Distribution Performance-Based Regulation 2013 Capital Tracker Applications

AltaGas Utilities Inc.,
ATCO Electric Ltd.,
ATCO Gas and Pipelines Ltd.,
EPCOR Distribution & Transmission Inc. and
FortisAlberta Inc.

December 6, 2013

The Alberta Utilities Commission
Decision 2013-435: Distribution Performance-Based Regulation
2013 Capital Tracker Applications
Application No. 1608827
Proceeding ID No. 2131

December 6, 2013

Published by
The Alberta Utilities Commission
Fifth Avenue Place, Fourth Floor, 425 First Street S.W.
Calgary, Alberta
T2P 3L8

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Calgary, Alberta

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1 Introduction

1. On September 12, 2012, the Alberta Utilities Commission (AUC or Commission) released Decision 2012-237,[1] Rate Regulation Initiative, Distribution Performance-Based Regulation, that established performance-based regulation (PBR) for the distribution utility functions of AltaGas Utilities Inc. (AltaGas or AUI), ATCO Electric Ltd. (ATCO Electric or AE), ATCO Gas and Pipelines Ltd. (ATCO Gas or AG) collectively referred to as the ATCO companies, EPCOR Distribution & Transmission Inc. (EPCOR or EDTI) and FortisAlberta Inc. (Fortis or FAI). These distribution utilities are collectively referred to as "the companies" in this decision. Decision 2012-237 (also referred to as the PBR decision) approved a five-year PBR plan for each of the companies that included an annual rate adjustment formula, commencing January 1, 2013. The PBR rate adjustment formula replaced the cost-of-service rate setting method that was used previously.

2. In Decision 2012-237, the Commission determined that a mechanism to fund certain capital-related costs outside of the I-X mechanism through a capital factor is required for the approved PBR plans.[2] This supplemental funding mechanism was referred to in Decision 2012-237 as a "capital tracker" with the revenue requirement associated with approved amounts to be collected from ratepayers by way of a "K factor" adjustment to the annual PBR rate setting formula.

3. The PBR decision provided each of the companies with the opportunity to file a capital tracker application with respect to 2013 supplemental capital funding requirements.[3] Each of the companies filed a 2013 capital tracker application. These applications were considered in the present proceeding.

4. Pending consideration of the 2013 capital tracker applications in this proceeding, Decision 2013-072,[4] dealing with the 2012 PBR compliance filings, approved capital tracker placeholders equal to 60 per cent of the applied-for capital tracker amounts for inclusion on an interim basis in 2013 rates.[5] These placeholder amounts will be trued-up to the amounts approved in this decision in subsequent proceedings.

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1 Decision 2012-237: Rate Regulation Initiative, Distribution Performance-Based Regulation, Application No. 1606029, Proceeding ID No. 566, September 12, 2012.
2 Decision 2012-237, paragraph 586.
3 Decision 2012-237, paragraphs 616 and 978.
4 Decision 2013-072: 2012 Performance-Based Regulation Compliance Filings, AltaGas Utilities Inc., ATCO Electric Ltd., ATCO Gas and Pipelines Ltd., EPCOR Distribution & Transmission Inc. and FortisAlberta Inc., Application No. 1608826, Proceeding ID No. 2130, March 4, 2013.
5 Decision 2013-072, paragraph 41.

5. Decision 2012-237 directed the companies to file their initial capital tracker applications by November 2, 2012.[6] Subsequent to the initial filing date, the companies requested, and were granted, an extension to December 14, 2012.

6. Some parties had previously registered statements of intent to participate (SIPs) for the proceeding in order to participate in an information session regarding Decision 2012-237 held on September 28, 2012. In addition to the companies, the other parties registering SIPs in advance of the information session included ENMAX Power Corporation, the City of Calgary (Calgary), the Consumers' Coalition of Alberta (CCA) and the Office of the Utilities Consumer Advocate (UCA). In addition, on November 5, 2012, the Commission issued a notice of proceeding soliciting SIPs from any party wishing to intervene or participate that had not registered prior to the information session. An additional SIP was filed by AltaLink Management Ltd. (AltaLink).

7. On February 15, 2013, most parties submitted information requests to the companies in accordance with a process established by the Commission by letter dated December 18, 2012. The CCA was granted an extension by the Commission and submitted information requests on February 19, 2013. The companies responded to the information requests on March 13, 2013.

8. After receiving the responses to its information requests, the CCA submitted a motion on March 25, 2013 to compel further and more complete responses.[7] The companies responded to the motion on April 3, 2013, and the CCA commented on the companies' responses on April 5, 2013. The Commission ruled on the motion on April 23, 2013, approving some portions of the CCA's motion, and denying others.[8] As a result, some of the companies were required to submit additional information responses on May 7, 2013.

9. In accordance with the procedural schedule established by the Commission, intervener evidence was filed on April 15, 2013 by the CCA and the UCA. Information requests to interveners were issued by most parties on April 26, 2013. Additional information requests were issued later by ATCO Electric and AltaGas on April 29, 2013. Responses to the information requests were provided on May 24, 2013 by the CCA and on May 27, 2013 by the UCA.

10. On April 25, 2013, the Commission issued a letter[9] scheduling an oral pre-hearing conference to be held on May 13, 2013 at the Commission's offices in Edmonton. The Commission's letter attached a draft of a preliminary issues list and invited comments from parties. The preliminary issues list is included as Appendix 4.

11. Parties commented in writing on the preliminary issues list on May 1, 2013, and provided reply comments in writing on May 8, 2013.

12. On May 15, 2013,[10] following the pre-hearing conference, the Commission issued a final issues list that further refined the scope of the relevant issues. The final issues list is included as Appendix 5.

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6 Decision 2012-237, paragraph 616.
7 Exhibit 96.02, CCA motion for further IR responses, March 25, 2013.
8 Exhibit 112.01, Commission ruling on motion to compel further and better information responses, April 23, 2013.
9 Exhibit 113.01, AUC letter regarding pre-hearing conference, April 25, 2013.
10 Exhibit 147.01, AUC letter regarding capital tracker proceeding final issues list and procedural schedule, May 15, 2013.

13. As a result of some of the issues being clarified in the final issues list, in a manner that may not have been foreseeable by some parties prior to the pre-hearing conference, in the letter setting out the final issues list, the Commission allowed parties to submit supplemental evidence on a limited number of issues on June 7, 2013. Parties could also apply to the Commission for permission to file supplemental evidence on additional matters. EPCOR, the UCA and Calgary filed requests to submit supplemental evidence.

14. In a ruling dated May 23, 2013,[11] the Commission acknowledged that the UCA and Calgary intended to file supplemental evidence on the matters directed by the Commission and denied the request of EPCOR to file supplemental evidence on additional matters, indicating that EPCOR would have an opportunity to deal with such matters in its rebuttal evidence.

15. The UCA and the CCA filed supplemental evidence on June 7, 2013 and June 10, 2013, respectively.

16. After reviewing the supplemental evidence, ATCO Gas filed a motion to exclude the Calgary supplemental evidence on the basis that it exceeded the scope of the issues permitted by the Commission.[12] Calgary replied to the motion on June 13, 2013 and ATCO Gas responded on June 14, 2013. The Commission granted ATCO Gas' motion on June 14, 2013,[13] with reasons set out in correspondence dated June 17, 2013[14] and Calgary's supplemental evidence was subsequently removed from the record of the proceeding.

17. The companies submitted rebuttal evidence on June 18, 2013.

18. An oral hearing was held at the Commission's Edmonton offices from June 24, 2013 through June 27, 2013, July 15, 2013 through July 19, 2013, and July 22, 2013 through July 24, 2013. The division of the Commission presiding over this proceeding was Mark Kolesar (panel chair), Neil Jamieson and Henry van Egteren.

19. Argument was filed by most parties on August 16, 2013, with the UCA and Calgary filing on August 19, 2013. Reply argument was submitted by all parties on September 9, 2013.

20. The Commission considers the record for this proceeding to have closed on September 9, 2013.

21. 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 and 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.

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[11] Exhibit 156.01, AUC letter ruling on supplemental evidence filings, May 23, 2013.
[12] Exhibit 179.01, ATCO Gas motion to exclude the supplemental evidence of Calgary, June 11, 2013.
[13] Exhibit 192.01, AUC ruling on ATCO Gas' motion to exclude supplemental evidence of Calgary, June 14, 2013.
[14] Exhibit 193.01, AUC letter providing supporting reasons of the Commission's June 14, 2013 ruling on ATCO Gas motion to exclude supplemental evidence of Calgary, June 17, 2013.

1.1 Background to performance-based regulation

22. In its letter dated February 26, 2010 announcing a Commission initiative on regulatory reform, the Commission noted that "[t]raditional rate-base rate of return regulation provides few opportunities to create meaningful positive economic incentives which would benefit both the companies and the customers."[15] Specifically, the Commission stated that the rate regulation initiative proceeds from the assumption that rate-base rate of return regulation offers few incentives to improve efficiency by minimizing costs and efficiently allocating resources.[16] This is because traditional rate-base rate of return regulation is essentially a cost-plus arrangement in which all of the utility's costs are recovered from customers. As Dr. Weisman explained in the PBR proceeding, traditional cost-of-service regulation "is essentially a *cost-plus* contract that affords the regulated firm a high degree of pass-through of cost-increases in the form of price increases."[17]

23. The February 26, 2010 letter also indicated that the Commission was "seeking a better way to carry out its mandate so that the legitimate expectations of the regulated utilities and of customers are respected."[18] The Commission's regulatory reform initiative led to the PBR proceeding,[19] the purpose of which was to employ performance-based regulation as an alternative to the cost-of-service regulatory model in order to emulate, to the greatest extent possible, the same efficiency incentives as those experienced in a competitive market while maintaining service quality. Enhanced incentives would result in productivity improvements, the benefits of which would accrue to both the companies and customers. In addition, the Commission anticipated that the overall effectiveness of the regulatory framework would be improved.

24. The Commission's regulatory reform initiative establishing the PBR framework, which led to Decision 2012-237, was guided by the following five principles established by the Commission for the development of PBR plans in Bulletin 2010-20,[20] issued on July 15, 2010.

> **Principle 1.** A PBR plan should, to the greatest extent possible, create the same efficiency incentives as those experienced in a competitive market while maintaining service quality.
>
> **Principle 2.** A PBR plan must provide the company with a reasonable opportunity to recover its prudently incurred costs including a fair rate of return.
>
> **Principle 3.** A PBR plan should be easy to understand, implement and administer and should reduce the regulatory burden over time.
>
> **Principle 4.** A PBR plan should recognize the unique circumstances of each regulated company that are relevant to a PBR design.
>
> **Principle 5.** Customers and the regulated companies should share the benefits of a PBR plan.

[15] Proceeding ID No. 566, Exhibit 1.01, AUC letter of February 26, 2010, page 2.
[16] Proceeding ID No. 566, Exhibit 1.01, AUC letter of February 26, 2010, pages 1-2.
[17] Proceeding ID No. 566, Exhibit 103.03, evidence of Dr. Weisman, paragraph 57.
[18] Proceeding ID No. 566, Exhibit 1.01, AUC letter of February 26, 2010, page 2.
[19] Application No. 1606029, Proceeding ID No. 566 leading to Decision 2012-237.
[20] Bulletin 2010-20, Regulated Rate Initiative – PBR Principles, July 15, 2010.

25. The attributes of a PBR plan were explained by the Commission as follows:

> A basic PBR plan begins with rates established through a cost of service proceeding such as a rate base rate-of-return proceeding. Those rates are then adjusted in subsequent years by a rate of inflation (I) relevant to the prices of inputs the companies use less an offset (X) to reflect the productivity improvements the companies can be expected to achieve during the PBR plan period. Thus, adjusting rates by I-X, rather than in cost of service proceedings, breaks the link between a utility's own costs and its revenues during the PBR term. In much the same way as prices in competitive industries are established in a competitive market, prices adjusted by I-X reflect industry-wide conditions that would produce industry price changes in a competitive market. Each company's actual performance under PBR will depend on how its own performance compares to the industry's inflation and productivity measures.
>
> Establishing prices in this way during the term of a PBR plan creates stronger incentives for the companies to improve their efficiency through cost reductions and other actions because they are able to retain the increased profits generated by those cost reductions longer than they would under cost of service regulation, especially with rates under cost of service regulation that are re-set every two years. At the same time, under a PBR regulatory framework, customers automatically share in the expected efficiency gains because they are built into rates through the X factor regardless of the actual performance of the companies. In addition, the X factor in a PBR plan is often increased by a stretch factor so as to capture efficiency gains that should be immediately realizable as the regulatory system changes from cost of service to PBR.[21]

26. The Commission went on to explain that, through the I-X mechanism, a PBR plan is designed so a company's prices or revenues-per-customer change with the change in input prices as measured by the I factor and decrease by the rate of productivity growth, as measured by the X factor.

27. The I factor provides a mechanism to adjust a company's prices (in the case of a price cap plan) or revenues-per-customer (in the case of a revenue-per-customer cap plan) year-over-year to reflect changes in the prices of inputs that the company uses. The Commission recognized that a PBR plan should provide incentives for the company to undertake productivity improvements to manage and minimize the costs that are within its control. However, changes in a company's input prices due to inflation (e.g., driven by macroeconomic forces) are not within its ability to control, although the company may be able to use those inputs more effectively than its competitors. In competitive markets, when faced with a universal economy-wide increase in input prices, such as an increase in salaries and wages or higher fuel prices, companies are often left with no choice but to pass on these higher costs to consumers. Similarly, when the prices of inputs go down, competition forces the companies to lower their prices.[22]

28. Therefore, in order for a regulated utility to earn its allowed rate of return, it must limit its input cost increases to the broad index of input price changes, as measured by the Commission-approved I factor. Because this measure is based on the input price changes experienced in the Alberta economy, it is reflective of input cost increases that are generated by competitive market forces. As the UCA pointed out in the PBR proceeding, the I factor mirrors the process of reviewing a company's costs and adjusting rates on a prudency basis, in effect using the selected inflation measure as a prudency test.[23] This preserves the incentive properties of PBR while

[21] Decision 2012-237, paragraphs 16 and 17.
[22] Decision 2012-237, paragraphs 153 and 154.
[23] Decision 2012-237, paragraph 148.

allowing a reasonable opportunity for the companies to recover their prudently incurred input costs.

29. The X factor reflects the rate of productivity growth that a company is expected to achieve annually during the PBR term. Because this measure is based on the average total factor productivity (TFP) growth experienced by the distribution utility industry over a long period of time, the Commission considers that it is reasonable to expect that Alberta distribution utilities will be able to achieve this rate of productivity growth during the PBR term. In the PBR proceeding, the Commission agreed with National Economic Research Associates' (NERA) explanation that the rationale behind the X factor (to which the TFP study contributes) is to emulate the incentives of competitive markets as they relate to productivity. In competitive markets, if a company achieves greater productivity growth than the industry, it generally is rewarded with larger earnings in the short run.[24] If a company's productivity growth is lower than the industry productivity, its earnings generally suffer in the short run. The X factor preserves the incentive properties of PBR while allowing a reasonable opportunity for the companies to earn their allowed rate of return.

30. At the same time, under a PBR regulatory framework, customers automatically share in the expected productivity gains because they are built into rates through the X factor, regardless of the actual performance of a company. Customers of a regulated company under PBR directly benefit from annual rates that are adjusted to reflect these expected productivity gains. In addition, the X factor in the PBR plans was increased by a stretch factor to capture efficiency gains that should be immediately realizable as the regulatory system changes from cost-of-service to PBR. The inclusion of a stretch factor provides a further benefit to customers.

31. In Decision 2012-237, the Commission explained that while the size of the X factor affects a company's earnings, it has no influence on the incentives for the company to reduce costs. The PBR plans derive their incentives from the decoupling of a company's revenues from its costs as well as from the length of the PBR term (i.e., regulatory lag).[25] The longer the regulatory lag, the stronger the PBR incentives to reduce costs. NERA provided the following general explanation of the PBR framework:

> The theory that we're drawing from doesn't require such precision. It says that there is an industry out there that's doing something. If it's a competitive industry -- it's an industry for making [hockey sticks], I don't know. [...] And of all the makers of hockey sticks, there's a productivity trend for hockey stick makers, and if you can't keep up, your business will fail. We don't need to be vastly more sophisticated than to measure the productivity of the hockey stick industry and use that as our way of allowing regulatory lag to eke out a few more years to avoid a couple of rate cases and to allow a little more productivity pressure to be visited on utility managements to try to make the businesses run better.[26]

32. However, the Commission also recognized that the I-X mechanism may not provide sufficient revenue to allow the companies to recover all of their prudently incurred costs. To that end, the Commission approved the use of Y factor and Z factor rate adjustments to deal with certain flow-through costs beyond the control of the company and the impact of significant

[24] Decision 2012-237, paragraph 290, referring to footnote 302 in that paragraph.
[25] Decision 2012-237, paragraph 257.
[26] Decision 2012-237, paragraph 277, quoting NERA.

unforeseen events outside of the control of the company that would not otherwise be reflected in rates through the inflation factor adjustment.

33. In addition, the Commission recognized that there may be circumstances during the PBR term where certain required capital-related costs could not be adequately funded through the I-X mechanism or through either a Y factor or Z factor adjustment. Each of the approved PBR plans included the opportunity for the company to apply for supplemental capital funding through the approval of a capital project identification and tracking mechanism referred to as a capital tracker. Costs for capital projects approved for capital tracker treatment would be recovered by way of a K factor component of the PBR rate adjustment formula.

34. While the Commission found that Y, Z and K factor adjustments were necessary elements of the approved PBR plans, the Commission was careful to limit the scope and application of these adjustments, noting that they reduce the incentives that a PBR plan is intended to promote. The Commission stated:

> All of these types of cost-based adjustments (whether Z, Y or K) are carefully defined and limited in their scope because they are inconsistent with the objectives of PBR in that they have the effect of lessening the efficiency incentives that are central to a PBR plan.[27]

35. The Commission concluded in Decision 2012-237 that the X factor, based on the average productivity growth in the industry, together with the I factor, based on Alberta inflation, along with the other features of the approved PBR plans, provides "each of the companies with a reasonable opportunity to recover its prudently incurred costs including a fair rate of return over the five-year term of the plan."[28]

36. The next section of this decision reviews the Commission's findings in Decision 2012-237 on the need for, availability and use of capital trackers and the K factor rate adjustment.

