 DACDA, Attachment 8-1.

⁷⁷⁴ Exhibits 273.02 and 273.03

should have produced final cost reports for all 2010 and 2011 projects, since it is now several months after the latest possible in-service date.

1321. In light of the above, the RPG recommended that the Commission forbear from approving costs, on a final basis, for capital additions to rate base for those projects identified in Table 1 of the RPG undertaking provided in Exhibit 273.03. Further, the RPG submitted that the Commission should direct AltaLink to provide all missing 150-day final cost reports, with detailed engineering separately identified, in the compliance filing related to this GTA, and then provide sufficient opportunity in the compliance proceeding to test the prudence of costs at that time. In the alternative, the RPG submitted that the impugned costs should remain in the deferral account until the next deferral account reconciliation application.

1322. In reply, the RPG submitted that AltaLink's assertion in argument that interveners did not challenge the prudence of project costs other than those of the SW project is wrong. As noted in its evidence and argument, the RPG submitted that it raised concerns regarding the prudence of the high cost of detailed engineering related to many of the 2010-2011 DACDA projects for which final costs reports were provided.

Commission findings

1323. ISO Rule 9.1.3.6 reads as follows:

9.1.3.6 Final Cost Report

Unless agreed otherwise, a **Designated TFO** shall provide to the **ISO**;

- a) on or before the 60th day from the last day of the month after the **Project Energization** of the **Project**, an estimate of the final cost of the **Project** substantially in the form of the **Final Cost Report** and specifying the accuracy range of the estimate, as a plus % to a minus % of the final costs; and
- b) as soon as practical, and in no event later than the first **day** of the sixth full month after the Project Energization of the Project, a Final Cost Report of the Project.

1324. Based on a plain reading of the above, the Commission considers that it was reasonable for the RPG to expect that for all projects included in AltaLink's 2010-2011 DACDA, cost reports pursuant to both ISO Rule 9.1.3.6 part a) and part b) ought to have been prepared by AltaLink and submitted to the AESO.

1325. The ISO Rule 9.1.3.6 reports were not a Commission filing requirement for AltaLink's 2010-2011 DACDA application. However, as discussed in Section 14.5, this concern has been addressed in respect of future AltaLink DACDA applications.

1326. While it is not clear to the Commission why AltaLink has not provided final cost reports for the projects identified by the RPG, the Commission does not consider the absence of reports pursuant to ISO Rule 9.1.3.6 to be fatal to the RPG's ability to test the prudence of the final project amounts reported by AltaLink in Schedule 8.3 and 8.4.2 of the application. The information reflected in Schedules 8.3 and 8.4.2 can be relied on as an accurate representation of

the amounts that would be included in AltaLink's final cost reports to the AESO had they been prepared.

1327. In the event that the amounts reported in Schedule 8.4.2 are not an accurate reflection of the final amount of costs expended on specific projects, AltaLink is obligated to file variance reports for trailing costs in a subsequent DACDA proceeding. In such event, interveners have an opportunity to test the prudence of the full amount of trailing costs that may come to light in a future proceeding.

1328. In view of the foregoing and with the exception of the SW project, the Commission considers that interveners had an adequate opportunity to test the prudence of the projects included in AltaLink's 2010-2011 DACDA. Accordingly, the Commission declines the RPG's request to withhold approval of rate base additions for projects for which final cost reports were not provided.

14.3.2 Engineering costs

1329. The RPG raised a concern with respect to detailed engineering costs for direct assign projects included in AltaLink's 2010-2011 DACDA in Section 1, Part 2 of the RPG general evidence.⁷⁷⁵ Referencing its analysis in Section 2, Part 2 of the RPG general evidence,⁷⁷⁶ the RPG recommended a disallowance of \$22 million. The RPG further submitted that when the missing final cost reports requested in its evidence are provided, an additional disallowance should be applied to these projects, using the same approach.

1330. In its rebuttal, AltaLink submitted that the RPG's recommendation is inappropriate because of the superficial nature of the RPG's analysis and because it is based on broad assumptions about the equivalency of ATCO Electric and AltaLink project data.

1331. In argument, the RPG submitted that AltaLink's detailed engineering costs (expressed as a percentage) are nearly two times those of ATCO Electric for projects under \$5 million, about five times ATCO Electric's for projects between \$5 and \$15 million, and nearly seven times ATCO Electric's for projects over \$15 million.

1332. The RPG submitted that the comparison of detailed engineering costs it provided in its evidence is sufficient to overturn any presumption of prudence afforded AltaLink, if it existed. Therefore, the RPG submitted that AltaLink has the onus to demonstrate that it acted prudently in incurring its detailed engineering costs.

1333. In reply, AltaLink submitted that it has addressed comparisons to ATCO Electric engineering costs in its rebuttal evidence and primary argument, and submitted that the RPG's request to cap engineering costs at ATCO Electric's level is entirely inappropriate and must be rejected.

1334. In reply, the RPG submitted that AltaLink has failed to exercise good judgment and make prudent decisions with respect to detailed engineering related to the 2010-2011 DACDA projects. As such, the RPG recommended that the Commission disallow AltaLink's excess costs. Alternatively, the RPG submitted that if the Commission is not prepared to disallow detailed engineering costs strictly on the basis of the peer comparison advanced by the RPG, the

⁷⁷⁵ Exhibit 122.05, page 1-18.