1.2 Selection of capital trackers as the method for addressing capital requirements that are not funded under the I-X mechanism

37. During the PBR proceeding, the companies expressed concern that an I-X mechanism by itself would provide insufficient revenues to fund necessary capital expenditures. Of particular concern were accelerated system modernization projects, externally driven projects, and capital expenditures required for a rapidly expanding system. Experts appearing in the PBR proceeding generally agreed that some method of funding certain capital expenditures outside of the I-X mechanism is required in a PBR plan, although there was no agreement on how to determine what capital expenditures should be eligible for supplemental funding or how to fund them.[29]

38. The Commission agreed "that a mechanism to fund certain capital-related costs outside of the I-X mechanism through a capital factor is required."[30] In approving a supplemental capital funding mechanism, the Commission's objective was to provide the companies with the opportunity to fund prudently incurred capital expenditures that could not be funded under the I-X mechanism, while minimizing negative impacts on the incentives created under the PBR

[27] Decision 2012-237, paragraph 21.
[28] Decision 2012-237, paragraph 35.
[29] Decision 2012-237, paragraphs 544 to 546.
[30] Decision 2012-237, paragraph 586.

plan. Various supplemental capital funding alternatives were discussed by the parties. The Commission described these alternatives as follows:

> A number of alternatives for a capital factor were explored during the proceeding. These included determining the average rate of capital growth in the TFP study and providing for capital in addition to that amount as required, modifying the X factor in consideration of a need for higher capital spending, excluding all capital from going-in rates and the I-X mechanism, and providing compensation for capital needs outside of the normal course of the company's operations by way of a capital tracker.[31]

39. The Commission rejected the various company proposals for supplemental capital funding; instead, it approved the use of a capital tracker mechanism as first suggested by NERA. The Commission stated:

> In the preceding sections the Commission has generally rejected the methodologies proposed by the companies for addressing this requirement. The Commission considers that the potential erosion of the incentive properties of PBR that arise from adopting the approaches to capital factors proposed by the companies are significant enough to warrant the use of the capital tracker approach to address special capital funding requirements.[32]

40. In its evidence, NERA had referred to the growing use by some U.S. regulators of a capital tracker mechanism that allows a regulated firm to track and begin to recover the costs associated with certain capital projects more quickly than in a normal rate case. The PBR decision referred to the NERA evidence where it described the purpose and use of capital trackers. NERA stated:

> Capital trackers are used to recover the costs of a classified, pre-approved set of infrastructure investments. The tracker does not include all infrastructure investments, rather only infrastructure investments that meet the classifications set at the on-set of the tracker; all other infrastructure investments are recovered in the company's next rate case proceeding. A "qualified investment" is an investment that meets the pre-set conditions for inclusion in the asset tracker. Typically, the proposed accounts included in a capital tracker go beyond the scope of routine investments required to support existing infrastructure. Qualified investments are specific, non-routine investments recovered outside of the normal rate case proceeding.[33]

41. In adopting the capital tracker mechanism, the Commission commented that it was the best method from among the alternatives considered for providing supplemental capital funding while maintaining the PBR incentives created under the PBR plans, stating:

> The Commission considers that the targeted criteria-based nature of a capital tracker limits the number of projects that are outside of the I-X mechanism, and as a result, the incentive properties of PBR are preserved to the greatest extent possible. Therefore, the Commission accepts that the use of capital trackers, as proposed by NERA and as recognized by several other parties as a viable option, is the best of the alternatives

[31] Decision 2012-237, paragraph 551.
[32] Decision 2012-237, paragraph 586.
[33] Decision 2012-237, paragraph 575, quoting from Exhibit 391.02, NERA second report, Section 4, paragraph 90, page 43.

> proposed for dealing with capital expenditures outside of the I-X mechanism. Accordingly, the Commission will include a capital tracker mechanism in the PBR plans.
>
> A capital tracker mechanism in a PBR plan is warranted in circumstances where the company can demonstrate that a necessary capital replacement project or capital project required by an external party cannot reasonably be expected to be recovered through the I-X mechanism. The Commission concludes that a structured criteria-based approach provides the most objective method for assessing whether projects qualify as capital trackers.[34]

42. Based on the record of the PBR proceeding, the Commission established the following criteria for the approval of supplemental capital funding under a PBR plan by way of a capital tracker:

(1) The project must be outside of the normal course of the company's ongoing operations.

(2) Ordinarily the project must be for replacement of existing capital assets or undertaking the project must be required by an external party.

(3) The project must have a material effect on the company's finances.[35]

43. In explaining the first criterion the Commission included the following:

- The first criterion is required to avoid double-counting between capital-related costs that should be funded by way of a capital tracker and those that should be funded through the I-X mechanism.
- Projects put forward for capital tracker treatment must be of sufficient importance that the company's ability to provide utility service at adequate levels would be compromised if the expenditures are not undertaken. Projects that do not carry this level of importance are likely to be subject to a reasonable level of management discretion, therefore allowing special treatment for this type of capital would eliminate the incentive for the company to examine all alternatives.
- An engineering study is required to be filed to justify the level of capital expenditures proposed.
- The company must demonstrate that the capital expenditures are required to prevent deterioration in service quality and safety, and that service quality and safety cannot be maintained by continuing with O&M and capital spending at levels that are not substantially different from historical levels.
- The company also will be required to demonstrate that the capital project could not have been undertaken in the past as part of a prudent capital maintenance and replacement program.[36]

44. The Commission explained the second criterion as ordinarily limiting the scope of eligible capital projects to those for replacement of aged infrastructure that has come to the end of its useful life and those that are required by third parties.[37] With respect to externally driven

[34] Decision 2012-237, paragraphs 586 and 587.
[35] Decision 2012-237, paragraph 592.
[36] Decision 2012-237, paragraph 594.
[37] Decision 2012-237, paragraph 595.

projects, the Commission noted that merely demonstrating a project is externally driven is insufficient to satisfy the criterion and that to qualify for capital tracker treatment a company must demonstrate that externally driven project costs are significantly different than historical trends, otherwise there is a likelihood for double-counting.[38]

45. With respect to growth projects, the Commission stated that Criterion 2 "excludes projects required to accommodate customer or demand growth because a certain amount of capital growth is expected to occur as the system grows and system growth generates new sources of revenue that offset the costs of the new capital."[39] The Commission's reasoning with respect to growth is demonstrated in the following statement:

> …as stated by the CCA investments to meet customer and load growth trigger revenue growth and are largely self-funding, therefore these projects should not be eligible for capital tracker treatment if they result in customer and load growth because the incremental costs should be funded by other features of the PBR formula.[40] (footnote omitted)

46. The Commission explained that the third criterion is needed to limit the use of capital trackers.[41] The Commission explained that companies may frequently undertake many small, atypical projects that may vary from year-to-year; however, undertaking a certain level of atypical projects on a consistent basis could be considered to be within the normal course of operations.

47. In discussing materiality, the Commission also commented on the grouping of projects for capital tracker consideration, stating:

> The Commission also considers that it would not be suitable to group together several dissimilar projects into a single large project to give the appearance of materiality. However, a number of smaller related items required as part of a larger project might qualify for capital tracker treatment.[42]

48. It was acknowledged by the Commission that superior incentives for capital trackers would result if the companies were required to spend money on capital expenditures prior to receiving approval for capital tracker recovery of the expenditures.[43] However, given the lack of experience with the capital tracker mechanism, for the first generation PBR plans, it was determined that the companies will be permitted to apply for capital trackers on a forecast basis. The approved forecast cost of a capital tracker project will be included in rates on an interim basis and will be subject to a true-up to prudently incurred actual expenditures, after the project is completed. The true-up process will test the prudence of the actual capital expenditures and imprudent expenditures will be subject to disallowance. As a result, the capital tracker mechanism retains some efficiency incentives due to the risk of regulatory disallowances in the true-up process if expenditures are not prudently incurred.[44] The true-up mechanism with a prudence review also mitigates somewhat the incentive for companies to overstate the initial

[38] Decision 2012-237, paragraph 600.
[39] Decision 2012-237, paragraph 595.
[40] Decision 2012-237, paragraph 591.
[41] Decision 2012-237, paragraph 601.
[42] Decision 2012-237, paragraph 601.
[43] Decision 2012-237, paragraph 614.
[44] Decision 2012-237, paragraph 615.

capital tracker forecasts. Nonetheless, the companies remained free to incur expenditures prior to applying for capital tracker approval.[45]

49. The PBR decision established March 1st as the annual filing date for capital trackers that a company proposes to have approved and included in rates as of January 1st of the following year. Capital tracker applications must include a business case with respect to each proposed capital tracker, which will include the forecast costs. In addition, each capital tracker application shall true-up the forecast to actual costs of projects that have been completed since the prior year's capital tracker filing, together with sufficient information to permit a prudence review.[46]

50. The Commission also provided the following direction on how to calculate the K factor component of the PBR formula for recovery of approved capital tracker amounts.

> The calculation of the K factor rate adjustments will be similar to revenue requirement calculations under cost of service, except that the calculation will be limited to the depreciation, taxes and return associated with the incremental rate base for the expenditures that form the capital tracker.[47]

51. Companies were also instructed to use the most recent forecast of billing determinants, along with the Phase II methodologies then in place, for determining the K factor rate adjustments by rate class.

52. The Commission concluded that the capital tracker application process and K factor collection mechanism would achieve the best balance between ensuring companies have sufficient funding to undertake necessary capital expenditures, and maintaining the efficiency incentives of the PBR plans to the greatest extent possible.

1.3 Scope of the proceeding

53. The Commission held a pre-hearing conference on May 13, 2013 to discuss and refine the issues relevant to the proceeding. In the Commission's letter of April 25, 2013,[48] inviting parties to attend the pre-hearing conference the Commission indicated that the purpose of the pre-hearing conference was to seek parties' input in clarifying the relevant issues within the scope of this proceeding; namely:

a. implementation and application of the capital tracker criteria

b. the evaluation of the projects proposed for capital tracker treatment using the capital tracker criteria established in Decision 2012-237

c. the reasonableness of the scope and timing of each project, the alternatives considered, forecasting methodologies and the forecast costs for each of the projects proposed for capital tracker treatment

d. the calculation of the resultant K factor

[45] Decision 2012-237, paragraph 615.
[46] Decision 2012-237, paragraph 975.
[47] Decision 2012-237, paragraph 977.
[48] Exhibit 113.01, AUC letter on the pre-hearing conference, April 25, 2013.

54. The April 25, 2013 letter also clarified the scope of this proceeding as follows:[49]

> Pursuant to Decision 2012-237, the capital tracker project applications must "address the Commission's capital tracker criteria."[3] Accordingly, matters related to the implementation and application of the capital tracker criteria, the evaluation of the capital tracker applications pursuant to the Commission's capital tracker criteria and the calculation of the resultant K factor are within the scope of the present proceeding. Further, because approved capital trackers will be recovered through rates on a cost of service basis, the reasonableness of the scope and timing of each project, the alternatives considered, forecast methodologies and the forecast costs for each project must be evaluated. A reconsideration of the capital tracker approach and issues related to the I-X mechanism, going-in rates, Y factors, Z factors or other PBR related matters are not within the scope of this proceeding.[4]

[3] Decision 2012-237, paragraph 616.

[4] Issues related to other PBR matters were addressed in Decision 2013-071: Rate Regulation Initiative, Distribution Performance-Based Regulation, Decision on Preliminary Question, Requests for Review and Variance of AUC Decision 2012-237, Application Nos. 1609018, 1609019, 1609024,1609025, and 1609097, Proceeding ID No. 2240, March 4, 2013.

55. The Commission's April 25, 2013 letter also attached for comment a preliminary issues list identifying the issues relevant to the clarified scope of the proceeding. The preliminary issues list is included as Appendix 4.

56. The Commission invited two rounds of written comments from parties. The first round of comments provided parties with an opportunity to propose modifications to the preliminary issues list, and the second round provided parties with an opportunity to reply to the suggestions of other parties.

57. Following the two rounds of written comments from parties, the Commission held an oral pre-hearing conference to discuss the submissions of parties on the issues list. This process allowed parties to expand on their positions regarding the issues list, and allowed questions to be asked of the parties on their positions.

58. After considering the positions of the parties on the issues list, the Commission distributed a final issues list on May 15, 2013.[50] The final issues list is included as Appendix 5. As a result of this process, relevant issues for this proceeding were further clarified and refined. Accordingly, the Commission will give no weight to any evidence or argument relating solely to matters outside of the scope of the proceeding as set out in the final issues list. In particular, the Commission will not place any weight on evidence that suggests a reconsideration of the capital tracker mechanism as the means of addressing necessary capital-related costs that are not funded under the I-X mechanism.

2 Overview of the 2013 capital tracker applications

59. As discussed in Section 1, in Decision 2012-237, the Commission approved a capital tracker mechanism to fund certain capital-related costs outside of the I-X mechanism. The

[49] Exhibit 113.01, paragraph 2.

[50] Exhibit 147.01, AUC letter regarding capital tracker proceeding final issues list and procedural schedule, May 15, 2013.

Commission also set out three criteria necessary for approval of a project for capital tracker treatment and provided some additional clarification on what was intended by each of the criteria. In their applications, the companies put forward various interpretations of the capital tracker criteria and used various methods to demonstrate compliance with the Commission's criteria. The following sections provide a brief overview of the companies' 2013 capital tracker applications.

2.1 AltaGas

60. AltaGas forecast total 2013 capital additions of approximately $31.1 million.[51] The company applied for three capital tracker programs in 2013: pipe replacement projects, station refurbishment projects and gas supply projects. The forecast capital additions for these projects totaled $11.65 million,[52] with an aggregate K factor amount of approximately $1.03 million in 2013. Capital trackers account for approximately 37 per cent of total 2013 capital additions.

61. AltaGas' proposed capital trackers are "modelled pretty much identically after the system safety and system reliability programs that [AltaGas] put forth in [its] 2010-2012 GRA [general rate application]."[53] AltaGas submitted that the applied-for capital trackers meet the Commission's capital tracker criteria, suggesting that the Commission's criteria "were not unlike those that AUI… had imposed on itself"[54] in that they were outside "the normal course of our operations that they were required to replace aging assets at the end of their useful life, and in some cases required by a third party, and they're certainly material to the finances of the organization."[55]

62. In addition to an assessment of the Commission's capital tracker criteria, AltaGas considered the overall revenue requirement of the proposed capital trackers, when compared to anticipated revenues to be received for these projects under the I-X mechanism. During the hearing, AltaGas' witness Mr. Stock provided the following overview of this analysis:

> And what we did was we essentially took a traditional cost-of-service approach to computing these K factor amounts. And of course under traditional cost of service, you would perform a forecast of your -- for your test year; you would compare that amount to the amount of funding that's available through existing rates; and the remainder you would identify as a deficiency, and you would seek recovery of that through a general rate application. So what we've done for each of these specific capital tracker programs is essentially that same type of calculation where we've come up with a forecast of the revenue requirements for 2013 to support these capital tracker programs. From that, we've subtracted the amount of funding that's currently available through the PBR formula through going-in rates, as well as I minus X and customer growth. And then the remainder shortfall or deficiency is equal to the amount that we've applied for as a K factor.[56]

[51] Exhibit 223.04, AltaGas revised capital tracker schedules, Schedule 3.0 recovery, line 2 ($409,507,857 – $378,401,946).
[52] Exhibit 223.04, AltaGas revised capital tracker schedules, Schedule 5.0 K expenditures provides forecast capital expenditures in 2013 of $11,650,078 and forecast capital additions in 2013 of $11,650,078.
[53] Transcript, Volume 5, page 778, lines 11-14.
[54] Transcript, Volume 5, page 779, lines 12 and 13.
[55] Transcript, Volume 5, page 779, lines 15-19.
[56] Transcript, Volume 5, page 796, lines 21-25; page 797, lines 1-12.

63. In developing the revenue requirement for each specific capital tracker, AltaGas examined historical information to determine the capital amounts already embedded in going-in rates in respect of the projects proposed for capital tracker treatment. AltaGas removed the impact of any amounts included in going-in rates associated with the proposed capital tracker from the calculated capital tracker revenue requirement.[57] This exercise resulted in a calculation of a K factor based on the incremental expenditure over what is currently in base rates, as opposed to a K factor based on the entire capital expenditure forecast in 2013 for the proposed capital additions. It also included a provision for growth in billing determinants. AltaGas then determined the K factor amounts for its capital trackers using a traditional cost-of-service methodology for revenue requirement calculations that included the application of the mid-year convention, for all facets of its capital tracker calculation.

64. The 2013 AltaGas programs proposed for capital tracker treatment and the resulting K factor revenue requirement are set out in the following table.

Table 1. AltaGas proposed capital tracker programs[58]

Capital tracker	Capital expenditure	K factor
	($000)	
Pipe replacement program	9,027	679
Station refurbishment program	1,289	141
Gas supply program	1,334	211
Total	**11,650**	**1,031**

65. AltaGas noted that it did not have any growth-related projects in its application.

66. AltaGas submitted that its proposed pipeline and station capital tracker projects are primarily driven by aging infrastructure that had come to the end of its useful life. Gas supply projects are primarily driven by the need to maintain secure access to gas and as a result of third party activities, or are driven by safety and reliability issues.[59]

67. AltaGas' capital tracker pipe replacement programs were categorized as PVC replacement, non-certified PE pipe replacement or steel pipe replacement. The three pipe replacement capital tracker programs were each supported by a business case and included 24 individual projects. AltaGas also submitted a business case in support of its 15 projects related to station refurbishments, and two business cases supporting each of its gas supply projects. AltaGas viewed this level of support as consistent with the Commission's directions, which required projects proposed for capital tracker treatment to be supported by a business case and an engineering study.[60]

68. AltaGas' K factor calculation was unique in the proceeding, in that its revenue requirement calculation for each of its programs provided for recovery of the cash working capital related to depreciation, interest, long-term debt and common equity as a component of rate base.[61] AltaGas did not include the impact of any increases or decreases to operations and

[57] Exhibit 39.01, AltaGas application, page 5, paragraph 16.
[58] Exhibit 223.04, AltaGas revised capital tracker schedules, schedules 4.0 K factors, 5.0 K expenditures and 5.1 K plant.
[59] Exhibit 39.01, AltaGas application, pages 2-3.
[60] Decision 2012-237, paragraph 594 and 975.
[61] Transcript, Volume 5, page 954, lines 15-18 and page 956, lines 13-16.

maintenance expenses that may result from capital tracker projects as part of the K factor calculations.

2.2 The ATCO companies

69. ATCO Electric and ATCO Gas utilized a common approach in preparing their capital tracker applications.

70. The ATCO companies described their approach as "a holistic approach to identifying those programs that best met the three criterion that the Commission had established."[62] The companies explained that they developed this approach by considering the evidence of Dr. Makholm in the original PBR proceeding, the survey of capital trackers in other jurisdictions prepared by Dr. Makholm for the ATCO companies in this proceeding and the guidance of the Commission in Decision 2012-237. Ms. Wilson, policy witness on behalf of the ATCO companies, expanded on the approach used by the ATCO companies by stating:

> But we did all of this with an eye to the overall investment requirements, capital investment requirements, of the utilities, of ATCO Gas and ATCO Electric, because we don't believe that you can rely solely on a qualitative criteria. I think there has to be a quantitative assessment that goes along with that to demonstrate that double counting isn't actually occurring and to demonstrate the overall funding shortfall.[63]

71. Ms. Wilson was asked, by Commission counsel, whether the individual projects identified for capital tracker treatment by the ATCO companies were identified first or if it was the funding shortfall that was identified first. Ms. Wilson responded as follows:[64]

> It really -- as I said, it really was both happening at the same time. It was -- I mean, we always kept an eye to the total funding shortfall. We knew that if we went over that total funding shortfall, that then we could no longer demonstrate that double counting wasn't occurring. But, as I described, we also had a lot of information that helped us identify the specific capital tracker programs that best met the Commission's criteria.