⁷⁷⁶ Exhibit 122.05, pages 2-3 to 2-10 (discussed in Section 6.1.5.4 of this decision).

Commission should further examine the factors that gave rise to AltaLink's high cost of detailed engineering.

1335. To this end, the RPG recommended that the Commission:

- Engage an expert independent auditor to conduct a cost and performance audit on the 2010-2011 DACDA projects to assess whether AltaLink's use of detailed engineering was reasonable at the time they were made and in the best interest of its customers, and to file its report at the time of the AltaLink compliance filing or as soon thereafter as possible.
- Direct AltaLink to provide a comparison of the cost/input relationship (hours and costs) established in the initial PPS estimate compared to the cost/input relationship as reported in the capital deferral account, along with comprehensive variance explanations, in order to measure the reasonableness of the final detailed engineering costs, as part of its compliance filing.

Commission findings

1336. Further to the Commission's findings in Section 6.1.5.4, the Commission notes that AltaLink's rebuttal evidence identifies several significant factors that would have the effect of explaining, in part, the difference in costs identified as detailed engineering costs in direct assign project cost reports.

1337. The Commission considers that the RPG's evidence does not rebut AltaLink's evidence regarding the difference in engineering costs between itself and ATCO Electric and, instead, relies on the magnitude of the differential in percentage terms as the basis for requesting its reduction.

1338. In particular, the Commission takes note of AltaLink's observation in argument that ATCO Electric has substantially more O&M-related FTEs than AltaLink, despite having a smaller transmission system. As well, the Commission considers that differences in capitalization policies could account for significant differences in O&M FTE levels between AltaLink and ATCO Electric.

1339. For the above noted reasons, the Commission considers that the RPG has failed to demonstrate that a blanket reduction in the amounts that AltaLink is permitted to add to rate base for projects included in its 2010-2011 DACDA application on the basis of engineering cost comparisons is warranted.

14.3.3 Summary

1340. The Commission approves the final capital expenditure amounts set out in AltaLink's 2010-2011 DACDA application for all projects except the SW project, which are approved only on a placeholder basis.

14.4 Reconciliation and other DACDA matters

1341. In Section 8.1 of Appendix 1, AltaLink provided the following reconciliation between the forecast amounts of capital additions established in GTAs and actual costs for direct assign projects included in its DACDA.

Table 53. Summary of GTA to actual capital additions

Variance type	Number of projects	GTA forecast	Actual cost	Variance
		(\$ million)		
GTA filed, unassigned projects	13	255.3	0.0	-255.3
GTA filed, completed projects	25	499.2	509.6	10.4
New projects	18	-	90.0	90.0
Total 2010-2011 projects	56	754.5	599.6	-154.9
Trailing costs	-	7.7	10.1	2.4
Total 2010-2011 actual	56	762.2	609.7	-152.5

Source: Appendix 1, Table 8.1.

1342. AltaLink provided its calculations of the 2010 and 2011 revenue requirement impact of the above noted variances in schedules 8.1-A (2010), 8.1-B (2010), 8.1-A (2011), and 8.1-B (2011).

Commission findings

1343. The Commission has compared AltaLink's calculations of the revenue requirement impacts of its GTA to the actual cost for projects included in the 2010-2011 DACDA application. The Commission is satisfied that the methodology used and calculations made are correct.

1344. The Commission notes that AltaLink's revenue requirement impact calculations are based on a comparison between its forecast and the actual amounts reported by AltaLink in the application, and do not reflect any disallowances.

1345. The Commission finds that it is reasonable to authorize that a reconciliation take place on the basis of the cost amounts provided for all projects on a final basis, excluding the SW project. For the SW project, the Commission approves a reconciliation for those cost amounts on an interim basis pending the result of the audit and the Commission's final determination of the prudence of AltaLink's expenditures on the SW project.

14.5 Minimum filing requirements for DACDA applications

1346. AltaLink noted that the preamble to the document titled "Consensus – Minimum Filing Requirements" (consensus document) incorporated into EUB Bulletin 2006-025 indicated that the purpose of the MFR is to:

- provide visibility into the application
- provide consistency between applications filed by different applicants
- facilitate an understanding of items included in the application and how forecasts used in the application were developed.

1347. AltaLink noted that the preamble to the consensus document also indicates that the MFR must be interpreted and implemented in conjunction with the USA, including accounting instructions.

1348. AltaLink noted that Section 31 of the consensus document explains at a high level what applicants must do when submitting "other information," which includes deferral accounts.

1349. The RPG submitted that in Decision 2005-120, the board found that prudence reviews assess whether the actions of AltaLink were reasonable and undertaken in the best interests of customers and also found that information deficiencies should be avoided because they can hamper the prudence review and the balancing of interests between ratepayers and the TFO.

1350. The RPG submitted that regulatory processes will be more efficient and effective when sufficient information is provided by the applicant in a timely manner. Under the current procedural process for DACDA proceedings, there is generally only a single round of information requests available to clarify the application. As such, it is unfair to interveners if the information request process is pre-occupied with eliminating an information deficiency that should not have existed in the first place.