72. In response to a question about how the aggregate amount of capital trackers that the ATCO companies applied for was identified, Ms. Wilson responded:

> Well, we have what we refer to as the reasoned demonstration, which provides a projection of our total capital funding requirements in 2013, and what can reasonably be assumed to be funded by I minus X. So to us that calculation demonstrates that providing our capital trackers that we were putting forward did not exceed that funding shortfall, there wouldn't be any double counting occurring.[65]

73. Ms. Wilson also confirmed that the aggregate capital tracker amount was directly tied to the funding shortfall.[66]

> Q. So if the shortfall had been significantly more than that, would there have been additional capital trackers applied for?

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62 Transcript, Volume 1, page 28, lines 8-10.
63 Transcript, Volume 1, page 29, lines 21-25 and page 30, lines 1-3.
64 Transcript, Volume 1, page 31, lines 12-20.
65 Transcript, Volume 1, page 31, lines 2-9.
66 Transcript, Volume 1, page 32, lines 4-10.

A. MS. WILSON: Yes.
Q. If the shortfall was significantly less than that, would there be fewer capital trackers applied for?
A. MS. WILSON: Yes.

74. The ATCO companies approach was further explained in the following exchange with Commission counsel:

> Q. …So ATCO in this joint approach did not take the position then that if your project meets the three criteria established by the Commission that you would apply for it? You also had to look at the three criteria and then look at the shortfall analysis and match the two; is that right?
> A. MS. WILSON: Yes. As I said, it was a holistic approach because, in our view, that is the only way you can actually demonstrate numerically that there isn't any double counting occurring.
> Q. So under some aspects of the ATCO utilities' capital plans for 2013, which you believe meets the Commission's capital tracker criteria, that you have not applied for as capital trackers?
> A. MS. WILSON: I haven't really turned my mind to that, sir.[67]

75. The capital funding shortfall was calculated as the difference between the following two values: the total revenue requirement associated with the 2012 going-in rate base, escalated by the I-X index and adjusted for the effect of the change in billing determinants between 2012 and 2013; and the total revenue requirement associated with the 2013 forecast rate base.[68] The going-in rate base was reflective of the 2012 approved forecast capital additions rather than the 2012 actual capital additions.[69] In support of its 2013 capital forecast, in addition to the projects that comprise the capital trackers, each of the ATCO companies submitted a list of capital additions that it stated would be funded under the I-X mechanism.

76. In the PBR decision, the Commission determined that each project proposed for capital tracker treatment will require support by way of a business case and an engineering study.[70] The ATCO companies provided various business cases and engineering studies in support of their applications.

77. Given that the capital funding shortfall under the "Reasoned Demonstration" was calculated using the total 2013 forecast capital expenditures, the ATCO companies also provided information and forecast expenditures for those projects that were not proposed for capital tracker treatment. The need for and nature of the testing of this information to determine the validity of the shortfall analysis was summarized in response to questioning from Commission counsel:[71]

> Q…But does the ATCO application because of the reasoned demonstration -- does it require the Commission to satisfy itself with respect to both the capital tracker capital and the noncapital tracker capital for 2013?

[67] Transcript, Volume 1, page 33, lines 3-17.
[68] Transcript, Volume 4, page 737, lines 18-25 and page 738, line 1-16.
[69] Transcript, Volume 2, page 454, lines 20-24.
[70] Decision 2012-237, paragraphs 594 and 975.
[71] Transcript, Volume 1, page 63, lines 14-21.

> A. MS. WILSON: Yes. But I view the assessment of the overall projection of the 2013 capital investment requirements can occur at a higher level than what would typically tend to occur in a general rate application.

78. The ATCO companies determined their capital tracker K factor amounts using the cost-of-service methodology generally employed for revenue requirement calculations. They proposed to recover the full revenue requirement associated with each capital tracker program. The revenue requirement calculation determined the 2013 mid-year rate base for each proposed capital tracker program using the mid-year convention, and then calculated the depreciation, return, debt costs, and taxes associated with the 2013 mid-year rate base.[72] [73] The ATCO companies noted that, due to the use of the mid-year convention, an adjustment to remove the 2012 mid-year investment that was already in base rates was required.[74] Neither of the ATCO companies included the impact of any increases or decreases to operations and maintenance expenses that may result from the capital tracker projects as part of the K factor calculation.

2.2.1 ATCO Gas

79. ATCO Gas provided a total 2013 capital additions forecast of approximately $316.5 million.[75] The "Reasoned Demonstration" analysis identified a capital funding shortfall revenue requirement amount of $10.3 million.[76] ATCO Gas applied for six capital tracker programs in 2013 totalling $112.7 million. ATCO Gas indicated that 94 per cent of rate base remained subject to the I-X mechanism.[77] ATCO Gas also confirmed that 36 per cent of forecast 2013 capital additions are proposed to be funded by way of capital trackers.[78]

80. The 2013 capital tracker revenue requirement requested by ATCO Gas in its application is $9.5 million, which ATCO Gas sought to recover through a K factor adjustment to 2013 rates. The revenue requirement was proposed to be divided between ATCO Gas North and ATCO Gas South. The requested capital tracker revenue requirement of $9.5 million is approximately $1.8 million less than the total capital revenue requirement shortfall of $10.3 million resulting from the "Reasoned Demonstration" analysis.[79] However, in response to an undertaking, the ATCO Gas K factor calculations were updated,[80] with the new aggregate K factor for ATCO Gas in 2013 calculated at $10.3 million.[81] The revised amount is approximately equal to the total capital revenue requirement shortfall identified in the "Reasoned Demonstration."

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72 Exhibit 37.01, ATCO Electric application, Appendix D, Schedules 3 to 10.
73 Exhibit 36.01, ATCO Gas application, page 56, paragraph 172 and Appendix D.
74 Exhibit 37.01, ATCO Electric application, page 69, paragraph 217; Exhibit 36.01, ATCO Gas application, page 56, paragraph 172.
75 Exhibit 36.01, ATCO Gas application, Appendix F, page 1, paragraph 2.
76 Exhibit 220.01, undertaking response of Ms. Wilson to Mr. McNulty at page 698 of the Transcript, Volume 4. ATCO Gas originally identified the total K factor as $9.5 million in Exhibit 36.01, Table 3.1, but later revised the number after correcting the income tax calculations.
77 Transcript, Volume 1, page 58, lines 1-3.
78 Transcript, Volume 1, page 59, lines 16-25 and page 60, lines 1-2.
79 Exhibit 36.01, ATCO Gas application, page 59, paragraph 181; Transcript, Volume 1, page 31, lines 24-25.
80 Transcript, Volume 4, page 698, lines 2-6.
81 Exhibit 265.01, ATCO Gas' argument, page 46, paragraph 143.

81. The 2013 ATCO Gas programs proposed for capital tracker treatment and the resulting K factor amount are set out in the following table.

Table 2. ATCO Gas proposed capital tracker programs[82]

	Capital expenditure			K factor		
Capital tracker	**North**	**South**	**Total**	**North**	**South**	**Total**
	($000)					
Urban mains replacement (UMR)	18,074	5,426	23,500	1,338	515	1,853
PE/PVC rural mains replacement (RMR)	12,300	16,700	29,000	1,365	1,081	2,446
Meter relocation & replacement project (MRRP)	15,279	21,987	37,266	1,612	1,904	3,516
Line heater replacements	3,120	2,080	5,200	323	242	565
Transmission driven capital	6,082	1,615	7,697	346	871	1,217
Third-party replacements*	6,635	3,400	10,035	499	225	724
Total	**61,490**	**51,208**	**112,698**	**5,483**	**4,838**	**10,321**

* Note: capital expenditures for third party replacements are not net of customer contributions.[83]

82. ATCO Gas indicated its average growth in rate base could rise as high as 15 per cent annually over the term of the PBR plan and 75 per cent of its capital investment requirements do not relate to growth on its system, and as such do not generate any incremental revenues.[84] The company stated its rate base is expected to grow by 10 per cent in 2013.[85] ATCO Gas also stated it was experiencing an "echo effect" in its replacement capital requirements reflecting an ongoing need to replace infrastructure installed over previous decades.[86]

83. ATCO Gas indicated that its projects proposed for capital tracker treatment are replacement capital projects or are third-party-driven projects. All of the proposed trackers are a continuation of, or similar to, programs and projects conducted in the past and are expected to continue for a number of years beyond 2013.

84. In support of its UMR program, ATCO Gas submitted a business case which contained an engineering assessment for each of the six projects identified for 2013. The RMR program business case included an engineering assessment; however, no specific projects were identified. The MRRP supporting evidence provided engineering details and a risk assessment for the sites scheduled for replacement. To support the line heater replacement capital tracker program, an example of an engineering assessment and risk matrix was provided for one of the 61 scheduled projects. The transmission driven capital projects were each supported by an individual business case and one business case was submitted for third-party-driven capital projects.

85. In information responses to the Commission, ATCO Gas acknowledged that a number of the forecasts originally submitted in its application had since changed. ATCO Gas, however, did not recommend that the K factor amount be updated because some of the forecasts had increased

[82] Exhibit 36.01, ATCO Gas application, page 21, Table 1.1 and Exhibit 220.01, Undertaking response of Ms. Wilson to Mr. McNulty at page 698 of the Transcript, Volume 4.
[83] Exhibit 36.01, ATCO Gas application, paragraph 144.
[84] Exhibit 36.01, ATCO Gas application, page 6, paragraph 8.
[85] Exhibit 36.01, ATCO Gas application, page 29, paragraph 76.
[86] Exhibit 36.01, ATCO Gas application, page 13, paragraph 26.

while others had decreased, and any additional differences would be trued up in future capital tracker applications.[87]

86. In addition to the information provided on capital tracker projects, ATCO Gas provided forecasts for 2013 capital additions funded under the I-X mechanism, which totalled $203.8 million. Business cases were provided by ATCO Gas to support some of the significant capital additions funded under the I-X mechanism. ATCO Gas provided the following breakdown for these capital projects.

Table 3. ATCO Gas' total capital expenditures/additions[88]

	2011 actual	2012 forecast	2013 forecast
	($ million)		
Capital additions supported by I-X			
Distribution extensions	38.9	50.5	49.1
Distribution improvements	11.2	18.1	11.7
Distribution services	34.5	37.5	38.8
Meters, regulators and installations	49.0	83.7	58.0
Land and structures	8.4	8.0	8.7
Moveable equipment	17.7	15.2	19.3
Communication equipment	2.2	6.3	2.1
Information technology	7.8	8.4	16.1
Total capital additions supported by I-X	169.7	227.7	203.8
Capital trackers			
Urban mains replacement	48.8	31.0	23.5
PE/PVC rural mains replacement	19.0	19.6	29.0
Above ground MRRP	36.1	22.3	37.3
Line heater replacements	1.3	3.5	5.2
Transmission driven capital	3.6	16.3	7.7
Third-party replacements	14.1	10.2	10.0
Total capital trackers	122.9	102.9	112.7
Total capital expenditures	**292.6**	**330.6**	**316.5**

2.2.2 ATCO Electric

87. ATCO Electric provided a total 2013 capital addition forecast of approximately $297.6 million.[89] The "Reasoned Demonstration" analysis identified a capital funding shortfall revenue requirement amount of $22.1 million.[90] ATCO Electric applied for eight capital tracker programs and also identified sub-programs and individual projects comprising the sub-programs. The total 2013 capital additions for the proposed capital tracker programs amounted to $223.6 million. ATCO Electric indicated that 86 per cent of rate base remained subject to the

[87] Exhibit 74.01, AUC-AG-08, pages 4-5.
[88] Exhibit 36.01, ATCO Gas application, Appendix F, page 2, Table 1.1.
[89] Exhibit 37.01, ATCO Electric application, Appendix F, Table 1.
[90] Exhibit 37.01, ATCO Electric application, Appendix E, Schedule 1.

I-X mechanism.[91] ATCO Electric also confirmed that 75 per cent of forecast 2013 capital additions are proposed to be funded by way of capital trackers.[92]

88. The 2013 capital tracker revenue requirement requested by ATCO Electric in its application is $19.7 million,[93] to be recovered by a K factor adjustment to 2013 rates. The requested capital tracker revenue requirement of $19.7 million is approximately $2.4 million less than the total capital revenue requirement shortfall of $22.1 million resulting from the "Reasoned Demonstration" analysis. ATCO Electric noted that the requested K factor amount is less than the revenue requirement shortfall, and suggested that this demonstrated that no double-counting of capital funded under the I-X mechanism is occurring.

89. Business cases were provided for each of the capital tracker projects, with the exception of its distribution to transmission contributions. Engineering studies were included with some of the business cases. ATCO Electric argued that engineering studies are not applicable to certain types of projects. In addition, in some circumstances, ATCO Electric indicated that an engineering study will be required to support a capital tracker project; however, at the time of the proceeding, some engineering studies were not yet ready. ATCO Electric offered to provide engineering studies at the true-up stage, if requested.[94]

90. The following table summarizes the programs, sub-programs and projects for which ATCO Electric requested capital tracker treatment.

[91] Transcript, Volume 1, page 58, lines 1-3.
[92] Transcript, Volume 1, page 59, lines 16-25 and page 60, lines 1-3.
[93] Exhibit 220.01, undertaking response of Ms. Wilson to Mr. McNulty at page 698 of the Transcript, Volume 4. ATCO Electric originally identified the total K factor as $20.2 million in Exhibit 37.01, paragraph 44, but later revised the number after correcting the income tax calculations.
[94] Transcript, Volume 2, page 288, lines 7-16.

Table 4. ATCO Electric proposed capital tracker projects[95]

Program Sub-category Project description	Capital amount	Contri-bution	Net capital amount
	($ million)		
End of Life:			
Distribution system equipment:			
Life extension and replacements	13.3	-	13.3
Wood pole replacement/life extension:			
Pole replacements	18.2	-	18.2
Porcelain switch replacements:			
Porcelain switch replacement	5.1	-	5.1
Overhead conductor replacement/cable replacement/cable life extension:			
Conductor and cable replacement	3.4	-	3.4
Replace underground cable in Grande Cache	1.8	-	1.8
Large projects:			
Rebuild and reconductor 5L214	2.7	-	2.7
Martineau system rebuild	2.0	-	2.0
Drumheller conversion	3.0	-	3.0
Total end of life	**49.4**	**-**	**49.4**
End of life K factor			**4.2**
Capacity:			
Small projects:			
Small projects capacity increase	2.0	-	2.0
Fort McMurray/Wood Buffalo area:			
Saline Creek Keyano College land development backbone	2.1	-	2.1
Parsons Creek backbone	2.5	-	2.5
Hangingstone 25kV new feeder 5L704 phase 3	2.8	-	2.8
Fort McMurray LTS 25kV backbone expansion	2.4	-	2.4
Janvier capacity upgrade	0.8	-	0.8
Dog Rib feeder 5L737	2.3	-	2.3
Other large projects:			
Grande Prairie system capacity upgrade	1.3	-	1.3
812S Norcen offload	0.5	-	0.5
Brintnell 876S area upgrade	4.8	-	4.8
Total capacity	**21.4**	**-**	**21.4**
Capacity K factor			**1.8**
Clearance and safety:			
Capital vegetation management:			
Capital forest management	5.1	-	5.1
Wildfire rights-of-way program	8.3	-	8.3
Small projects:			
Small projects - safety & clearance	1.8	-	1.8
Agricultural area line to ground clearance	1.1	-	1.1
Double circuit mitigation:			
Double circuit removal	2.5	-	2.5
Total clearance and safety	**18.6**	**-**	**18.6**
Clearance and safety K factor			**1.6**

[95] Sources of data: Exhibit 37.01, ATCO Electric application Appendix B, Business Cases; Exhibit 37.01, ATCO Electric application, Section 2, tables providing sub-categories of expenditures; Exhibit 220.01, undertaking response of Ms. Wilson to Mr. McNulty at page 698 of the transcript.

Program Sub-category Project description	Capital amount	Contri-bution	Net capital amount
		($ million)	
Reliability:			
Small projects:			
Reliability improvements	3.0	-	3.0
Distribution automation:			
Distribution automation	3.2	-	3.2
Other large projects:			
Two Hills voltage unbalance	1.8	-	1.8
5L216 reliability improvements	2.8	-	2.8
Resolve 5L322 voltage imbalance	2.7	-	2.7
Rycroft tie line	1.5	-	1.5
5L349 rebuild and reconductoring	1.0	-	1.0
Total reliability	**16.1**	**-**	**16.1**
Reliability K factor			**1.6**
Line moves:			
Distribution line moves - miscellaneous:			
Line moves and encroachments	6.2	1.3	4.9
High load corridor development:			
Highway 21 underground crossings	0.8	-	0.8
High load corridor development	3.0	1.4	1.6
Wood Buffalo & Hwy 63/881:			
Highway 63 twinning	4.3	-	4.3
Total line moves	**14.2**	**2.7**	**11.5**
Line moves K factor			**1.4**
Transmission projects:			
Total 2013 forecast:			
Tower road feeders	1.9	-	1.9
High Prairie distribution	1.2	0.9	0.3
Hanna Area distribution	1.8	0.7	1.1
Central East distribution	3.1	0.5	2.6
Total transmission projects	**8.0**	**2.1**	**5.9**
Transmission projects K factor			**0.7**
New extensions:			
Growth capital – new extensions:			
Residential and commercial extensions	49.8	-	49.8
Oilfield and industrial extensions[96]	39.4	20.0	19.4
Street and sentinel lights	5.8	-	5.8
Large new extensions[97]	42.0	20.5	21.5
Total new extensions	**137.0**	**40.5**	**96.5**
New extensions K factor			**8.3**
Distribution to transmission contributions:			
Capital additions	63.1	58.9	4.2
Total distribution to transmission contributions	**63.1**	**58.9**	**4.2**
Distribution to transmission contributions K factor			**0.2**

[96] ATCO Electric did not provide a breakdown of contributions associated with new extensions between projects. Assumption made that approximately 50 per cent relates to oilfield and industrial extensions and 50 percent to large new extensions.

[97] Ibid.

Program Sub-category Project description	Capital amount	Contri-bution	Net capital amount
	($ million)		
Total capital trackers	**327.8**	**104.2**	**223.6**
Total K factor			**19.7**

91. As set out in the table above, ATCO Electric applied for programs that are for the replacement of aging assets (end of life projects), externally driven projects (line moves, transmission projects, distribution to transmission contributions), capitalized projects that relate to the ongoing maintenance of ATCO Electric's distribution system (clearance and safety, reliability) and growth-related projects that are required to connect additional customers or increase the load capabilities of ATCO Electric's system (capacity, new extensions).

92. ATCO Electric did not offset the requested K factor amount for its growth-related projects by the incremental revenues associated with the additional customers or additional load arising from these projects. Instead, "ATCO Electric addresses this matter through the incorporation of a projected growth in MWh in its reasoned demonstration."[98] Ms. Wilson expanded on this approach at the oral hearing stating:

> Well, again through the reasoned demonstration, we have taken the effect of growth into account, both from the capital cost as well as from the incremental revenue side, and -- to determine the total funding -- incremental funding requirement and rather than try to parse the growth aspect for ATCO Electric into some piece that might be funded through the incremental revenues versus might not, it was much easier and cleaner to -- and more efficient to deal with growth in total as a capital tracker rather than trying to parse it to something finer.[99]

93. In addition to the information provided on capital tracker projects, ATCO Electric provided forecast capital expenditures for its non-capital tracker projects, which totalled $74.0 million. Business cases were provided by ATCO Electric to support some of the significant non-capital tracker projects. ATCO Electric provided the following table setting out its forecast capital expenditures for projects funded under the I-X mechanism.

[98] Exhibit 81.01, AUC-AE-3(c).
[99] Transcript, Volume 1, page 230, lines 10-19.

Table 5. ATCO Electric 2013 forecast for non-capital tracker projects[100]

Non-capital tracker programs	2013 forecast ($ million)
System maintenance capital - new technology	3.9
Telecommunication	7.7
Isolated generation	0.2
Transportation	14.6
Software	22.7
Buildings/structures/improvements	15.5
Tools and instruments	1.5
Office furniture	2.0
Communications structures and equipment	0.2
Allocated capital	5.6
Total	**74.0**

2.3 EPCOR

94. EPCOR forecast $94.45 million of total capital additions in 2013.[101] EPCOR applied for 23 capital trackers in 2013 totalling $75.66 million in forecast capital additions. However, EPCOR requested recovery for only the portion of the requested capital tracker projects that EPCOR determined to be in excess of the amount funded under the I-X mechanism, with an aggregate forecast K factor amount of approximately $5.03 million in 2013. The Commission estimates that EPCOR's proposed capital tracker projects account for approximately 50 per cent of total 2013 capital additions.

95. EPCOR summarized its overall approach to capital trackers in its argument, stating:

> While EDTI took a "top-down" approach to determining that the I-X component would substantially under-fund its capital requirements over the PBR Term, it is important to note that EDTI's Application reflects a "bottom-up" approach to developing its specific Capital Trackers in accordance with the Commission's three-part criteria. EDTI began with a 2013 Forecast of the specific capital work and associated capital additions it will be required to undertake to meet its service obligations. In this regard, EDTI's approach was the same as the "bottom-up" forecasting approach it has used over the past number of years under cost of service regulation. EDTI prepared its Forecast on a project-by-project basis, using the more than 60 capital project categories reflected in EDTI's recent Tariff Applications. (footnotes omitted)[102]

96. In analyzing its overall capital funding shortfall, EPCOR used the estimated total revenue the company would receive from the PBR formula during the PBR term, to determine that "over the PBR Term the I-X component of the Plan will fund, on average, significantly less than half of the capital additions."[103] EPCOR then calculated how much capital would need to be funded by capital trackers in order to allow EPCOR to earn its approved return on equity. This analysis utilized a 2013 capital additions estimate that was based on EPCOR's three years of capital spending prior to the start of the PBR term, rather than on a detailed capital additions forecast.

[100] Exhibit 37.01, ATCO Electric application, Appendix D, Schedule 2.
[101] Exhibit 38.01, EPCOR application, Table 2.2.1-1.
[102] Exhibit 263.02, EPCOR argument, paragraph 5.
[103] Exhibit 263.02, EPCOR argument, paragraph 3.

Mr. Baraniecki explained the three-year average was a "conservative level of a forecast based on something other than our 2013 bottom-up forecast."[104]

97. In addition to identifying the magnitude of the overall capital shortfall, EPCOR identified the specific projects driving the 2013 capital additions shortfall using a bottom-up detailed capital forecast approach to calculate the K factor it proposed to recover. This approach "ensured that EDTI's applied-for K factor adjustment for each Capital Tracker would only recover that portion of EDTI's 2013 Forecast capital-related cost that is not funded under the I-X mechanism on a project-by-project basis."[105] EPCOR used the following three-step approach to identify the 2013 capital trackers and quantify the corresponding K factor amounts:[106]

- Forecast 2013 project category-by-project category return and depreciation to be recovered under the I-X mechanism, as follows:
    a) Determine the portion of EPCOR's capital additions that relates to each of its project categories prior to 2012. EPCOR estimated its capital additions from 1943 to 2003 due to a lack of detailed historical data.[107]
    b) Determine EPCOR's 2012 going-in year return and depreciation that is driven by each project category's historical capital additions.
    c) Escalate the return and depreciation amounts determined in step (b) by I-X to determine the amount for 2013.
    d) Add the effects of forecast growth for the 2013 PBR year.
- Forecast project category-by-project category return and depreciation in 2013.
    a) Determine the portion of EPCOR's capital additions that relates to each project category prior to 2013.
    b) Use the 2013 forecast capital additions for each project category to determine the 2013 return and depreciation for each project category.
- Calculate the portion of the revenue requirement to be recovered by way of capital tracker for each project category as the difference between the 2013 forecast and the portion to be recovered under the I-X mechanism.

98. As a result of the above approach, EPCOR's capital tracker application reflects a request for capital tracker funding for the portion of new and ongoing capital activities that it determined not to be funded under the I-X mechanism. EPCOR did not include the impact of any increases or decreases to operations and maintenance expenses that may result from the capital tracker projects as part of its K factor calculation.

99. EPCOR considered that performing its calculation in this manner "create[d] a model for this purpose that was as accurate as possible, incorporating the effects of, for example, depreciation reflected in going-in year rates that becomes available to fund new projects over time as existing assets retire, and the effects of load and customer growth which increases revenues available to EDTI over time to fund new capital investment."[108]

100. EPCOR slotted its proposed capital trackers into three categories. Category 1 was composed of trackers that consist of capital projects that are outside the normal course of

[104] Transcript, Volume 6, pages 997-998.
[105] Exhibit 263.02, EPCOR argument, paragraph 6.
[106] Exhibit 38.01, EPCOR application, Section 2.2.2, paragraphs 84, 95 and 100.
[107] Exhibit 38.01, EPCOR application, paragraphs 86-88.
[108] Exhibit 263.02, EPCOR argument, paragraph 6.

EPCOR's ongoing operations. Category 2 was composed of capital projects that may fall within the normal course of operations, but were included as capital trackers for the primary purpose of recovering the capital funding shortfall. EPCOR explained that Category 3 was composed of capital projects proposed for capital tracker treatment for the primary purpose of recovering the capital funding shortfall due to the effect of the mid-year rule on EPCOR's 2012 going-in year rates.

101. Within each of the three capital tracker categories, EPCOR identified capital tracker projects with positive, negative or zero values to be included in the K factor calculation. According to EPCOR, projects with a positive K factor recover incremental revenues from customers. Projects with a negative K factor reduce the overall K factor amount because the I-X mechanism is providing more revenue for a particular project than would result under a cost-of-service calculation.[109] Projects with a zero K factor have no rate impact in the current year, but are forecast to have a significant rate impact in future years as a result of capital additions. EPCOR sought approval for these zero K factor projects as capital trackers in advance of the capital additions.[110]

102. EPCOR applied a materiality threshold of $100,000 to that portion of revenue requirement associated with each individual capital project that is not funded under the I-X mechanism; that is, any project for which that portion resulted in a shortfall or surplus of less than $100,000 was not proposed to be recovered or refunded by way of a K factor adjustment. EPCOR did not apply the materiality threshold to either Category 1 projects or to zero K factor projects. EPCOR viewed the $100,000 threshold as "an effort to reduce regulatory burden and incorporate a level of PBR incentive into its Category 2 Trackers reflective of the objectives of PBR outlined by the Commission in Decision 2012-237."[111]

103. The 2013 projects that EPCOR proposed for capital tracker treatment and the resulting K factor revenue requirement, including the categorization of projects, are set out in the following table.

[109] Exhibit 38.01, EPCOR application, paragraph 296.
[110] Exhibit 38.01, EPCOR application, paragraph 5.
[111] Exhibit 263.02, EPCOR argument, paragraph 50.

Table 6. EPCOR's proposed capital tracker projects[112]

Project description	2013 forecast net capital additions ($ million)	2013 K factor ($ million)
Category 1: Trackers which consist of capital projects that are outside the normal course of EDTI's ongoing operations		
Trackers with positive 2013 K factor adjustments		
SE and West LRT distribution system relocation	3.99	0.18
Queen Elizabeth II Highway and 41Ave interchange distribution system relocations	2.00	0.09
Interval meter data collection and processing	1.85	0.18
Life cycle replacement of PILC cable systems	1.04	0.05
Trackers with zero 2013 K factor adjustments		
Walterdale Bridge replacement franchise relocations	0.00	0.00
OMS/DMS life cycle replacement	0.00	0.00
North service centre replacement	0.00	0.00
Category 1 total	**8.88**	**0.51**
Category 2: Trackers included for the primary purpose of recovering the capital funding shortfall inherent in the PBR Plan approved by the Commission for EDTI		
Trackers with positive 2013 K factor adjustments		
Life cycle replacement and extension of underground distribution cable	10.20	0.76
New 15-kV and 25-kV circuit additions	4.61	0.23
New underground cable and aerial line reconfigurations and extensions to meet customer growth	8.08	0.44
Distribution pole and aerial line life cycle replacements	5.60	0.32
Aerial and underground distribution transformers - new services and life cycle replacement	4.76	0.22
Franchise agreement driven relocations and conversions	5.04	0.20
Capitalized underground system damage	2.97	0.15
Vehicles - growth and life cycle replacements	2.90	0.23
New underground and aerial service connections for commercial, industrial, multi-family and misc. customers	8.73	0.37
Underground residential distribution (URD) servicing – rebates, acceptance inspections & terminations	12.13	0.60
Capital tools and instrument purchases	1.36	0.11
Trackers with negative 2013 K factor adjustments		
NLRT distribution system relocations	0.00	(0.10)
Regulated default supply	0.00	(0.21)
Category 2 total	**66.40**	**3.30**
Category 3: Trackers included for the primary purpose of recovering the capital funding shortfall due to the effect of the Mid-Year Rule on EDTI's 2012 going-in year rates		
Poundmaker contributions (East Industrial '07-'08)	0.00	0.74
Poundmaker feeders	0.00	0.29
Work management system upgrade	0.38	0.17
Category 3 total	**0.38**	**1.20**
Grand total	**75.66**	**5.03**

[112] Source of data: Exhibit 38.01, EPCOR application, Table 1.0-1; Exhibit 88.02, UCA-EDTI-1 Attachment 1.

104. EPCOR provided business cases to support all of its Category 1 capital tracker projects. EPCOR provided business cases for its capital tracker projects with a positive K factor in Category 2, but did not provide business cases for projects with a negative K factor because those amounts arise from projects that were approved in previous proceedings. A new business case was provided to support the Category 3 2013 and 2014 work management system upgrade project. All of the remaining Category 3 projects occurred in 2012 and were approved in Decision 2012-272.[113] Copies of the business cases from EPCOR's 2012 distribution tariff application were provided for these Category 3 projects.

2.4 Fortis

105. Fortis forecast total 2013 capital expenditures of approximately $419.7 million.[114] The company applied for three capital tracker programs in 2013 totalling $266.9 million in forecast capital expenditures,[115] with an aggregate K factor amount of approximately $24.3 million.[116] Expenditures proposed to be recovered by way of capital trackers account for approximately 60 per cent[117] of total 2013 capital expenditures.

106. Fortis did not request capital tracker treatment for expenditures relating to the replacement of existing infrastructure. Fortis considered that replacement of existing infrastructure could be funded under the I-X mechanism and that externally driven and growth projects would require capital tracker treatment. At the oral hearing, Fortis' witness, Mr. Delaney, explained the approach used by the company in developing its capital tracker application as follows:

> So when we look at the thrust of the criteria that we -- that we saw in the decision, you get terms in their normal course, ordinarily, externally driven, and these types of concepts, what's in -- what should be incentive under PBR.
>
> So, you know, wholistically [sic] we sat back and thought about that. We -- everyone on the panel here has experience in other utilities, and we thought about what is it about FortisAlberta that's not ordinary, that's not normal, that's somewhat driving these large capital expenditures we have.
>
> And that comes down to growth. We have an incredibly fast-growing utility. …
>
> So that led us naturally to think about externally driven, those customer growth factors as capital trackers. That's kind of the general overall sense from -- in which we did it. Now, at the same time that we're looking that, we're also looking at the investments required and what's in base rates and firming up an investment shortfall type of analysis.
>
> So those two things are going hand in hand. …
>
> … We also thought about the system that we have out there now and sustaining that system, you know, the distribution system, our vehicles, our facilities, and, you know, we came to the conclusion that we could handle the capital needs of that existing system

[113] Decision 2012-272: EPCOR Distribution & Transmission Inc., 2012 Phase I and II Distribution Tariff, 2012 Transmission Facility Owner Tariff, Application No. 1607944, Proceeding ID No. 1596, October 5, 2012.
[114] Exhibit 75.02, AUC-FAI-001(b), sum of lines 3 and 4 in unlabelled table PDF page 7.
[115] Exhibit 35.07, Fortis application, Table 3, paragraph 81.
[116] Exhibit 35.07, Fortis application, Table 2, paragraph 72.
[117] Exhibit 75.02, AUC-FAI-001(b), line 4 divided by sum of lines 3 and 4 in unlabelled table PDF page 7.

> under I minus X, and that the capital trackers would apply to incremental capital needs of the company, new things that are just not there today, the new customer growth, the new facilities we had to build for customer growth. They don't exist today. They're new and incremental.[118]

107. Fortis characterized replacement capital for existing infrastructure to be "sustainment capital" that could be funded under the I-X mechanism. In its application, Fortis quoted Mr. Lorimer's testimony at the PBR hearing where he explained "sustainment capital" as follows:

> …we have a component of our capital plan is our sustainment capital. The replacement of assets as they age and need to be replaced, that bucket of investment that we make regularly each year is basically being matched by our depreciation costs. So there's fairly -- fair stability in the existing pool of assets. There's new assets going in relatively consistent with the depreciation of the existing pool of assets.[119]

108. Fortis reserved the opportunity to apply for capital tracker treatment in the future for "sustainment capital" expenditures if "there is a surge in Sustainment capital tracker expenditures, such as for urgent repairs."[120]

109. Fortis' proposed 2013 capital trackers are composed of three categories:

- externally driven capital expenditures
- customer growth capital expenditures
- the distribution control center (DCC)/supervisory control and data acquisition (SCADA) project.

110. In performing the "investment shortfall analysis" referred to in the quote above, Fortis compared the overall revenue requirement for projects proposed for capital tracker treatment to revenue anticipated to be received under the I-X mechanism. Fortis summarized the purpose for the investment shortfall analysis, stating:

> FortisAlberta confirmed the need for its Capital Tracker proposals and the absence of double counting, through the investment shortfall analyses provided in its Rebuttal Evidence (Ex. 196.01). The analyses demonstrate that the Customer Growth, Externally Driven and DCC/SCADA capital expenditures are not funded under the I-X formula. Therefore, there is no double-counting.[121]

111. Fortis calculated a K factor for its proposed capital tracker programs based on the incremental expenditure over what is currently in base rates. This calculation used a traditional cost-of-service methodology for revenue requirement calculations that included the application of the mid-year convention for all facets of its capital tracker calculation. Fortis' approach was to recover the full revenue requirement associated with each of its proposed capital tracker programs, rather than calculating the expenditures that are incremental to the amounts provided under the I-X mechanism. Fortis reduced the revenue requirement for each of its growth-related

[118] Transcript, Volume 7, page 1374, line 23 to page 1376, line 20.
[119] Exhibit 35.07, Fortis application, paragraph 29 quoting Mr. Lorimer at the PBR hearing Proceeding ID No. 566 (Transcript, Volume 12, page 2340, line 4).
[120] Exhibit 35.07, Fortis application, paragraph 30.
[121] Exhibit 262.01, Fortis argument, paragraph 20.

projects by 29 per cent to account for incremental revenue arising from growth in billing determinants.[122] Fortis did not appear to include the impact of any increases or decreases in operations and maintenance expenses that may result from the capital tracker projects as part of its K factor calculation.

112. The 2013 Fortis capital tracker programs and the resulting K factor revenue requirement, after offsetting incremental revenue attributed to growth projects,[123] are set out in the following table.

Table 7. Fortis' proposed capital tracker programs[124]

Capital tracker	Capital expenditure	K factor
	($ million)	
Customer growth	142.0	9.3
Externally driven	109.1	12.2
DCC/SCADA	15.8	2.8
Total	**266.9**	**24.3**

113. Fortis submitted that the applied-for capital trackers maximize "the effects of the incentive properties of the PBR regime by leaving Sustainment capital investments under the I-X mechanism, and placing mandatory investments (Externally Driven and Customer Growth) under the Capital Tracker mechanism."[125]

114. Fortis submitted a business case in support of its DCC/SCADA project stating the "DCC/SCADA project is a material, new investment that is outside the normal course of historical operations for FortisAlberta."[126] Fortis also stated that the "project was approved in Decision 2012-108[127] as part of the Negotiated Settlement Agreement for FortisAlberta's 2012 Distribution Tariff Application."[128] Fortis also presented evidence in support of its externally driven and customer growth capital tracker programs.[129]

3 Criteria for capital trackers

115. In Decision 2012-237, the Commission established a PBR regime based on an I-X indexing mechanism. This approach to regulation breaks the traditional link between revenues and costs that is the basis of cost-of-service regulation, where rates are set to recover approved costs. Under PBR, revenues or prices are indexed by the difference between inflation and the X factor. The X factor in the Commission's PBR regime is based on the long term productivity of the distribution utility industry and a stretch factor.

[122] Exhibit 35.07, Fortis application, paragraphs 90 and 92.
[123] Return and depreciation on capital trackers, before revenue offsets was $28.1 million as indicated in Exhibit 196.01, Fortis rebuttal evidence, paragraph 17, line 19 in unlabelled table.
[124] Exhibit 35.07, Fortis application, Table 2, paragraph 72, and Table 3, paragraph 81.
[125] Exhibit 262.01, Fortis argument, paragraph 3.
[126] Exhibit 35.07, Fortis application, paragraph 122.
[127] Decision 2012-108: FortisAlberta Inc., Application for Approval of a Negotiated Settlement Agreement in respect of 2012 Phase I Distribution Tariff Application, Application No. 1607159, Proceeding ID No. 1147, April 18, 2012.
[128] Exhibit 262.01, Fortis argument, paragraph 9.
[129] Exhibit 35.02 to Exhibit 35.05, Fortis application, Appendices 2 to 5.