1351. In light of the potential that the large direct assign program between 2012 and 2015 will cause the scope of DADCA proceedings to increase dramatically, the RPG submitted that the Commission should:

- set out in the decision the complete list of information the Commission expects to be provided in the next DACDA application
- direct AltaLink to file variance reports throughout the project life cycle and a cumulative variance report at project conclusion with:
 - line item reporting based on the cost categories identified in AUC-RPG-18, Attachment 2⁷⁷⁷
 - “the line item variance reporting should occur whenever the line item cost changes by the lesser of 10% or an amount between \$1 and \$5 million from the original authorized budget or PPS estimate”⁷⁷⁸
 - additional project reporting as required to address issues arising from a cost and performance audit
- specifically reiterate the board’s finding at page 13 of Decision 2005-120 with respect to the provision of cost input relationships
- direct that AltaLink provide reports arising from cost and performance audits recommended by the RPG
- direct AltaLink to provide documentation supporting its internal process controls in its next DACDA
- direct AltaLink to provide:
 - the 150-day final cost report submitted to the AESO pursuant to ISO Rule 9.1.3.5
 - all project cost, schedule or scope changes submitted to the AESO, and the AESO’s response
 - all monthly or regular reports prepared by AltaLink’s project manager for review by AltaLink management
 - all monthly or regular reports prepared by the EPCM service provider’s project manager for review by AltaLink

⁷⁷⁷ Exhibit 147.05.

⁷⁷⁸ Exhibit 298.01 paragraph 152.

1352. In consideration of the substantial information it is requesting AltaLink to provide, and the considerable resources required to review, understand and test such information, the RPG submitted that the Commission should also consider the use of additional processes and procedures to facilitate the efficient and effective review of AltaLink's DACDA applications.

1353. In reply, AltaLink submitted that further to its primary argument, the filing requirements for DACDA proceedings have been made clear by the Commission and do not require restating in this proceeding. Additionally, AltaLink submitted that various forms of evidence filed in the current proceeding far exceed the MFR applicable to DACDA applications.

1354. AltaLink opposed the RPG's request that it provide various types of additional reports, and noted that, as the Commission has reviewed and approved four DACDA applications on the basis of current reporting, it is clear that the information it is providing in compliance with the current MFR is sufficient for the Commission to determine whether AltaLink's costs are prudent.

1355. AltaLink submitted that the level of detail the RPG is proposing through its audit request is unprecedented and would place the Commission in the position of taking on management accountabilities. In view of the significant change in regulatory governance proposed by the RPG, AltaLink submitted that the RPG's recommendations can only be properly considered in a generic consultation process involving the AESO, other utilities, and affected parties.

Commission findings

1356. The Commission acknowledges AltaLink's submission that it has complied with filing requirements for capital-related deferral accounts as set out in the MFR consensus document, and finds that it has complied in full with these minimum requirements.

1357. The Commission also finds that the information filed in support of AltaLink's 2010-2011 DACDA application aligned with the Commission's expectations for DACDA filings as most recently set out in Decision 2011-122.

1358. While the consensus document set out minimum filing requirements, the Commission may request additional information as warranted. As noted previously in this decision, effective July 25, 2013,⁷⁷⁹ the government passed an amendment to Section 46(1) of the *Transmission Regulation* that removed the legislative presumption of prudence for project costs incurred by the TFOs. Including more information in the application could save work for all parties involved once the application is submitted. The intervenor groups focused considerable attention during this proceeding on the examination of the forecast capital projects, the majority of which are part of the direct assign capital projects area, and will be included in future deferral account applications. The additional information the RPG is requesting would be beneficial in understanding the scope of the projects, the cost estimates included, the reasons supporting the design specifications, and the involvement of the AESO in the development and execution of the capital projects it is assigning.

1359. In Decision 2013-358, the Commission issued directions to include specified information in support of any direct assign projects with costs in excess of \$5.0 million for future DACDA applications.

⁷⁷⁹ Alberta Regulation 145/2013.

1360. As AltaLink is subject to the same duties as ATCO Electric with respect to the preparation and filing of information and reports to the AESO for its direct assign projects, the Commission finds that similar reporting requirements should apply to AltaLink for its future DACDA applications.

1361. Accordingly, the Commission directs AltaLink to file the following additional information in its next DACDA application in support of projects with final costs in excess of \$5.0 million unless or until otherwise advised:

- project milestone schedules and the timing of capital expenditures
- AESO change order requests and authorizations
- project cost estimates prepared at each of the following project development stages:
 - PPS
 - NID
 - facility application
 - most current version at the time of the application
 - final cost report, if available
- detailed breakdowns of capital expenditures on the following activities:
 - clearing
 - foundations
 - tower assembly
 - tower erection
 - stringing
- preliminary engineering costs included in the cost estimates
- the detailed engineering costs included in the cost estimates
- the current AESO functional specifications
- bulk transmission line optimization studies where required by ISO Rule 502.2
- post completion reports
- 60-day and 150-day reports filed in response to ISO Rules

1362. Further to the matters discussed in Section 6.1.7 of the decision, the Commission acknowledges the potential that the updated filing requirements described above may be subject to change in light of the ongoing consultative process described in that section. Accordingly, in the event determinations made in the course of the consultations described in that section should change the filing requirements in support of DACDA applications, the Commission will consider specific requests to amend these filing requirements.

1363. Finally, in Section 6.1.1 of the decision, the Commission addressed concerns raised by AltaLink regarding the scope of this proceeding and determined that the broad scope of matters addressed within this proceeding also reflects AltaLink's decision to include, for the first time, a DACDA application with its GTA. As well, throughout this decision, the Commission has endeavored to provide direction to both AltaLink and stakeholders regarding the issues that it will be considering in future DACDA proceedings. The complexity of issues and the size of the capital projects that will be submitted for cost approval in future DACDA proceedings dictates that future DACDA filings be made on a stand-alone basis and not as part of a GTA.

Consequently, the Commission directs AltaLink to file all future DACDA applications as separate stand-alone proceedings.

15 Order

1364. It is hereby ordered that:

- (1) AltaLink shall on or before January 15, 2014, refile its 2013-2014 General Tariff Application to reflect the findings, conclusions and directions of this decision and if necessary, the findings, conclusions and directions of the Commission from any Generic Cost of Capital (GCOC) decisions, as they may affect the Commission's findings in this decision.

Dated on November 12, 2013.

The Alberta Utilities Commission

(original signed by)

Don Romaniuk
Panel Chair

(original signed by)

Henry van Egteren
Commission Member

(original signed by)

Kate Coolidge
Acting Commission Member

Appendix 1 – Proceeding participants

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Appendix 2 – Oral hearing registered appearances

Name of organization (abbreviation) counsel or representative	Witnesses
AltaLink Management Ltd. (AltaLink or AML) R. Block, QC	<p>AltaLink GTA panel D. Frehlich, P.Eng. D. Fedorchuk, P.Eng. J. Picard-Thompson, P.Eng., MBA J. Bronneberg, CA C. Lomore, CFA R. McCabe, CA, MBA D. Richards M. Bartel, P.Eng., MBA G. Chalk, MBA S. Fetter, J.D., (Regulation UnFettered) R. White, CA, CBA, CFA (PwC)</p> <p>AltaLink depreciation panel M. Bartel, P.Eng., MBA R. McCabe, CA, MBA L. Kennedy (Gannett Fleming)</p> <p>AltaLink fairness advisor panel W. Lipson, MBA (KPMG)</p> <p>AltaLink confidential matters panel D. Fedorchuk, P.Eng. J. Picard-Thompson, P.Eng., MBA G. Chalk, MBA W. Lipson (KPMG)</p>
Alberta Direct Connect Consumers Association (ADC) R. Secord	<p>ADC panel C. Chekerda, P.Eng. G. Meyer, (Brubaker & Associates) M. Gorman, MBA (Brubaker & Associates) J. Dauphinais, P.Eng. (Brubaker & Associates) J. Christie, P.Eng. (ERCO Worldwide)</p>
ATCO Electric Ltd. (ATCO Electric) M. Synnott	
Consumers' Coalition of Alberta (CCA) J. A. Wachowich	
Industrial Power Consumers Association (IPCAA) M. Forster	

Name of organization (abbreviation) counsel or representative	Witnesses
Ratepayer Group (RPG) M. Forster J. Wachowich	RPG HVDC converter station costs panel M. Rashwan, P.Eng. M.Sc., Ph.D. (TransGrid Solutions) V. Bellissimo, P.Eng. (IPCAA) D. Levson, P. Eng. (Bema Enterprises Ltd.) RPG general panel V. Bellissimo, P.Eng. (IPCAA) T. Mohr, MBA (FTI Consulting) D. Levson P.Eng. (Bema Enterprises Ltd.) R. Belland, MA (CRD Management Inc.) T. Cline, P.Eng. (Grid Power Development and Design) RPG confidential matters panel T. Mohr, MBA (FTI Consulting)
Office of the Utilities Consumer Advocate (UCA) T. Marriott M. Paul	UCA general evidence panel S. Radway, MA UCA depreciation panel J. Pous, B.S. Industrial Engineer, M.S. Management (Diversified Utility Consultants)

The Alberta Utilities Commission (AUC) Commission Panel D. Romaniuk, Panel Chair H. van Egteren, Commission Member K. Coolidge, Acting Commission Member Commission Staff C. Wall (Commission counsel) J. Halls W. MacKenzie J. Cameron L. Mullen S. Karim

Appendix 3 – Summary of Commission directions

This section is provided for the convenience of readers. In the event of any difference between the directions in this section and those in the main body of the decision, the wording in the main body of the decision shall prevail.