116. The long term productivity measure used TFP growth of the distribution utility industry. This TFP growth was based on a study that comprised all capital investments undertaken by the companies in the study over the period measured and captures year-to-year fluctuations in the need for capital. Even so, there was general agreement among the parties to the proceeding leading up to Decision 2012-237 that the I-X mechanism may not generate sufficient revenue for Alberta electric and gas distribution companies in some circumstances.[130] In response to this concern, the Commission established capital trackers as part of Decision 2012-237 as a mechanism to provide the companies with additional revenue for qualifying capital expenditures. Although the intent of the PBR plan was to break the link between revenues and costs, capital trackers would be regulated on a cost-of-service basis, thereby linking revenues and costs for these expenditures.

117. As discussed in Section 1.2 of this decision, at paragraph 592 of Decision 2012-237, the Commission set out three criteria that any capital tracker would have to satisfy in order to identify capital projects that would receive capital tracker treatment:

(1) The project must be outside of the normal course of the company's ongoing operations.

(2) Ordinarily the project must be for replacement of existing capital assets or undertaking the project must be required by an external party.

(3) The project must have a material effect on the company's finances.

118. Further, at paragraph 593 of Decision 2012-237, the Commission indicated that the party recommending the capital tracker must demonstrate that all of the criteria have been satisfied in order for a capital project to receive consideration as a capital tracker.

119. Decision 2012-237 also noted that "[n]either the companies nor other parties have had the opportunity to evaluate whether [the proposed capital] projects satisfy the Commission's criteria."[131] As well, implementation of the capital tracker criteria was not addressed in the PBR proceeding leading to Decision 2012-237. Accordingly, as discussed in Section 1.3 of this decision, the Commission determined that implementation and application of the capital tracker criteria will be considered as part of the present proceeding.

120. The purpose of this proceeding is to determine how the Commission's three criteria will be interpreted and applied to projects the companies proposed for capital tracker treatment. This implementation methodology will be used not only to evaluate the capital tracker projects proposed by the parties for 2013, but also for subsequent capital tracker applications throughout the PBR term.

121. In determining how to implement the Commission's three criteria, it is important to keep in mind their purpose, which is to permit the identification of capital projects, the cost of which cannot reasonably be expected to be recovered through the I-X mechanism.[132]

122. Parties to this proceeding differed significantly in their views on how to interpret and apply the capital tracker criteria established in Decision 2012-237. Sections 3.1 to 3.4 below deal

[130] Decision 2012-237, paragraphs 545 and 546.
[131] Decision 2012-237, paragraph 616.
[132] Decision 2012-237, paragraph 587.

with the interpretation, implementation and application of each of the three capital tracker criteria.

3.1 Criterion 1 – The project must be outside of the normal course of the company's ongoing operations

123. Decision 2012-237 noted the following in respect of Criterion 1:

> 594. The first criterion is required to avoid double-counting between capital related costs that should be funded by way of a capital tracker and those that should be funded through the I-X mechanism. This criterion is also required to ensure that capital tracker projects are of sufficient importance that the company's ability to provide utility service at adequate levels would be compromised if the expenditures are not undertaken. Projects that do not carry this level of importance are likely subject to a reasonable level of management discretion, therefore allowing special treatment for this type of capital would eliminate the incentive for the company to examine all alternatives. Therefore, this criterion would require that an engineering study be filed to justify the level of capital expenditures being proposed. That is, the company must demonstrate that the capital expenditures are required to prevent deterioration in service quality and safety, and that service quality and safety cannot be maintained by continuing with O&M and capital spending at levels that are not substantially different from historical levels. The company will also be required to demonstrate that the capital project could not have been undertaken in the past as part of a prudent capital maintenance and replacement program.[133] (footnote omitted)

124. There was substantial debate in this proceeding about which projects may be considered outside the normal course of the company's ongoing operations. In addition, parties to this proceeding did not agree on how to demonstrate that there is no double-counting between capital related costs that should be funded by way of a capital tracker and those that should be funded under the I-X mechanism. Parties also disagreed on the role of engineering studies in identifying projects qualifying for capital tracker treatment. Each of these aspects of Criterion 1 is addressed in the sections that follow.

125. Section 3.1.1 provides a definition of "outside the normal course of the company's ongoing operations." Subsequent sections establish two tests, both of which must be met in order to satisfy Criterion 1. Sections 3.1.2 and 3.1.3 establish the "accounting test" that the Commission will use to determine the absence of double-counting and to calculate the amount of investment that is outside the normal course of the company's ongoing operations. Section 3.1.4 sets out the "project assessment" that the Commission will use to evaluate the need for, and reasonableness of, a project proposed for capital tracker treatment.

3.1.1 Defining "outside the normal course of the company's ongoing operations"

126. In the PBR proceeding, the concept of the normal course of the company's ongoing operations was discussed in the following exchange between Commission counsel and Dr. Makholm, on behalf of NERA:

> Q. And that's -- okay. So, in other words, it has to be something unusual, out of the normal course of the utility as opposed to what the industry group that formed the basis for the TFP study that carries on?

[133] Decision 2012-237, paragraph 594.

> A. DR. MAKHOLM: Well, sure. Because everybody's rates are based on their own books and records in base rates, and if the company has been doing whatever it is that we're describing consistently over the course of many years, it's in their base rates, and hence the base rates ought to be able to reflect that capital expense. It's what isn't in base rates that's idiosyncratic and out of phase and deferred and lumpy that the formula wouldn't be able to cover, and that's the dividing line for derogating from a formula that's supposed to cover everything, is whether or not you decide by looking that there's a certain category of costs or a certain practical nature of any particular company's activities that lead it to conclude and convince the Commission that a straight-forward formula of the RPI minus X plus Z variety won't do.[134]

127. In this proceeding, parties' views with respect to which projects may be considered outside of the normal course of the company's ongoing operations tended to polarize around two different interpretations. Calgary and the UCA favoured a qualitative approach based on past operations of a utility. The companies favoured a quantitative approach that demonstrated how much of the revenue requirement for capital projects will be funded under the I-X mechanism. The CCA observed that several definitions of the normal course of the company's ongoing operations are pertinent in this proceeding.

128. Calgary submitted that in order for a project to be considered outside of the normal course of the company's ongoing operations, the project has to be "outside of the same or similar type of activity a utility has been typically carrying out for years."[135] Further, according to Calgary, a demonstration of outside the normal course is not dependent on what the I-X mechanism will yield.[136]

129. In a similar vein, the UCA concluded in its argument that, to be outside the normal course of the company's ongoing operations, "the project should not be an activity or part of a program that the utility has previously undertaken such that it is idiosyncratic, not routine or regularly undertaken, and would not include costs that relate to the continuation of programs that are already in place."[137] In its argument, the UCA also advocated the use of the following test to determine whether a project is outside the normal course of the company's ongoing operations:

> 1. The project must be outside the normal course of the company's ongoing operations.
>   a. Is the project required to prevent deterioration in service quality and safety?
>   b. Does the project require spending outside of historical trends?
>   c. If the answer to both are yes, the project is outside of the normal course of business.[138]

130. The UCA's technical engineering experts, SMi Faciliop (SMi) and Teshmont Consultants LP. (Teshmont), generally defined the normal course of the company's ongoing operations as the ongoing activities of the distribution company to provide reliable and safe distribution service

[134] Decision 2012-237, paragraph 589, quote from Proceeding ID No. 566, Transcript, Volume 1, pages 160-163 (Makholm).
[135] Exhibit 269.01, Calgary argument, paragraph 128.
[136] Exhibit 269.01, Calgary argument, paragraph 128.
[137] Exhibit 268.02, UCA argument, paragraph 109.
[138] Exhibit 268.02, UCA argument, paragraph 20.

while meeting expected service levels, as defined by a pre-determined set of service level measures.[139]

131. Teshmont added that incremental improvement of safe and reliable service is also expected in normal operations.[140] Teshmont indicated that, from an engineering perspective, "normal course of business includes but is not limited to replacing damaged or aged system elements, removing or correcting impediments to service, gathering measurements and data on equipment to be used to assess [declining] performance, assessing and responding to normal changes in customer behaviors, some improvements to safe and reliable service, and similar activities."[141] According to SMi, however, projects and programs designed to enhance or improve the level of service would be considered outside of the normal course of utility operations.[142]

132. Both of the UCA's engineering consultants indicated they had not considered the concept of a normal course from a financial (i.e., project cost) perspective.[143] In addition to considering whether proposed projects were outside the normal course the company's ongoing operations, the UCA stated that its engineering experts, SMi and Teshmont, "also focused on whether the projects were required to prevent deterioration in service quality and safety and whether alternatives to the project were adequately discussed, addressed or even disclosed."[144]

133. In response to AUC-UCA-1, the UCA's witness, Mr. Bell, indicated that "projects that are outside the normal course of business must not be costs that relate to the continuation of programs that have been in place."[145] At the same time, Mr. Bell noted that historical costs and costs included in going-in rates are an indicator for costs that are in the normal course of business. Therefore, according to Mr. Bell, "historic spending patterns set a baseline as to what is included in the normal course of business, and to be considered outside of the normal course of business, the utility must demonstrate that it cannot maintain safe and reliable service using historic spending levels."[146]

134. During the hearing, Mr. Bell accepted Commission counsel's interpretation of his position that the definition of normal course of the company's ongoing operations is partially functional and partially financial.

> Q. So, sir, I take it that your definition of normal course is partially a functional one and partially a financial one. If a particular activity has been carried out in the past by a utility, then it is within the normal course of operations, unless it can be said that the current level of activity is substantially different than historical levels. Have I understood your position properly?
> A. MR. BELL: That would be my interpretation of the Commission's criteria, yes.[147]

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139 Exhibit 167.02, AUC-UCA-1(a), responses from SMi and Teshmont.
140 Exhibit 167.02, AUC-UCA-1(a), response from Teshmont.
141 Exhibit 167.02, AUC-UCA-1(a), response from Teshmont.
142 Exhibit 167.02, AUC-UCA-1(a), response from SMi.
143 Transcript, Volume 9, page 1771, lines 14-17 (Teshmont) and Volume 10, page 1953, lines 8-11 (SMi Faciliop).
144 Exhibit 266.02, UCA argument, paragraph 26.
145 Exhibit 167.02, AUC-UCA-1(a), response from R. Bell.
146 Exhibit 167.02, AUC-UCA-1(d), response from R. Bell.
147 Transcript, Volume 11, page 2106, line 18 to page 2107, line 2 (Bell).

135. In its argument, the UCA explained that in order to identify projects outside the normal course of the company's ongoing operations under Mr. Bell's approach, "[f]irst, the extent of projects which the utility has or should have been performing in order to provide safe and reliable service must be determined and compared with the proposed project. Second, the level of cost expended must be compared to historic levels."[148]

136. The CCA observed that several definitions of the normal course of the company's ongoing operations are pertinent to this proceeding.

> One is the capital cost growth the company has experienced in the recent past. A second is capital cost growth in excess of the company's longer term historical norms. A third is capital cost growth in excess of the norms for utilities in the TFP research sample. In all three cases, comparisons would be more useful if they were adjusted for customer growth and an estimate of construction cost inflation. The comparator would then effectively be capital productivity growth.[149]

137. During the hearing, when questioned on his views with regard to determining whether a project is inside or outside the normal course of a company's ongoing operations, the CCA's expert witness, Dr. Lowry responded:

> You know, what you ideally like to do -- it's hard and maybe impossible in the short run -- is to ascertain what's normal compared to other utilities in the sample. But at least it can be informative to look in the absence of that, which is hard -- this whole area of capital benchmarking which Dr. Weisman mentioned is very much in its infancy, and I don't think it's going to happen any time soon. You can get capital productivity trends. That's easy. But capital levels benchmarking would be harder. […] So in the absence of well-developed methodologies for capital benchmarking between firms, it is helpful to look at what they did in the past versus what they're doing now, and certainly there are examples of it in this case like where ATCO would like to step up their urban mains replacement.[150]

138. The companies relied on a quantitative approach that purported to demonstrate how much revenue requirement associated with capital projects would not be funded under the I-X mechanism, thereby establishing the level of capital investment that is outside the normal course of the company's ongoing operations.

139. Specifically, the ATCO companies indicated that the "costs of capital investments which cannot be addressed by the base rates under the PBR formula are the things which would be outside the 'normal course of ongoing operations'."[151] According to the ATCO companies' expert witness, Dr. Makholm, determination of whether incremental funding by way of a capital tracker was required should be based on "things that have not, as an empirical matter, entered the base rates as coming out of the last base rate case."[152]

140. Fortis offered a definition similar to the ATCO companies, and stated that the concept of the normal course of the company's ongoing operations cannot be interpreted as an "activity or function-based concept."[153] In Fortis' view, such an interpretation could exclude virtually any

[148] Exhibit 268.02, UCA argument, paragraph 30.
[149] Exhibit 270.02, CCA argument, paragraph 32.
[150] Transcript, Volume 12, pages 2365, line 14 to page 2366, line 3 (Lowry).
[151] Exhibit 265.01, ATCO argument, paragraph 80.
[152] Transcript, Volume 1, page 106, lines 6-10 (Makholm).
[153] Transcript, Volume 7, page 1371, line 16 (Lorimer).

utility investment from capital tracker eligibility. The concept of normal course must be interpreted as a financial consideration, which looks at whether the particular capital investments for which capital tracker treatment is sought can or cannot be funded by going-in rates escalated by I-X.[154]

141. EPCOR expressed a similar view and indicated that the line of demarcation between what is inside or outside the normal course of the company's ongoing operations is not to be limited to a determination of whether a particular capital project is similar to capital projects that the utility has engaged in at some point in its history, or even on an ongoing basis. Instead, the focus is on whether or not the capital-related costs associated with the work included in the capital tracker are funded under the I-X mechanism.[155]

142. At the same time, EPCOR did not disagree with Dr. Makholm's statement in the PBR proceeding that projects outside the normal course of the company's ongoing operations would be "idiosyncratic and out of phase and deferred and lumpy."[156] EPCOR's expert witness, Dr. Weisman, in this proceeding, described the concept of outside the normal course as encompassing either the qualitative characteristics of a project (e.g., idiosyncratic or lumpy) or the quantitative characteristics of a project (e.g., current costs exceeding historical costs).[157] Mr. Elford, on behalf of EPCOR, expressed a similar view.[158]

143. In its argument, AltaGas indicated that a capital program "is definitely not 'normal course' if the revenue requirement associated with the program will not be fully funded through the I-X."[159] During the hearing, AltaGas indicated that the concept of normal course relates to the historical practices of the company.[160] During the hearing, AltaGas agreed with Commission counsel's characterization that its proposed capital tracker projects are "lumpy, idiosyncratic, out of phase, do not include any routine items, and, thus, are outside the normal course of the utility's operations."[161]

Commission findings

144. In Decision 2012-237, the Commission acknowledged that there are circumstances in which a PBR plan would need to provide for revenue in addition to the revenue generated under the I-X mechanism in order to provide for certain capital expenditures.[162] In evaluating the interveners' and the companies' proposed definitions of "the normal course of the company's ongoing operations," the Commission considered the basic relationship between capital expenditures and the I-X mechanism outlined in Decision 2012-237.

145. As noted in Decision 2012-237, the TFP growth study used to determine the X factor adopted by the Commission measures the rate of change in productivity of the distribution industry over time. The TFP growth study necessarily encompassed all input costs, including all

[154] Transcript, Volume 7, page 1371, lines 20-24 (Lorimer).
[155] Exhibit 263.02, EPCOR argument, paragraph 115.
[156] Decision 2012-237, quoting Dr. Makholm in paragraph 589.
[157] Transcript, Volume 6, pages 1059-1060 (Weisman).
[158] Transcript, Volume 6, pages 1053-1055 (Elford).
[159] Exhibit 267.01, AltaGas argument, paragraph 9.
[160] Transcript, Volume 5, page 794, line 21 to page 795, line 6 (Johnston).
[161] Transcript, Volume 5, page 826, lines 15-22 (Johnston).
[162] Decision 2012-237, paragraph 549.

types of capital expenditures and all of the year-to-year fluctuations in capital investments.[163] Because this measure is based on the average TFP growth experienced by the distribution utility industry over a long period of time, the Commission considered that it was reasonable to expect that Alberta distribution utilities would be able to achieve this rate of productivity growth during the PBR term. In addition, the Commission increased the X factor in the PBR plans by a stretch factor to capture efficiency gains that should be realizable immediately as the regulatory system changes from cost-of-service to PBR.

146. Under the PBR plans, productivity represented by the X factor, together with the I factor, are applied to the going-in rates or revenues-per-customer. As the Commission explained in Section 1.1 of this decision, under PBR, a company will normally earn its allowed rate of return if it limits its input cost increases to the broad index of input price changes in the Alberta economy, as measured by the Commission-approved I factor, and achieves its productivity growth equal to the Commission-approved X factor, based on the long-term average productivity growth in the industry.

147. Because a company's rate base reflects historical capital expenditures, the going-in rates developed in the cost-of-service proceeding prior to PBR reflect the historical capital expenditures of the company. The underlying assumption in the PBR plans is that the company's historical productivity growth is similar to the historical productivity growth of the distribution industry reflected in the X factor. Therefore, applying I-X (reflecting inflation and the industry's historical rate of productivity growth) to going-in rates (reflecting the company's historical expenditures including the allowed rate of return component) will provide revenue sufficient to accommodate the company's historical rate of growth in capital expenditures for the duration of the PBR term.

148. However, incremental funding by way of capital trackers is warranted when a company's rate of growth in inputs associated with its prudent capital expenditures in a PBR year is sufficiently greater than the company's growth in outputs associated with its prudent capital expenditures, so that even if the company were to achieve the productivity growth implied by the Commission-approved X factor, the company would have insufficient revenue from the I-X mechanism to fund all of its prudent capital expenditures in the PBR year and, at the same time, have a reasonable opportunity to earn an allowed rate of return.

149. The Commission concludes that, in general, in order for a capital project to be considered outside of the normal course of the company's ongoing operations, the increase in associated revenue provided under the I-X mechanism (reflective of historical expenditures embedded in going-in rates and industry productivity growth) would not be sufficient to recover the entire revenue requirement associated with the prudent capital expenditures for this project. However, this definition does not mean that customers will pay for the companies' inability to achieve productivity growth at least equivalent to the Commission-approved X factor. As set out in Section 3.1.3 of this decision, a company will get incremental funding only for that portion of the revenue requirement associated with a project afforded capital tracker treatment in excess of the revenue available from the I-X mechanism. Therefore, customers will benefit from the expected productivity gain embedded in X, whether or not it is achieved.

[163] Decision 2012-237, paragraph 549.