1. The Commission must have full visibility of the process by which AltaLink converts its department-level forecasts into the FTEs requested in individual O&M USA accounts. The Commission directs AltaLink to clearly and precisely set out the following information in an updated FTE forecast in the refiling:
 - the name of each AltaLink staff position, specified at the most detailed level possible, by department
 - a clear identification of the AltaLink cost centre (not USA account) for each AltaLink staff position
 - for each AltaLink staff position, the specific allocation that has been applied between O&M and capital, expressed as a percentage
 - for each AltaLink staff position allocated wholly or partially to O&M, the USA to which the FTE is assigned Paragraph 31
2. The Commission shares some of the CCA's concerns that AltaLink's proposed escalator for contracted manpower may be excessive. In particular, it is not clear to the Commission that agreed-upon escalators arising from union labour agreements with AltaLink apply to the market for contracted manpower. The Commission also considers that the increases included in AltaLink's salary escalator for non-union labour do not apply to the market for contractor services. In view of the foregoing, the Commission considers that an escalator of 3.75 per cent per year, which is at the high end of the range proposed by the CCA, is reasonable. AltaLink is directed to make adjustments to all contracted manpower forecasts that relied upon AltaLink's proposed 4.81 per cent escalator at the time of its refiling. Paragraph 45
3. Given all of these considerations, AltaLink is directed to use the updated direct assign capital program arising from the re-assessment of the in-service dates in the refiling of its O&M- related FTE forecast for 2014. Paragraph 82
4. The Commission finds the forecast amounts for the test period to be reasonable because they reflect the ongoing investment in VM control previously approved by the board. Subject to any adjustments that may be required as a result of the Commission's findings in Section 3.2 and Section 6.1.3, and any adjustments for changes in contractor escalation rates as directed by the Commission in Section 2.2 of the decision, AltaLink's VM forecast is approved as filed. AltaLink is directed to apply this adjustment in its refiling. Paragraph 121
5. The Commission finds AltaLink's expenditure forecasts to be reasonable, subject to the Commission's finding in Section 2.2 to reduce the escalator applied to contracted manpower expenses from 4.81 per cent to 3.75 per cent. AltaLink is directed to apply this adjustment in its refiling. Paragraph 125
6. Accordingly, the Commission directs AltaLink to use actual 2012 expenditures as a baseline, and apply the contracted manpower escalator of 3.75 per cent per year approved

- in Section 2.2 above. AltaLink is directed to provide its updated 2013 and 2014 forecasts with its refiling application. Paragraph 133
7. The Commission finds AltaLink's recent forecast to be reasonably accurate and, therefore, considers that AltaLink's forecasts should only be adjusted to reflect the reduction to the allowed contracted manpower inflation rate directed to be applied by the Commission in Section 2.2 above. AltaLink is directed to update its USA 563 contracted manpower expense forecasts for both 2013 and 2014 in its refiling according to these revised inflation assumptions. Paragraph 139
 8. Accordingly, for its refiling, AltaLink is directed to reduce its forecasts to the level of AltaLink's actual recorded 2012 USA 566 contracted manpower expense, plus an allowance for inflation of 3.75 per cent as authorized by the Commission in Section 2.2. Paragraph 146
 9. The Commission considers AltaLink's 2013 and 2014 forecasts to be reasonable, and approves them as filed, subject to making any adjustments necessary to reflect the lower contractor inflation escalator approved in Section 2.2. AltaLink is directed to make any required adjustment in its refiling. Paragraph 154
 10. Accordingly, AltaLink's forecasts for 2013 and 2014 are approved as filed, except as necessary to adjust for the change in the contractor escalation rate directed by the Commission in Section 2.2 of the decision. AltaLink is directed to make this change in its refiling. Paragraph 159
 11. The Commission notes that expenditures for contracted manpower related to USA 934 did not materialize to the extent forecast in AltaLink's last GTA. Given the extent of the forecast error (cumulatively, in the order of \$0.6 million over the 2010 to 2012 period), the Commission considers that AltaLink's 2013 and 2014 forecasts should be reduced by \$0.2 million in each year. The Commission does not require any additional adjustment related to its findings on the contracted manpower escalator. AltaLink is directed to provide its updated USA 935 contracted manpower forecasts reflecting these findings in its refiling. Paragraph 166
 12. For these reasons, the Commission directs AltaLink to reduce its USA 560 GOE forecast to \$0.1 million for each of 2013 and 2014 at the time of its refiling. Paragraph 172
 13. The Commission considers that the approved USA 566 GOE should take into account AltaLink's track record of spending lower than forecast, as captured by the forecast error. Accordingly, AltaLink's forecasts are reduced by \$0.5 million for each year. AltaLink is directed to make this adjustment in its refiling Paragraph 190
 14. The Commission notes that AltaLink's expenditures on USA 921 were, on average, more than \$200,000 per year less than the approved forecast over the 2010 to 2012 period. The Commission has taken this into account in respect of AltaLink's 2013 and 2014 forecasts and, therefore, reduces these forecasts to \$1.9 million for each year. AltaLink is directed to make this adjustment in its refiling. Paragraph 196
 15. The Commission considers that AltaLink's recent track record indicates a tendency to over-forecast expenditure for USA 924 GOE. Accordingly, the Commission has reduced AltaLink's forecasts to \$2.2 million for each of 2013 and 2014. AltaLink is directed to make this change in its refiling. Paragraph 231

16. The Commission has reviewed the Serecon report and notes that Serecon has recommended an increase of 3.5 per cent for each year of the test period for annual structure payments. The Commission considers that, for purposes of the placeholder amounts used in determining revenue requirement forecasts, it would be more appropriate to use a rate more reflective of general inflation. Therefore, the Commission directs AltaLink to use a forecast increase rate of 2.5 per cent. Paragraph 247
17. The Commission does not consider the information requested by the CCA to be necessary. The Commission, however, does consider that information similar to that found in AUC-AML-019 (attachment) would be helpful. Therefore, the Commission directs AltaLink to supply, in its next GTA filing, a table showing, for the last five years and in a format similar to that of the referenced attachment, the annual structure payment rates paid by AltaLink and the other electric transmission utilities in Alberta. Paragraph 248
18. AltaLink is further directed to file copies of all SRB decisions issued between the date of this decision and the filing of the next GTA in respect of right-of-way payments involving all electric transmission utilities in Alberta. Paragraph 249
19. AltaLink is directed to provide a revised right-of-way payment forecast reflecting the lower inflationary rate of increase as well as any other adjustments arising from directions elsewhere in this decision. Paragraph 250
20. The Commission continues to believe the above direction to be reasonable. AltaLink is directed to continue to file such information. Paragraph 257
21. With respect to the information requested by the CCA in its argument, the Commission does not consider this information to be necessary. The Commission does consider that information with respect to what AltaLink offers would be helpful. AltaLink is therefore directed to file a schedule, at the time of filing its next GTA, showing the easement payment schedule for the past five years. Paragraph 258
22. The Commission has considered the CCA's position that most of the additional revenues from the March 15, 2013 update are in the business development category. However, there is no evidence on the record to indicate that the entire increase in 2012 can be attributed directly to revenues from AOLP. The Commission finds that, since AltaLink is now providing services to an additional affiliate, there should be additional revenues incorporated into the test years to account for the services provided to AOLP. The Commission finds it reasonable to assume that, if the \$0.7 million in the 2012 update was received in equal parts from each of AILP and AHLP (i.e., \$0.35 million each) it likewise would seem reasonable that a similar amount should be forecast in the test years for AOLP. For these reasons, the Commission approves this recommendation from the CCA and directs AltaLink, in its refiling, to include \$0.35 million in each of 2013 and 2014 for services to AOLP. Paragraph 279
23. The Commission acknowledges that the timing of third-party activities can be difficult to forecast. However, the Commission is concerned that there appears to be a consistent trend of under-forecasting in this category. The Commission directs AltaLink to explain in detail any future variances in this category. Paragraph 292
24. As the AESO did not participate directly in AltaLink's GTA, there was no opportunity to test the certainty of the projects and the in-service targets for those projects, as set out in Appendix 11. In view of the Commission's finding that there is a significant potential for

- cost savings, the Commission considers that this evidence should be provided. Accordingly, the Commission directs AltaLink specifically to request the AESO to review the current in-service dates for direct assign projects included in the 2013-2014 test year forecasts to determine whether the in-service dates for some or all of these projects can be moved to a later date using the 2012 LTO as the basis for such review. AltaLink is further directed to provide the results of such consultations at the time of its refiling. Paragraph 391
25. The Commission notes that AltaLink reported cumulative CWIP expenditures of \$6.2 million on the Tower Development Project up to the end of 2012 in its prior GTA, but did not provide any subsequent follow up to these expenditures in the current GTA. As the Commission will be required to assess the prudence of expenditures on this initiative at a future date, the Commission requires additional information regarding the amount, if any, of AltaLink expenditures subsequent to December 31, 2012 on the Tower Development Project, as well as a full explanation of the current accounting treatment of all cumulative expenditures on this project. AltaLink is directed to provide this information as part of its GTA refiling. Paragraph 486
26. In previous decisions, the Commission has approved the use of an actual labour cost multiplier for use by SNC-ATP to determine its hourly rates billed to AltaLink, along with certain mark-ups for procurement and construction management. For purposes of forecasting the capital expenditures related to the projects allocated to SNC-ATP due to its being at the PPS stage, AltaLink is directed to continue the use of this approach, as previously approved by the Commission, that being the two times labour multiplier and the other approved mark-ups. Paragraph 731
27. For purposes of forecasting the capital expenditures related to those projects allocated to SNC-ATP and B&M pursuant to the new relationship agreements, AltaLink is directed to use the same rates as above, namely, the two times labour multiplier and other approved mark-ups. Given that the Commission cannot accept the rates resulting from the CPP, the rates approved pursuant to the MSA are the only proxy for market rates available to the Commission. Paragraph 732
28. For these reasons, the Commission finds that AltaLink has not demonstrated that it is reasonable to include the costs of its proposed RRM in its forecast capital costs in its tariff application. If necessary, AltaLink is directed to remove any impact of the proposed RRM in its refiling. Paragraph 759
29. The Commission has reviewed the evidence in the application and considers the forecast expenditures to be reasonable. They are approved as filed. The Commission agrees with the concern of the CCA and for purposes of future proceedings, AltaLink is directed to use an uncertainty adjusted forecast for such expenditures. Paragraph 790
30. In light of the foregoing, while the Commission considers that AltaLink cannot be precluded from acquiring its preferred adjacent site, the Commission will authorize an expenditure of \$4,560,000 (= 9.6 acres x \$475,000 per acre (includes improvement costs)) at this time. AltaLink is directed to make this adjustment in its refiling. Paragraph 813
31. Accordingly, the Commission denies AltaLink's request for advance approval of this project, and directs AltaLink to remove any forecast capital expenditures and additions for this project from its revenue requirement calculations in its refiling. Paragraph 828