150. The UCA's engineering witnesses generally defined normal course of the company's ongoing operations as the ongoing activities of the distribution company to provide reliable and safe distribution service while meeting expected service levels, as defined by a pre-determined set of service level measures.[164] In accordance with the Commission's findings above that establishing normal course involves a comparison of revenues required to fund a project during the PBR term to revenue provided under the I-X mechanism, the Commission finds that the concept of normal course is mainly a financial and accounting consideration, rather than strictly an engineering consideration. The Commission will refer to this comparison of revenues as the "accounting test" under Criterion 1. As discussed in Section 3.1.4 of this decision, an engineering study and a business case will aid the Commission in assessing whether a project proposed for capital tracker treatment is (i) required to provide utility service at adequate levels and, if so, (ii) that the scope, level and timing of the project are prudent, and the forecast or actual costs of the project are reasonable. The Commission will refer to this assessment as the "project assessment" under Criterion 1. Therefore, the applicant must satisfy the Commission's requirements for both the accounting test and the project assessment in order to satisfy the requirements of Criterion 1.

151. Regarding the UCA's and Calgary's view that ongoing operations and costs that relate to a continuation of projects undertaken in the past are within the normal course, the Commission finds that this view provides an overly narrow interpretation of what constitutes the normal course of the company's ongoing operations. During the hearing, all of the UCA's witnesses acknowledged that an ongoing project, such as pole replacements, may be considered outside of the normal course of the company's ongoing operations due to either increased levels of work or higher costs.[165]It appears that the UCA's test, proposed in paragraph 20 of its argument,[166] and Mr. Bell's similar interpretation of outside the normal course of the company's ongoing operations, as described by the UCA in its argument,[167] are generally consistent with the Commission's definition.

152. The practical aspects of defining which projects are outside of the normal course of the company's ongoing operations are discussed in Section 3.1.2 dealing with demonstrating the absence of double-counting and Section 3.1.3 dealing with quantifying the extent to which the increase in associated revenue provided under the I-X mechanism would not be sufficient to recover the entire revenue requirement associated with the prudent capital expenditures for a project.

3.1.2 Demonstrating the absence of double-counting

3.1.2.1 Aggregate investment shortfall approach and project net cost approach

153. In Decision 2012-237, the Commission noted that the "inclusion of capital trackers in the PBR plan presents a potential for double-counting if capital costs that should be funded by the I-X mechanism are also funded by the revenue provided through a capital tracker."[168] Accordingly, in order for a project to qualify for capital tracker treatment, the companies must

[164] Exhibit 167.02, AUC-UCA-1(a), responses from SMi Faciliop and Teshmont.
[165] Transcript, Volume 9, page 1864, line 21 to page 1865, line 5 and Volume 11, page 2191, lines 15-22 (Bell), Volume 9, page 1766, lines 6-14 (Teshmont), Volume 10, page 1952, lines 19-21 (SMi).
[166] Exhibit 268.02, UCA argument, paragraph 20.
[167] Exhibit 268.02, UCA argument, paragraph 30.
[168] Decision 2012-237, paragraph 602.

demonstrate that no double-counting occurs between capital related costs that should be funded by way of a capital tracker and those that should be funded through the I-X mechanism.[169]

154. In their respective 2013 capital tracker applications, all of the companies preferred a quantitative approach (in this case, financial modeling grounded in rate-base rate of return principles) to establish that no double-counting was taking place. However, the companies' quantitative approaches differed significantly in a number of aspects.

155. For purposes of their quantitative assessment, the ATCO companies provided a "Reasoned Demonstration" model which showed the aggregate amount of capital-related costs that was assumed to be covered by I-X and then compared this amount to the 2013 forecast total capital-related funding requirements of each of ATCO Gas and ATCO Electric, respectively.

156. In the case of ATCO Electric, the company forecast its total capital-related revenue requirement for 2013 to be $208.8 million. Comparing this capital forecast to ATCO Electric's estimated 2013 PBR capital-related revenue of $184.7 million (calculated as the going-in capital-related revenue requirement escalated by I-X and including the incremental revenue arising from forecast billing determinants growth) resulted in a $22.1 million revenue requirement shortfall for capital funding not addressed under the I-X mechanism.[170] Since its proposed 2013 capital trackers amounted to approximately $19.7 million in K factor revenue requirement,[171] ATCO Electric maintained that the reasoned demonstration model confirms that the company's capital tracker projects were incremental to the funding that can be provided under the I-X indexing mechanism and as such, no double-counting of capital recovery was occurring.[172]

157. A similar demonstration provided by ATCO Gas identified an approximately $10.3 million revenue requirement shortfall for capital funding which could not be addressed under the I-X mechanism in 2013.[173] Because ATCO Gas sought approval of 2013 capital trackers totalling $10.3 million in K factor revenue requirement,[174] the company indicated that its reasoned demonstration confirms that no double-counting of capital recovery occurred.[175]

158. In addition to providing this aggregate investment shortfall analysis, the ATCO companies also purported to demonstrate how each individual capital tracker project met the Commission's criteria.[176] However, the ATCO companies submitted that performing the double-counting analysis on an individual project basis has several significant problems. First, such an approach would ignore the overall investment requirements of the utility. Second, looking at the individual project level would require the calculations to be undertaken for every type of capital investment the companies have included in their going-in rates and in their capital trackers. In the ATCO companies' view, this would be a complex and subjective exercise because utility accounting records do not lend themselves to this type of analysis. In light of these perceived problems, the ATCO companies preferred the reasoned demonstration approach, which considers all of the capital-related costs of the utility and the indexed and growth-related revenue available

[169] Decision 2012-237, paragraph 594.
[170] Exhibit 37.02, Appendix E – ATCO Electric reasoned demonstration.
[171] Exhibit 220.03, undertaking response of Ms. Wilson to Mr. McNulty.
[172] Exhibit 37.01, ATCO Electric application, paragraph 44.
[173] Exhibit 36.04, Appendix E – ATCO Gas reasoned demonstration.
[174] Exhibit 220.02, undertaking response of Ms. Wilson to Mr. McNulty.
[175] Exhibit 36.01, ATCO Gas application, paragraph 42.
[176] Transcript, Volume 1, page 189, line 20 to page 190, line 2 (Wilson).

to offset those capital-related costs.[177] During the hearing, the ATCO companies explained the relationship between the reasoned demonstration and the quantum of capital trackers applied for.

> Q. And if the reasoned demonstration provided for a greater shortfall, would there be more capital trackers being applied for?
> A. MS. WILSON: Well, we actually have not applied for the full amount of the funding shortfall.
> Q. I understand that. About 1.8 million on the ATCO Electric side, for example?
> A. MS. WILSON: Correct.
> Q. So if the shortfall had been significantly more than that, would there have been additional capital trackers applied for?
> A. MS. WILSON: Yes.
> Q. If the shortfall was significantly less than that, would there be fewer capital trackers applied for?
> A. MS. WILSON: Yes.[178]

159. Fortis, in its application, presented an "investment shortfall analysis" that compared the company's 2013 total PBR revenue (both capital and operating) to the revenue required to fund Fortis's 2013 forecast operating and capital expenses. In particular, Fortis estimated its 2013 revenue requirement at $433.2 million. At the same time, Fortis' 2013 PBR revenue (calculated as the going-in total revenue requirement escalated by I-X and including the incremental revenue arising from the forecast billing determinants growth) totalled $408.7 million, resulting in an estimated aggregate revenue shortfall of $28.9 million.[179]

160. Based on this analysis, Fortis determined that the revenue provided under the I-X mechanism supports only operating expenses and sustainment capital expenditures. However, Fortis claimed that the I-X mechanism does not support three distinct components of Fortis' capital program: customer growth, externally driven capital expenditures, and the DCC/SCADA project, with the revenue requirement for these projects totalling $24.3 million in 2013. Fortis indicated that no reasonably anticipated level of productivity gains could make up for this revenue shortfall.[180]

161. In its application, EPCOR provided an aggregate, "top-down" capital funding shortfall analysis comparing its total capital requirement to capital-related funds available under the PBR formula to demonstrate that "the I-X component would substantially under-fund its capital requirement over the PBR term."[181] However, this analysis was "just a high-level check"[182] to show that there was a significant shortfall in the amount of $54.8 million[183] between the level of capital additions accommodated under the approved PBR plan and the level of capital investment that EPCOR expected to incur in 2013.

162. To ensure that the Commission's concern over double-recovery was addressed in the development of its capital trackers, EPCOR used financial modeling to determine the level of capital funding that will be provided under the I-X mechanism for each of its capital projects,

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177 Exhibit 265.01, ATCO argument, paragraph 98.
178 Transcript, Volume 1, page 31, line 21 to page 32, line 10.
179 Exhibit 196.01, Fortis rebuttal evidence, paragraph 16.
180 Exhibit 35.07, Fortis application, paragraph 72.
181 Exhibit 263.02, EPCOR argument, paragraph 130.
182 Transcript, Volume 6, page 996, lines 5-11 (Baraniecki).
183 Exhibit 38.01, EPCOR application, page 9, Table 2.1-1.

from a "bottom-up" perspective. EPCOR used its 2013 capital additions forecast to populate a model that calculated the revenue it will receive under the PBR plan for each project in 2013 compared to the forecast capital-related costs that EPCOR will incur (i.e., the capital funding shortfall on a project-category by project-category basis). The model incorporated the effect of depreciation in going-in rates that becomes available to fund new projects over time as existing assets retire. The model also incorporated the effect of load and customer growth, which increases the revenue available to EPCOR over time, to fund new capital investment.[184]

163. Based on its project-category by project-category "bottom-up" capital funding shortfall analysis, EPCOR determined that without the approval of its proposed K factor adjustment, the company will incur a revenue requirement shortfall of $5.75 million on a forecast basis under the PBR plan in 2013. EPCOR pointed out that this "bottom-up" shortfall was consistent with the overall shortfall of $5.42 million obtained using a "top-down" approach.[185]

164. During the hearing, EPCOR's witness, Dr. Weisman, expressed his view that "top-down" and "bottom-up" approaches were snapshots of two different problems.

> A. DR. WEISMAN: …And I think what the problem is here is there's really two issues going on. There is a revenue deficiency issue in the aggregate. That would be the top-down problem. And there are specific projects that Dr. Makholm talked about in the PBR proceeding with regard to ring-fenced unique projects that would come along from time to time. And I think the Commission has put in place one mechanism to address what I would perceive to be two separate problems.[186]

165. According to Dr. Weisman, these two problems could not be dealt with using just one tool: "there's no equation, if you will, that somehow says magically the sum of the bottom-up projects will take care of the revenue sufficiency issue."[187] Dr. Makholm, on behalf of the ATCO companies, stated that capital trackers have to be evaluated "against a general issue of revenue adequacy."[188]

166. In line with the other companies' applications, AltaGas provided a comparison between the revenue requirement associated with the 2013 rate base forecast using a traditional cost-of-service approach relative to the amounts available under the PBR formula. AltaGas relied on this aggregate funding shortfall analysis to demonstrate that the PBR formula could not address the projected rate base growth in 2013. Specifically, AltaGas demonstrated that the revenue provided by the PBR formula (inclusive of 2013 Y factors) totalling $5.5 million was "significantly less than the required funding of $18.1 million for rate base growth in 2013 relative to 2012."[189] AltaGas implied that it could not fund $12.6 million in net rate base growth.

167. However, similar to EPCOR's approach, AltaGas complemented the aggregate capital investment shortfall analysis with investment shortfall calculations on a project-by-project basis. Specifically, for each project proposed for capital tracker treatment, AltaGas compared the level of capital funding that will be provided under the I-X mechanism (calculated as going-in revenue escalated by I-X and including billing determinants growth) to the 2013 forecast capital costs.

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184 Exhibit 38.01, EPCOR application, pages 31-39.
185 Exhibit 38.01, EPCOR application, Table 2.1-2 on page 10 and paragraph 101.
186 Transcript, Volume 6, page 1017, line 23 to page 1018, line 4 (Weisman).
187 Transcript, Volume 7, page 1338, lines 10-12 (Weisman).
188 Transcript, Volume 1, page 41, lines 20-21 (Makholm).
189 Exhibit 267.01, AltaGas argument, paragraph 24.

AltaGas showed that without the approval of its proposed capital trackers, the company will incur a revenue requirement shortfall of $1.03 million (associated with a $12 million shortfall in rate base additions) on a forecast basis.[190] Conversely, AltaGas noted that, if approved, the funding from the K factor would substantially offset the rate base funding shortfall, reducing the projected overall net rate base additions shortfall to $0.5 million. Accordingly, AltaGas argued that its proposed capital trackers did not result in any double-counting.

168. The interveners' concerns with the companies' quantitative models centered on the fact that the proposed double-counting calculations did not take into account the potential O&M savings and efficiency gains under PBR. This issue is discussed in Section 3.1.2.2 of this decision.

169. In addition, the CCA[191] and Calgary[192] noted that if the proposed double-counting calculations become an accepted and central part of capital tracker proceedings, the companies' forecasts of cost growth and not the I-X mechanism would become the chief driver of the total capital cost budget. In this regard, the CCA and Calgary expressed their concerns that under this approach, the companies would have an incentive to exaggerate their forecast capital costs. This issue is addressed in Section 3.1.4 below.

170. The CCA also noted that all of the double-counting analyses focus only on 2013. The CCA argued that it was not appropriate to focus only on one year, as it is possible that "subsequent years of the PBR term are less problematic and the utility is asking for help with some cost blips that it should be able to finance."[193] The CCA's witness, Dr. Lowry, referred to this issue as "intertemporal double counting."[194] This issue is further discussed in Section 3.1.2.3 below.

Commission findings

171. The Commission accepts the companies' views that the absence of double-counting is best demonstrated quantitatively. The Commission agrees that using a quantitative analysis for this purpose is more objective than relying on purely qualitative criteria.[195]

172. In this proceeding, the companies presented two broad quantitative approaches to establish that no double-counting is occurring between the revenue provided under the I-X mechanism and the revenue provided by way of capital trackers.

173. Under the first broad approach, used by the ATCO companies and Fortis, the forecast total capital costs (for the ATCO companies), or total costs, both capital and O&M (in the case of Fortis) were compared to the projected revenue to be generated under the I-X mechanism. The identified aggregate revenue shortfall was proposed to be recovered by way of capital trackers through a K factor adjustment in the PBR formula. Since the proposed K factor summed to an amount equal to or less than the identified aggregate shortfall, the ATCO companies and Fortis concluded that no double-counting was occurring. Since each of these approaches compared the

[190] Exhibit 223.04, AltaGas capital tracker schedules 3.0 and 4.0.
[191] Exhibit 270.02, CCA argument, paragraph 39 (c) and (e).
[192] Exhibit 277.01, Calgary reply argument, paragraph 133.
[193] Exhibit 270.02, CCA argument, paragraph 39 (i).
[194] Exhibit 163.01, AUC-CCA-1(a) , sub point (vii).
[195] Exhibit 265.01, ATCO argument, paragraph 7 and Exhibit 267.01, AltaGas argument, paragraph 12.

projected revenue to projected aggregate costs, the Commission will refer to both of these analyses as an "aggregate investment shortfall approach."

174. Under the second broad approach, used by EPCOR and AltaGas, the revenue generated under the I-X mechanism for each capital project (or capital program or project category) was compared to the forecast revenue requirement associated with that capital project (or capital program or project category) in 2013. This analysis purported to demonstrate a lack of double-counting on a project-by-project basis. The sum of these individual project-by-project revenue shortfalls was to be recovered by way of capital trackers through a K factor adjustment in the PBR formula. The Commission will refer to these project-by-project analyses as a "project net cost approach." In addition to using a project net cost approach, EPCOR and AltaGas also undertook an analysis using an aggregate investment shortfall approach.

Aggregate investment shortfall approach

175. The Commission considers that there are several principal concerns with using the aggregate investment shortfall approach to demonstrate the absence of double-counting. This approach does not comport with the guidance provided in Decision 2012-237, since Decision 2012-237 defined the capital tracker criteria at the project level.[196] Accordingly, the decision contemplated that the capital tracker criteria, including the requirement to demonstrate that there is no double-counting, should be applied to individual projects or appropriately grouped projects, not to the aggregate project level utilized in the aggregate investment shortfall approach.

176. The aggregate investment shortfall approach establishes the amount of forecast revenue requirement associated with total additions to rate base in the PBR year that is not recovered under the I-X mechanism. It then designates specific capital projects for capital tracker treatment because they are asserted to satisfy the Commission's capital tracker criteria. The aggregate investment shortfall approach, therefore, cannot demonstrate that double-counting is not occurring for a particular capital tracker project. This is because it does not demonstrate that any of the aggregate investment shortfall is caused by the need for a particular capital tracker project, as opposed to any other capital project. The only thing that is demonstrated is that the sum of the revenue requirements associated with the proposed capital tracker projects is equal to or less than the total aggregate investment shortfall.

177. This difficulty is demonstrated by the Fortis application. Fortis asserted that the revenue derived from the PBR formula notionally supports operating expenses and sustainment capital expenditures.[197] [198] PEG, on behalf of the CCA, noted that Fortis' assumption that the I-X mechanism funds this particular type of capital expenditure, and no other capital expenditures, and is arbitrary. PEG further noted that Fortis' "sustainment [capital expenditures] budget is potentially eligible for K factor treatment but details of this treatment should be submitted for Commission review."[199] The UCA pointed out that there were historical capital expenditures reflected in going-in rates for some of the projects that Fortis proposed for capital tracker treatment. Accordingly, the UCA submitted that the I-X mechanism would provide funding for those expenditures, resulting in potential double-counting:

[196] Decision 2012-237, paragraphs 587-601.
[197] Exhibit 35.07, Fortis application, paragraph 72.
[198] Exhibit 262.01, Fortis argument, paragraph 43.
[199] Exhibit 108.01, PEG evidence, page 59.

> FAI has a history of expenditures for AESO contributions. The average of the last three years approved results is $42.4 million. There is a long standing history of AESO contributions, and as such should not be included as a capital tracker. Even if one accepts that […] the AESO contributions are eligible as a capital tracker, there is no recognition of the fact that there is already an amount included in normal operations.
> […]
> Similar to AESO contributions, FAI has a history of expenditures for Substation Associated Upgrades.[200]

178. The Commission agrees with the views of PEG and the UCA that Fortis' allocation of capital between capital tracker and non-capital tracker categories lacks sufficient support. Without a project net cost analysis, the Commission has no way of discerning if any of the projects proposed for capital tracker treatment may already be funded under the I-X mechanism, thereby resulting in double-counting. This problem of potential double-counting is compounded in each subsequent PBR year.

179. The UCA raised similar issues with respect to the applications of the ATCO companies. Specifically, Mr. Bell stated that, with respect to ATCO Electric's six capital tracker programs not related to customer growth, load growth or demand growth, "there is a long history of capital additions in each of the categories."[201] Similarly, Mr. Bell observed that each of ATCO Gas' programs proposed for capital tracker treatment has a history of forecast expenditures and, thus, are included in going-in rates.[202] The Commission agrees and finds that, as in the case of Fortis, without a project net cost analysis, the Commission has no way of discerning if any of the ATCO companies' projects proposed for capital tracker treatment may already be funded under the I-X mechanism, thereby resulting in double-counting.

180. For example, whereas Fortis asserted that all of its sustainment capital was funded under the I-X mechanism, ATCO Electric's application implied that the majority of additions to its core distribution assets, or activities (such as the replacement of poles, conductors, wires, insulators), would not be funded under the I-X mechanism.[203] In addition, ATCO Electric's safety and reliability projects appear in both capital tracker and non-capital tracker categories.[204] As another example, ATCO Electric offered that buildings less than $10 million would be accommodated by the I-X mechanism, but buildings in excess of that amount might qualify for capital tracker treatment.[205]

181. Calgary expressed similar concerns with respect to ATCO Gas' application.

> However, given the selectiveness in which ATCO chose to place capital programs above or below the "revenue adequacy line", it is clear that there would be no way for the Commission and customers to ever discern whether any particular project would be funded or unfunded during the course of the PBR term.[206]

[200] Exhibit 111.03, UCA evidence of R. Bell, page 10, lines 5-10 and lines 18-19.
[201] Exhibit 111.03, UCA evidence of R. Bell, page 8.
[202] Exhibit 111.03, UCA evidence of R. Bell, pages 18-20.
[203] Exhibit 37.01, ATCO Electric application, Appendix F, Table 1.
[204] Transcript, Volume 2, page 400, line 10 to page 401, line 2 (Wilson).
[205] Exhibit 37.01, ATCO Electric application, Appendix F, paragraphs 49 and 53.
[206] Exhibit 277.01, Calgary reply argument, paragraph 54.

182. An additional concern with the aggregate investment shortfall approach is that this analysis requires the Commission to examine the companies' total capital forecast (or a total revenue forecast, including both capital and O&M in the case of Fortis), not just the forecast costs of projects proposed for capital tracker treatment. This is demonstrated by the following exchange between Commission counsel and the ATCO companies' witness, Ms. Wilson:

> Q... Is the Commission expected to assess the reasonability of the forecasted 2013 noncapital tracker project costs in order to determine the reasonability of the shortfall analysis, the reason[ed] demonstration, based primarily on this Appendix F?
> A. MS. WILSON: Yes, sir. And the business cases that were filed supporting it. I'm not sure if they formed part of Appendix F. I believe they did. Yes, sir.[207]

183. In Decision 2012-237, the Commission did not contemplate evaluating the totality of the company's capital forecast or its entire forecast revenue requirement, in order to determine the eligibility of a subset of the company's capital forecast for capital tracker treatment. This would be inconsistent with the PBR goal of reducing regulatory burden. A requirement to review a company's entire capital forecast, in effect, amounts to a return to cost-of-service testing of the full capital forecast (or a total revenue forecast, including both capital and O&M in the case of Fortis).

184. The ATCO companies indicated that, in calculating mid-year rate base for each subsequent PBR year, they would be using an updated forecast of the opening rate base balance, which would include actual capital additions to date and a forecast closing rate base balance. This estimated mid-year rate base would then be used to calculate the amount of the aggregate investment shortfall for that subsequent PBR year.

> Q. So I think what I'm hearing you say -- and I just want to confirm this -- is as much as we used to do under cost of service, you would essentially determine what your new sort of closing balance of rate base would be at the end of 2013 based on what actually occurred. You'd then work out your forecast for 2014, figure out your mid-year rate base for 2014, calculate the 2014 revenue requirement as you did for 2013, figure out what your shortfall is, and go through the same exercise again. That's basically --
> A. MS. WILSON: Yes.[208]

185. Accordingly, in order for the Commission to test the reasonableness of the estimated aggregate investment shortfall amount for the coming year, the Commission would have to test the reasonableness of both the updated forecast opening rate base (both capital projects assumed to be recovered under the I-X mechanism, and those recovered by way of capital trackers), as well as the forecast closing rate base for that PBR year based on the company's entire capital forecast. In Decision 2012-237, the Commission considered the implications of having to assess the totality of capital forecasts, and rejected this approach when dealing with ATCO Electric's proposed four-year capital forecast in the PBR proceeding:

> 563. Because the ATCO Electric approach forecasts the total amount of capital revenue requirement over the PBR term to ensure that it is collecting the amount of revenue needed to fund its forecast capital expenditures, the Commission considers that the adoption of the ATCO Electric proposal would amount to retaining cost of service regulation for all capital but with a four year forecast. The Commission would not only

[207] Transcript, Volume 2, page 395, lines 16-23 (Wilson).
[208] Transcript, Volume 4, page 741, lines 16-25 (Wilson).

> be required to test the projects that comprise the ATCO Electric K factor, but it would also need to test the projects covered by the 4.9 per cent. If the projects that make up the 4.9 per cent were not tested, ATCO Electric could select which projects and types of capital expenditures should be included in the 4.9 per cent thereby avoiding scrutiny of possible double-counting of costs already in the K factor. If the Commission were to direct ATCO Electric to provide details for all capital projects including those captured by the 4.9 per cent, it would represent a return to cost of service regulation for all capital for a four year forecast term, reducing the efficiency incentives that PBR creates and failing to reduce the regulatory burden.[209]

186. Under the ATCO companies' aggregate investment shortfall approach, if a company spends less than forecast on the capital assumed to be recovered under the I-X mechanism, the company would retain the difference only in that PBR year since the actual results will be incorporated in the aggregate investment shortfall in the following year. The ATCO companies confirmed this is a possible result in the following exchange with Commission counsel during the hearing:

> Q. Look at line 6, building structures improvements for the year 2010. The Commission approved in 2010 71 million for -- for that line item, and the actual spend was 9.3 million. Do you see that?
> A. MS. WILSON: Yes, sir.
> Q. If that happened in a PBR year, what would happen to the $61.7 million in savings?
> A. MS. WILSON: Well, if the intent were to continue to rely on the reasoned demonstration going forward, then at the point in time when, for example, the 2013 actuals were available, they would be incorporated into the new reasoned demonstration, and they would get factored in at that point in time.
> Q. For 2014 you mean?
> A. MS. WILSON: I think it would have to be 2015, based on the timing of the applications.
> Q. And the 61.7 million savings accrues to ATCO; is that right?
> A. MS. WILSON: No. It would get factored into the updated reasoned demonstration, and it would then get factored in on a going-forward basis.
> Q. Right. But as far as collections in 2013, the money is still collected and kept by ATCO; is that right?
> A. MS. WILSON: Yes.
> Q. And all other things being equal, that would actually change the forecasted shortfall to be something less than what was expected?
> A. MS. WILSON: Yes, sir.[210]

187. Conversely, if the company spends more than forecast on the capital assumed to be recovered under the I-X mechanism, the company would bear the cost of the overspending only in that year since the actual results will be incorporated in the aggregate investment shortfall in the following year.

188. To the extent that an aggregate investment shortfall approach requires an adjustment to the entire opening rate base for the subsequent PBR year, the Commission considers such an outcome to be inconsistent with the objective of PBR to create incentives to reduce costs by extending regulatory lag. This is because using an aggregate investment shortfall approach

[209] Decision 2012-237, paragraph 563.
[210] Transcript, Volume 2, page 404, line 19 to page 405, line 21 (Wilson).

reduces the regulatory lag for capital projects assumed to be recovered under the I-X mechanism to a single year, as opposed to the remainder of the five-year PBR term.

189. In light of the above considerations, the Commission finds that the aggregate investment shortfall approach should not be used to demonstrate that a particular project proposed for capital tracker treatment does not result in double-counting, as required to satisfy Criterion 1. Accordingly, the Commission rejects the approaches proffered by ATCO Electric, ATCO Gas and Fortis to demonstrate that there is no "double-counting between capital related costs that should be funded by way of a capital tracker and those that should be funded through the I-X mechanism," as required by Decision 2012-237 at paragraph 594.

Project net cost approach

190. The Commission considers that the project net cost approach does not exhibit the shortcomings associated with the aggregate investment shortfall approach. The project net cost approach is applied on a project-by-project basis, consistent with Decision 2012-237, which contemplated that the capital tracker criteria, including the requirement to demonstrate that there is no double-counting, should be applied to individual projects or appropriately grouped projects.

191. The project net cost approach demonstrates that double-counting is not occurring for an individual capital tracker project, unlike the aggregate investment shortfall approach, which demonstrates that the sum of the revenue requirements associated with the proposed capital tracker projects is equal to or less than the total aggregate investment shortfall.

192. The project net cost approach demonstrates that double-counting is not occurring for an individual capital tracker project by showing that those revenues provided under the I-X mechanism associated with a particular capital tracker project are not sufficient to fund the entirety of the revenue requirement for that project. As a result, under the project net cost approach used by EPCOR and AltaGas, only that portion of the revenue requirement for a project in a PBR year that is not funded under the I-X mechanism is included in the K factor calculation.[211] In contrast, under the aggregate investment shortfall approach used by the ATCO companies and Fortis, the entire revenue requirement associated with capital additions for a project in a PBR year is included in the K factor (but with the sum of revenue requirements for all projects proposed for capital tracker treatment not exceeding the aggregate shortfall).[212] The Commission considers that basing the K factor calculations on project incremental revenue requirement amounts not funded under the I-X mechanism better demonstrates that capital trackers do not result in double-counting. The K factor calculation methodology is further discussed in Section 4 of this decision.

193. Further, as EPCOR and AltaGas pointed out, the project net cost approach does not require the Commission and interested parties to examine and verify the entirety of the companies' capital forecasts since the costs of projects other than capital tracker projects need

[211] Exhibit 38.39, EPCOR application, Schedule 2; Exhibit 223.04, AltaGas schedules 4.1 to 4.3.

[212] Exhibit 37.02, ATCO Electric application, Appendix E – reasoned demonstration; Exhibit 220.03, undertaking response of Ms. Wilson to Mr. McNulty; Exhibit 36.04, ATCO Gas application, Appendix E – reasoned demonstration; Exhibit 220.02, undertaking response of Ms. Wilson to Mr. McNulty; Exhibit 196.01, Fortis rebuttal evidence, pages 4-5; and Exhibit 35.01, Fortis application, Appendix 1.

not be tested at each capital tracker proceeding. Rather, only those projects proposed for capital tracker treatment will be scrutinized each year, thereby reducing regulatory burden.[213]

194. The Commission agrees with EPCOR that under the project net cost approach "projects excluded from Capital Tracker treatment are not subject to true-up over the course of the PBR Term and, as such, effectively remain under the I-X component of the PBR Formula and are subject to PBR-type incentives."[214] These incentives include a requirement to manage capital costs not subject to capital tracker treatment that remain under the I-X mechanism over the PBR term and achieve the level of productivity prescribed by the I-X mechanism. This cost management incentive is strengthened under the project net cost approach when the regulatory lag for capital projects that remain under the I-X mechanism is extended to the remainder of the PBR term.

195. Dr. Makholm, on behalf of ATCO, and Dr. Weisman, on behalf of EPCOR, cautioned that capital trackers need to be evaluated against a general requirement for revenue sufficiency. In this regard, the ATCO companies expressed the view that a double-counting analysis on an individual project net cost basis would ignore the overall investment requirements of the utility. The Commission does not agree. The amount required to provide for revenue sufficiency is the sum of the incremental revenue requirements associated with individual capital projects and, thus, is addressed generally when incremental funding is provided for such projects. AltaGas and EPCOR showed that, if capital tracker treatment is approved for all of their proposed projects that are not adequately funded under the I-X mechanism, then the requirement for revenue sufficiency is reasonably met.[215] This is because the revenue under the I-X mechanism together with the revenue provided by capital trackers would provide the company with a reasonable opportunity to recover its prudently incurred costs, including its allowed rate of return, if the company limits its input cost increases to the broad index of input price changes in the Alberta economy, as measured by the Commission-approved I factor, and achieves productivity growth equal to the Commission-approved X factor.

196. For the above reasons, the Commission finds that the project net cost approach adequately demonstrates that a specific project proposed for capital tracker treatment does not result in double-counting, as required to satisfy Criterion 1. Accordingly, the Commission accepts the approaches proffered by EPCOR and AltaGas, with the modifications to be implemented in their 2013 true-up filings as directed in sections 5 and 8, to demonstrate that there is no "double-counting between capital related costs that should be funded by way of a capital tracker and those that should be funded through the I-X mechanism," as required by Decision 2012-237 at paragraph 594.

197. As discussed earlier in this section, EPCOR and AltaGas also provided an analysis using the aggregate investment shortfall approach. The Commission finds that an analysis using the aggregate investment shortfall approach is not required to satisfy Criterion 1.

[213] Transcript, Volume 6, page 1005, line 19 to page 1006, line 8 (Baraniecki) and Exhibit 279.01, AltaGas reply argument, paragraph 45.
[214] Exhibit 225.02, EPCOR opening statement, paragraph 11.
[215] Exhibit 223.04, AltaGas capital tracker schedules 3.0; and Exhibit 38.01, EPCOR application, Table 2.1-2 on page 10 and paragraph 101.

3.1.2.2 Consideration of potential O&M savings and efficiency gains

198. The interveners' concerns with the companies' quantitative double-counting analyses centered on the fact that neither the aggregate investment shortfall approach nor the project net cost approach took into account the potential O&M savings and efficiency gains under PBR. Therefore, the interveners contended that these approaches overstated the need for capital trackers.

199. Calgary observed that ATCO Gas' aggregate investment shortfall approach "does not include efficiencies from operating costs nor does it include actual lower embedded cost of debt from actual debt issues at interest rates lower than forecast in going-in rates."[216] PEG, on behalf of the CCA, raised concerns similar to Calgary's with respect to the companies' approaches to demonstrating the absence of double-counting.[217] The UCA noted that the approaches used by the companies ignore "the trade-offs between capital and O&M, which is central to the purposes of PBR."[218]

200. Furthermore, the CCA and Calgary did not agree with the underlying assumption in the companies' approaches that the I-X mechanism provides a specific budget for all or part of a company's capital expenditures. Calgary noted that under PBR, what the I-X index will yield "is subject to too many variables, each of which could have wide variation from the factors setting the going-in revenue requirement, including lower achievable and achieved operating costs through efficiencies, lower debt costs than approved for 2012, and changes in accounting for income tax."[219] In the CCA's view, it is "arbitrary to use I-X to calculate the budget for capital and also unfair to focus only on capital funding shortfalls inasmuch as I-X may overcompensate for O&M cost growth."[220]

201. The CCA noted that a typical utility faced with the operating challenges in Alberta would achieve capital productivity growth below the industry TFP trend but also achieve O&M productivity growth that is sufficiently above the TFP trend so that the long term TFP trend is realized. PEG, in its evidence, calculated that whereas the TFP growth of the utilities in NERA's sample was 1.10 per cent from 1973 to 2009, capital productivity averaged 0.84 per cent growth and O&M productivity averaged 1.76 per cent.[221] Based on this evidence, the CCA proposed that:

> [A] revenue sufficiency test for use in this proceeding should, at a minimum, reduce the approved X factor in the calculation of the capital cost budget by 26 basis points (1.10-0.84) to reflect the tendency of capital productivity to grow more slowly than TFP. Absent such an adjustment, the revenue deficiency calculation is unfairly focused on the deficient revenue generated by the I-X mechanism for capital when the same mechanism overcompensates for OM&A cost growth.[222]

[216] Exhibit 269.01, Calgary argument, paragraph 107.
[217] Exhibit 108.01, PEG evidence, pages 59 and 61.
[218] Exhibit 274.02, UCA reply argument, paragraph 83.
[219] Exhibit 269.01, Calgary argument, paragraph 128.
[220] Exhibit 270.02, CCA argument, paragraph 39 (j).
[221] Exhibit 108.01, PEG evidence, page 41.
[222] Exhibit 270.02, CCA argument, paragraph 39 (j).

202. In response, EPCOR's witness, Dr. Weisman, summarized the interveners' position with regards to this issue as follows:

> The argument is essentially that the required Capex [capital expenditures] may be self-financed to the extent that exploiting economies of scale and an expected increased growth in O&M productivity growth going forward are sufficiently remunerative.[223]

203. In this regard, Dr. Weisman noted that potential O&M savings and productivity offsets are "unknown and perhaps unknowable at this point in the proceeding."[224] EPCOR also pointed to the fact that any O&M savings are not easily identifiable:

> There are places where maybe there are some cost savings that we can't get our heads around or don't realize that we are going to realize yet and so they're not reflected in that line.[225]

204. EPCOR[226] and AltaGas[227] indicated that there was very little, if any, net additional O&M savings resulting from capital tracker projects and that, in many instances, these projects will result in an increase, not a decrease, in operating costs. In a similar vein, Fortis indicated that, because its proposed capital trackers represent new investments, these projects will result in an increase, as opposed to a decrease, in O&M costs.[228] Dr. Makholm on behalf of the ATCO companies pointed to the difficulty of identifying and allocating any O&M savings resulting from capital tracker projects:

> [W]hile it is conceivable that tracked capital costs may substitute for operating expenses, the cost classifications for operating costs for distribution utilities are simply too aggregated generally to permit such precision in identifying how they interact with particular tracked costs without some sort of allocation—which is in itself inherently arbitrary or subjective.[229]

205. AltaGas argued that the inclusion of O&M costs and debt costs in the quantitative double-counting analysis would mean reverting to cost-of-service type regulation, as these costs would need to be re-forecast and tested each year.[230] The ATCO companies expressed a similar view.[231]

206. With respect to changes in the cost of debt, AltaGas noted that in Decision 2012-237, the Commission determined that changes in the cost of debt eventually would be reflected in the I factor and denied flow-through treatment for these costs. As such, AltaGas argued that "reflecting any changes in cost of debt in a revenue shortfall calculation could also be duplicative of the changes allowed under the I factor."[232] Fortis made a similar argument and submitted that because the companies bear the risk of changes with respect to cost of debt, constraining capital

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223 Exhibit 199.02, rebuttal evidence of Dr. Weisman, page 16.
224 Exhibit 199.02, rebuttal evidence of Dr. Weisman, page 16.
225 Transcript, Volume 7, page 1332, lines 3-6 (Elford).
226 Exhibit 199.01, EPCOR rebuttal evidence, pages 2-6.
227 Exhibit 267.01, AltaGas argument, paragraph 41.
228 Exhibit 276.01, Fortis reply argument, paragraph 32.
229 Exhibit 195.02, ATCO Gas rebuttal evidence, Appendix A, page 14, lines 19-23.
230 Exhibit 267.01, AltaGas argument, paragraph 36.
231 Transcript, Volume 1, page 196, lines 2-13 (Wilson).
232 Exhibit 267.01, AltaGas argument, paragraph 38.

tracker treatment "based on an assumed trend in the future cost of debt would be wholly inapt, contradictory and unfair."[233]

207. AltaGas, the ATCO companies and EPCOR expressed their views that including any O&M savings and productivity improvements in any shortfall calculations would, in effect, be equivalent to conscripting these savings to be reinvested in the funding of capital projects. Specifically, AltaGas[234] and EPCOR[235] pointed out that the X factor of 1.16 per cent determined by the Commission in Decision 2012-237 is already reflective of the expected O&M savings and efficiency gains, as part of the innovation and discovery process under PBR. Therefore, any gains above those reflected in the X factor should accrue to the companies, as evidenced by the following statement of EPCOR:

> To the extent that there is a level of "innovation and discovery" above that necessary to achieve the X factor, it cannot credibly be used as a *slush fund* for whatever purpose the interveners (or the Commission) deem appropriate. It should accrue to the utility as a reward for superior performance. By the same token, to the extent that the level of "innovation and discovery" is below that necessary to achieve the X factor, the utility would have no recourse to the Commission and would suffer a penalty for inferior performance. This is what it means for the utility to be a "residual claimant" under the PBR regime chosen by the Commission.[236]

208. Dr. Weisman also pointed to the fact that the fruits of this innovation and discovery process reflected in the X factor of 1.16 per cent are guaranteed to consumers independent of the actual performance of the companies. Finally, Dr. Weisman expressed his view that for the interveners' to suggest relying on the innovation and discovery unleashed by PBR to fund the incremental capital is "a quintessential example of regulatory recontracting because the effect is to hold the utility to a markedly higher standard of performance than that contemplated by the Commission in its PBR decision."[237]

209. In a similar vein, the ATCO companies submitted that the benefits of any productivity improvements and efficiency gains will be passed on to customers at the time of rebasing. In ATCO's view, prior to rebasing, the companies should be entitled to keep the benefit of those productivity improvements, which ends up resulting in a sharing of benefits under PBR.[238]

Commission findings

210. In Decision 2012-237, the Commission determined that changes in the cost of debt "should be occasioned by changes in interest rates in the economy and would therefore be eventually reflected in the indexes that make up the I factor."[239] The Commission, therefore, denied the flow-through treatment of these costs, with the consequence that the companies are not required to bring forward to the Commission their forecast cost of debt during the PBR term. Therefore, the Commission agrees with the views of Fortis and AltaGas that reflecting any changes in the cost of debt in a double-counting analysis will be duplicative of the changes allowed under the I factor.