32. For the above reasons, the Commission considers that AltaLink's forecast expenditure on general facility maintenance for 2013 should be reduced to the \$4.0 million amount shown in Table 10.5-1. AltaLink is directed to make this adjustment in its refiling. Paragraph 844
33. Given AltaLink's acknowledgment during the hearing that there may be some misclassification of certain plant assets between Account 352 and Account 390, AltaLink is directed to incorporate any required corrections and present its recommendations respecting depreciation parameters for each of these accounts in its next depreciation study. Paragraph 894
34. Notwithstanding, as the two accounts represent less than 5.0 per cent of total plant in service for AltaLink, the Commission considers it is not necessary to delay making a finding respecting the service life for these accounts pending the review and directs AltaLink to maintain the existing 50-R2 life-curve parameters for Account 352 until it files its next depreciation study. Paragraph 895
35. For these reasons, the Commission directs AltaLink to incorporate the 49-R2 life-curve for Account 354 as part of its compliance filing to this decision. Paragraph 901
36. The Commission directs AltaLink to maintain the existing -5.0 per cent net salvage parameters for Account 352 until such time as AltaLink investigates and corrects any misclassification of plant assets between Account 352 and Account 390. The Commission directs AltaLink to provide updated recommendations for accounts 352 and 390 based on corrected data at the time of its next depreciation study. Paragraph 928
37. The Commission directs AltaLink to retain its current net salvage of -5.0 per cent for Account 354, and to incorporate the effects of this as part of its compliance filing in this decision. Paragraph 940
38. This information should continue to be available to parties in future depreciation studies, and the Commission directs AltaLink to ensure that, in addition to the years 2010 and 2011 being restated for the missing information, subsequent years be treated in a similar manner. Paragraph 956
39. The Commission finds that the OCASTD deferral account is no longer necessary to protect customers as the market has changed considerably since 2008. Further, the Commission notes that the CCA has recommended that this deferral account be discontinued and that AltaLink had stated that other costs associated with short-term debt are considered to be well manageable within its forecasts. The Commission directs AltaLink to discontinue its deferral account for OCSTD. However, in an effort to continue to mitigate possible volatility in customer rates, the Commission also directs AltaLink, at the time of its refiling, to provide an update to credit facility amounts consistent with the direction issued in Decision 2011-453, at paragraph 1036. Paragraph 1079
40. The Commission acknowledges the concern of the CCA. The Commission considers that the DAIC amount may change as a result of directions made elsewhere in this decision. AltaLink is directed to address this matter in its refiling. Paragraph 1135
41. The Commission has reviewed the materials provided by AltaLink on the reconciliation of its 2010 and 2011 OCASTD account and accepts the deferral amounts as being correct. AltaLink is directed to refund the \$1.7 million difference between its actual and forecast costs for this account as requested in its application. Paragraph 1144

42. The Commission has reviewed the materials provided by AltaLink for the reconciliation of its 2010 and 2011 long-term debt deferral account and accepts the deferral amounts as being correct. AltaLink is directed to refund the \$1.8 million difference between its actual and forecast costs for this account as requested in its application. Paragraph 1148
43. The Commission notes that in paragraph 65 of Section 9 of Appendix 1 to AltaLink's application, actual expenditures were \$13.8 million but only \$9.5 million was included in its GTA filings. This yields a difference of \$4.3 million. However, Table 9.0 indicates a difference of only \$1.3 million. The Commission can find no explanation for this discrepancy and, therefore, directs AltaLink to provide a schedule showing the correct amount in its refile. The Commission will dispose of the correct balance in this deferral account at that time. Paragraph 1155
44. AltaLink's performance reliability and safety performance raises no concerns for the Commission at this time. AltaLink is directed to provide similar reliability and safety performance reporting in its next GTA. Paragraph 1163
45. Accordingly, the Commission directs AltaLink to file the following additional information in its next DACDA application in support of projects with final costs in excess of \$5.0 million unless or until otherwise advised:
- project milestone schedules and the timing of capital expenditures
 - AESO change order requests and authorizations
 - project cost estimates prepared at each of the following project development stages:
 - PPS
 - NID
 - facility application
 - most current version at the time of the application
 - final cost report, if available
 - detailed breakdowns of capital expenditures on the following activities:
 - clearing
 - foundations
 - tower assembly
 - tower erection
 - stringing
 - preliminary engineering costs included in the cost estimates
 - the detailed engineering costs included in the cost estimates
 - the current AESO functional specifications
 - bulk transmission line optimization studies where required by ISO Rule 502.2
 - post completion reports
 - 60-day and 150-day reports filed in response to ISO Rules Paragraph 1361
46. Finally, in Section 6.1.1 of the decision, the Commission addressed concerns raised by AltaLink regarding the scope of this proceeding and determined that the broad scope of matters addressed within this proceeding also reflects AltaLink's decision to include, for the first time, a DACDA application with its GTA. As well, throughout this decision, the Commission has endeavored to provide direction to both AltaLink and stakeholders regarding the issues that it will be considering in future DACDA proceedings. The complexity of issues and the size of the capital projects that will be submitted for cost approval in future DACDA proceedings dictates that future DACDA filings be made on a

stand-alone basis and not as part of a GTA. Consequently, the Commission directs AltaLink to file all future DACDA applications as separate stand-alone proceedings.

..... Paragraph 1363

Appendix 4 – Abbreviations

Abbreviation	Name in full
ACTCMP	Alberta Counter Terrorism Crisis Management Plan
ADC	Alberta Direct Connect Consumers Association
AECU	Alberta Electric Utility Code
AESO	Albert Electric System Operator
AFFO	adjusted funds from operations
AFUDC	allowance for funds used during construction
AHAT	asset health assessment tool
AHLP	AltaLink Holdings L.P.
AIFR	all injury frequency rate
AILP	AltaLink Investment L.P.
ALP	AltaLink L.P.
AML or AltaLink	AltaLink Management Ltd.
AOLP	AltaLink Ontario Limited Partnership
ARS	Alberta Reliability Standards
ATCO Electric	ATCO Electric Ltd.
AUC or Commission	Alberta Utilities Commission
AYM	assessment year modifiers
B&M	Burns and MacDonnell Canada Ltd.
BW	Bowmanton-Whitla
BWLC	Brooks to Whitla Landowner Committee
CAEPLA	Canadian Association of Energy and Pipeline Landowners Associations
capex	capital expenditure
CCA	Consumers' Coalition of Alberta
CEO	chief executive officer
CFO	chief financial officer
COO	chief operating officer
CPP	competitive procurement process
CRA	Canada Revenue Agency
CRU	capital replacement and upgrade
CTI	critical transmission infrastructure
CWIP	construction work in progress
DA	direct assign
DACDA	direct assign capital deferral account

Abbreviation	Name in full
DAIC	directly attributable, indirectly charged
DB plan	defined benefit pension plan
DBRS	DBRS Limited
EATL	Eastern Alberta Transmission Ltd
EBIT	earnings before interest and taxes
ELG	equal life group
EMF	electromagnetic fields
ENMAX	ENMAX Power Corporation
EPC	engineering-procurement construction
EPCM	engineering-procurement construction management
ESI	Ecological Solutions Inc.
EUB or board	Alberta Energy and Utilities Board
FAI	FortisAlberta Inc.
FFO	funds from operations
FFO/debt	funds from operations to debt ratio
FIT	future income taxes
FTE	full-time equivalent
FTI	FTI Consulting, Inc.
FTSB	Foothills Technical Services Building
GAAP	Generally Accepted Accounting Principles
Gannett Fleming	Gannett Fleming Canada, ULC
GCOC	Generic Cost of Capital
GOE	general operating expense
Grid Power	Grid Power Development and Design Inc.
GTA	general tariff application
GTMP	Graduated Threat Mitigation Plan
HDVC	high voltage direct current
HS&E	healthy, safety & environment
IFRS	International Financial Reporting Standards
INAC	Indian and Northern Affairs Canada
IPCAA	Industrial Power Consumers Association of Alberta
IRs	information requests
ISD	in-service date
ISO	Independent System Operator
IT G&A	information technology general and administrative
KCPL	Kansas City Power and Light

Abbreviation	Name in full
km	kilometre
KPMG	KPMG LLP
kV	kilovolt
kW	kilowatt
LCC	line commuted converter
LTDDA	long-term debt deferral account
LTIP	long-term incentive plan
LTO	long term outlook
LTSR	lost time severity rate
MFR	minimum filing requirements
MPLS	multiprotocol label switching
MSA	Master Services Agreement
MW	megawatt
NID	needs identification document
NPV	net present value
O&M	operations and maintenance
OCASTD	other costs associated with short-term debt
P&L	permit and licence
post-P&L	post-permits and licences receipt
PPS	proposal to provide service
pre-FA	pre-facilities application
pre-P&L	pre-permits & licences receipt
PwC	Pricewaterhouse Coopers LLP
RFP	request for proposal
RFQ	request for qualifications
ROE	return on equity
RPG	Ratepayer Group
RRM	risk/reward model
S&P	Standard & Poor's Financial Services LLC
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
SARI	system average restoration index
SATR	Southern Alberta Transmission Reinforcement
Serecon	Serecon Valuations Inc.
SIP	statement of intent to participate
SIR	self-insurance reserve

Abbreviation	Name in full
SNC-ATP	SNC-Lavalin ATP Inc.
SNC-Lavalin	SNC Lavalin Group Inc.
SRB	Surface Rights Board
SRD	Alberta Environment and Sustainable Resources Development
STIP	short-term incentive plan
SW	southwest
T&Cs	terms and conditions
TCA	trend/change authorization
TFCMC	Transmission Facilities Cost Monitoring Committee
TFO	transmission facility owner
TGS	TransGrid Solutions
UCA	Office of the Utilities Consumer Advocate
USA	uniform system of accounts
UUWA	United Utility Workers Association
VAFR	vehicle accident frequency rate
VM	vegetation management
WATL	Western Alberta Transmission Line