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233 Exhibit 276.01, Fortis reply argument, paragraph 33.
234 Exhibit 267.01, AltaGas argument, paragraph 41.
235 Exhibit 278.02, EPCOR reply argument, page 13.
236 Exhibit 278.02, EPCOR reply argument, paragraph 38.
237 Exhibit 278.02, EPCOR reply argument, paragraph 40.
238 Exhibit 265.01, ATCO argument, paragraph 102.
239 Decision 2012-237, paragraph 748.

211. With respect to the interveners' concerns that the companies' approaches to demonstrate the absence of double-counting did not consider O&M savings and the potential for increased productivity, the Commission agrees with the views of EPCOR[240] and the ATCO companies[241] that these potential benefits are not always identifiable. Moreover, as the companies pointed out, if the Commission were to consider O&M savings in determining the need for capital trackers, then increases in O&M costs must be taken into account as well, which would mean reverting to cost-of-service type regulation.

212. The CCA[242] and Calgary[243] expressed their views that future productivity gains can finance projects eligible for capital tracker treatment and, as such, must be factored into the double-counting analysis. Mr. Bell, on behalf of the UCA, expressed a similar view in his testimony.[244] The Commission agrees with the views of AltaGas, ATCO and EPCOR that such an approach is contrary to the incentives of PBR. As EPCOR explained:

> The bottom line is that the Commission made a principled decision not to make earnings sharing a component of its PBR framework for the utilities. This decision harbors two important implications. First, the gains to consumers are guaranteed to them independent of the actual performance of the utilities. Second, the utilities are the residual claimants for their efficiency gains. This means that all efficiency gains in excess of those required to satisfy the Commission's X factor of 1.16% belong to the utilities and should not be hijacked for any other purpose. In other words, contrary to the suggestion of the interveners, these efficiency gains should not be appropriated by the Commission to finance qualified Capital Trackers that are appropriately recovered in the form of a K factor. For the Commission to do otherwise would undermine the credibility and integrity of its own PBR regime, and destroy the very incentives it was intended to create.[245]

213. Dr. Lowry acknowledged the problems associated with accounting for O&M savings and efficiency gains and proposed using partial factor productivity instead of the Commission-approved X factor in the calculation of the capital cost budget, as a practical means to address this issue.[246] The CCA recommended that the companies' capital cost forecast be reduced by the 0.84 per cent annual average growth in the capital productivity of U.S. power distributors, which resulted from NERA's research. Regarding the O&M forecast, the CCA submitted that the "only O&M forecast that it would find acceptable is one that employs a sensible O&M productivity growth assumption," which in the CCA's view is the 1.76 per cent long run trend in the O&M productivity of power distributors in NERA's study.[247]

214. In Decision 2012-237, the Commission did not approve the use of any partial productivity factors (either for capital or for O&M) of the type proposed by Dr. Lowry and the CCA. Rather, the Commission established an X factor of 1.16 per cent based on industry TFP growth of 0.96 per cent and a stretch factor of 0.2 per cent for the PBR term.[248] The Commission

[240] Transcript, Volume 7, page 1332, lines 3-6 (Elford).
[241] Exhibit 275.01, ATCO reply argument, paragraph 50.
[242] Exhibit 108.01, PEG evidence, pages 63-64.
[243] Exhibit 269.01, Calgary argument, paragraph 66.
[244] Transcript, Volume 9, page 1818, lines 10-21 (Bell).
[245] Exhibit 278.02, EPCOR reply argument, paragraph 44.
[246] Transcript, Volume 12, page 2333, line 15 to page 2334, line 1 (Lowry).
[247] Exhibit 280.01, CCA reply argument, paragraph 75.
[248] Decision 2012-237, paragraphs 514 and 515.

reaffirms its view that a reconsideration of the PBR formula parameters, including the I-X index, is not within the scope of this proceeding.[249]

215. The Commission explained in Decision 2012-237 that, under a PBR regulatory framework, customers automatically share the expected efficiency gains because they are built into rates through the X factor (inclusive of the stretch factor to capture efficiency gains that should be immediately realizable as the regulatory system changes from cost-of-service to PBR), regardless of the actual performance of the company.

216. In addition, the Commission observed that a PBR plan should be viewed as a collection of tools aimed at introducing efficiency incentives while providing the companies with a reasonable opportunity to earn their allowed rate of return. In this regard, AltaGas pointed out that other parameters of a PBR plan, such as a materiality threshold on capital trackers, could offset "incidental O&M savings" and smooth the imprecision inherent in the PBR model.[250] PBR plan safeguards, such as reopeners, would also protect the companies and consumers in the event that the PBR regime permits excessively low or high earnings.

217. Finally, the Commission agrees conceptually with the arguments of Calgary and the CCA that the I-X mechanism does not provide a specific budget for all or part of a company's capital expenditures. As Calgary put it, since "dollars are not colour-coded," the companies have discretion as to how and when to spend their PBR revenue.[251] Nonetheless, even though the companies have discretion as to how and when to spend their PBR revenue, in Section 3.1.3, the Commission has determined that, in order to calculate the amount of an investment that can be considered outside the normal course of the company's ongoing operations and to be recovered by way of capital trackers, it is necessary to compare the forecast revenue requirement for a project to the going-in revenue requirement that is historically associated with a similar type of capital expenditure escalated by I-X and including the impact on revenue of any changes in billing determinants.

218. In light of the above considerations, the Commission is satisfied that, when viewed in their entirety, the PBR plans approved in Decision 2012-237 ensure that customers share the expected efficiency gains, independent of the actual performance of the companies. In order to preserve the incentives of the approved PBR plans, the Commission finds that no consideration of O&M savings and potential productivity offsets above those implied by the approved X factor should form part of the companies' double-counting analysis.

3.1.2.3 Intertemporal double-counting

219. The CCA submitted that the double-counting issue is one which needs to be assessed over all the years of the PBR plan and potentially over multiple PBR plans. Specifically, the CCA explained that double-counting can take several forms:

> One is the double counting that might occur in a period (e.g. in 2013) inasmuch as the I-X mechanisms escalate rates that were designed to recover cost in a certain base period and the cost of assets in place in that period is actually shrinking due to depreciation and the downward trend in the embedded cost of debt. There can also be intertemporal double counting since the I-X mechanism will also escalate rates in years of slow capital cost

[249] Exhibit 113.01, paragraph 2.
[250] Exhibit 90.01, AUC-AUI-2.
[251] Exhibit 269.01, Calgary argument, paragraph 132.

> growth and high capex today all else equal slow capital cost growth tomorrow due to depreciation.[252]

220. In this regard, the CCA noted that, while the aggregate investment shortfall and project net cost calculations performed by the companies can potentially control for double-counting in the current period, these approaches would likely not control effectively for intertemporal double-counting "since future slowdowns in [capital cost] growth could be obscured by forecast 'fudging' or the utilities could just stop asking for K factors."[253]

221. In response, AltaGas noted that "there is the potential for the unit cost of investments in growth projects (cost per customer) to decline as customer growth occurs over time, resulting in economies of scale."[254] Such economies of scale, if applicable, would apply only to growth projects where there are changes in the input to output quantity relationships. Even in such cases, AltaGas noted that:

> [A]s long as a growth project is included as a capital tracker using a cost of service approach to cost recovery, any economies of scale resulting from growth in customer numbers and any revenue growth would be automatically captured, for the benefit of customers, in the calculation of the annual rate changes. This calculation would be applicable to any utility using the revenue per customer cap approach to PBR, including AUI.[255]

222. AltaGas submitted that, because economies of scale do not apply to its projects proposed for capital tracker treatment, the issue of intertemporal double-counting did not apply to AltaGas. With respect to Dr. Lowry's concerns that a surge in capital expenditures will, once it ends, tend to accelerate productivity growth in subsequent years (because of the extra downward pressure it places on the rate base as the surge assets depreciate), AltaGas submitted its capital tracker programs did not represent a surge in capital spending in one or two years, but were ongoing programs expected to continue throughout the PBR term.[256]

223. Fortis indicated that when it asked for examples of the types of scale economies the CCA observed, the CCA could not provide tangible examples. Fortis expressed its view that the economies of scale "are appropriately dealt with under the I-X formula and should not be a consideration for whether a project meets the Capital Tracker criteria." Accordingly, Fortis argued that "[r]esetting X as part of a Capital Tracker proceeding does not seem to FortisAlberta to be a relevant exercise."[257]

224. In a similar vein, Dr. Weisman on behalf of EPCOR pointed out that any economies of scale and resulting gains are already reflected in the PBR plan on a prospective basis through the X factor:

> Q. […]And how is us pointing out that they may have efficiencies they can capture or economies of scale they could capture not us seeking to confer gains on consumers?

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252 Exhibit 270.02, CCA argument, paragraph 37.
253 Exhibit 270.02, CCA argument, paragraph 39 (g).
254 Exhibit 267.01, AltaGas argument, paragraph 45.
255 Exhibit 267.01, AltaGas argument, paragraph 45.
256 Exhibit 267.01, AltaGas argument, paragraphs 46-48.
257 Exhibit 262.01, Fortis argument, paragraph 148 referring to Exhibit 196.01, Fortis rebuttal evidence, paragraph 125.

> A. DR. WEISMAN: The gains to consumers as we talked about in the PBR proceeding are already reflected in the plan on a prospective basis. The stretch factor, the productivity factor combine to 1.16. Those are gains guaranteed to consumers regardless -- independent of the performance of the firm. But now to the extent you want to come back and say well, you know, there's more slack there, you're basically reneging on the contract in my view, and as soon as you start doing that, all of what you sought to achieve with regard to price cap goes out the window because the firm can no longer trust the regulator that it's going to adhere to the plan. The reason we call it a "fixed-price contract" is you can't revisit it. You don't get a second bite at the apple. The firm doesn't get it, and the regulator doesn't get it, and the interveners don't get it.[258]

225. Dr. Makholm on behalf of the ATCO companies commented on the fact that it is uncertain whether any economies of scale can be realized by the Alberta companies since there is "no evidence in the record on that."[259] Furthermore, Dr. Makholm expressed his view that the issue of economies of scale is "in conflict with the boundaries of the tracker proceeding," since it was dealt with, and rejected in the PBR proceeding.[260]

Commission findings

226. In Section 3.1.2.1 of this decision, the Commission found that the project net cost approach used by EPCOR and AltaGas, with possible modifications, adequately demonstrates that no double-counting occurs between project costs funded under the I-X mechanism and project costs proposed to be recovered by way of capital trackers. The Commission is satisfied that the project net cost approach can demonstrate that there is no double-counting in a given PBR year.

227. With respect to the issue of intertemporal double-counting (that is, over-recovery of capital costs in the years subsequent to when a capital tracker was approved), the Commission considers this issue to be closely related to the issue of potential O&M savings and efficiency gains, discussed in Section 3.1.2.1 above. In his testimony, Dr. Lowry noted that double-counting can be a problem when a period of large capital expenditures may slow down the need for capital spending in the future, resulting in some productivity improvements over time:

> Yeah. Now, it's at what I'd call a sweet spot where it's rapid enough to permit the realization of some real productivity gains, accelerated product growth, but not so rapid as to require blips in growth-related CapEx. As many blips. I'm not saying that there isn't occasionally a blip.[261]

228. In this regard, as discussed in Section 3.1.2.1, the Commission agrees with Dr. Weisman's assessment that the extent of the economies of scale (one potential driver of intertemporal double-counting) is "unknown and perhaps unknowable"[262] at this time. Dr. Makholm pointed out that there is no evidence on the record of this proceeding "that economies of scale will have any effect on the tracked costs that they've applied for here or the

[258] Transcript, Volume 6, page 1207, line 16 to page 1208, line 10 (Weisman).
[259] Transcript, Volume 3, page 611, lines 1-8 (Makholm).
[260] Transcript, Volume 3, pages 608-610 (Makholm).
[261] Transcript, Volume 12, page 2290, lines 14-18 (Lowry).
[262] Exhibit 199.02, rebuttal evidence of Dr. Weisman, page 16.

tracked costs that they'll apply for next year or the year after."[263] Dr. Lowry acknowledged that he has not seen any evidence of intertemporal double-counting occurring in Alberta.[264]

229. Furthermore, as Dr. Weisman,[265] Dr. Makholm[266] and Fortis[267] pointed out, any economies of scale and resulting gains are already reflected in the PBR plans on a prospective basis through the X factor. These gains are guaranteed to customers regardless of the actual performance of the company. Incorporating these productivity gains above the Commission-approved X factor in the calculation of capital tracker amounts will effectively result in revisiting the "fixed-price contract" that is a PBR plan.[268]

230. During the hearing, Dr. Lowry identified two options for dealing with the issue of intertemporal double-counting: do a full cost-of-service review or use a partial factor productivity trend of capital instead of the X factor as the basis for the companies' capital budget funded under the I-X mechanism.[269] As discussed in sections 3.1.2.1 and 3.1.2.2 of this decision, the Commission does not accept these proposals.

231. Accordingly, consistent with the findings in Section 3.1.2.1 of this decision, the Commission is satisfied that, when viewed as a whole, the PBR plans approved in Decision 2012-237 ensure that customers share in the expected productivity gains independent of the actual performance of the companies during the PBR term. Any long-term productivity gains above those prescribed by the parameters of the approved PBR plans, and which may give rise to concerns with intertemporal double-counting, will be passed on to customers at the time of any re-basing. PBR plan safeguards, such as re-openers, also would protect the companies and consumers in the event that the PBR regime permits excessively low or high earnings.

3.1.3 Identifying and quantifying the investments outside of the normal course

232. In Section 7.3.2.4 of Decision 2012-237, the Commission set out the capital tracker criteria and referenced Dr. Makholm with respect to establishing that capital tracker expenditures are outside of the normal course of the company's ongoing operations:

> A. Dr. MAKHOLM: …Because everybody's rates are based on their own books and records in base rates, and if the company has been doing whatever it is that we're describing consistently over the course of many years, it's in their base rates, and hence the base rates ought to be able to reflect that capital expense. It's what isn't in base rates that's idiosyncratic and out of phase and deferred and lumpy that the formula wouldn't be able to cover, and that's the dividing line for derogating from a formula that's supposed to cover everything, is whether or not you decide by looking that there's a certain category of costs or a certain practical nature of any particular company's activities that lead it to conclude and convince the Commission that a straight-forward formula of the RPI minus X plus Z variety won't do.[270]

[263] Transcript, Volume 3, page 611, lines 5-8 (Makholm).
[264] Transcript, Volume 12, page 2288, lines 18-25 (Lowry).
[265] Transcript, Volume 6, page 1207, line 16 to page 1208, line 10 (Weisman).
[266] Transcript, Volume 3, page 611, lines 5-16 (Makholm).
[267] Exhibit 262.01, Fortis argument, paragraph 148.
[268] Transcript, Volume 6, page 1209, line 7 (Weisman).
[269] Transcript, Volume 12, page 2391, lines 16-22 (Lowry).
[270] Decision 2012-237, paragraph 589, quote from Proceeding ID No.566, Transcript Volume 1, pages 160-163.

233. In this proceeding, the Commission sought parties' views on how to interpret "consistently over the course of many years" in Dr. Makholm's quote. Specifically, the Commission inquired whether average expenditures on similar categories of capital projects over the last 10-year period reasonably reflects a company's historical practices. Additionally, the Commission sought parties' views on how to quantify investments outside the normal course of the company's ongoing operations, if the 10-year historical average were to be adopted. In particular, the Commission inquired whether only deviations from the historical average should be eligible for capital tracker treatment or, if the expenditures are different from the historical average, whether all of the expenditures in the category should be eligible for capital tracker treatment.

234. All of the companies argued that average historical spending levels are not relevant in themselves. In the companies' views, the way to account for historical capital expenditures to identify investments outside of the normal course of the company's ongoing operations and calculate the K factor is through their respective aggregate investment shortfall approach or project net cost approach.

235. The ATCO companies indicated that any reliance on historical spending levels in assessing a project proposed for capital tracker treatment must take into account a number of considerations. There are numerous complexities associated with determining the amount of funding, related to historical spending levels, that is actually included in the going-in rates of the utility. There is also a need to consider the relationship between the X factor and the TFP growth study data used to derive the X factor. The incremental funding that is actually freed up each year through depreciation expense must be calculated. Further, the freed up depreciation expense available to fund new capital investment is minimal in value, due to the age of retiring assets.

236. In addition, the ATCO companies expressed a concern that reliance on historical investment levels, on a project specific basis, obscures the overall investment requirements of the company. Therefore, instead of attempting to do a detailed assessment of historical expenditures that would necessitate the company examining every type of capital program it had undertaken in the past, the ATCO companies chose "to do an overall, capital related, funding shortfall analysis via the Reasoned Demonstration, which takes into account all historical investment that has occurred; but does so without requiring an allocation of historical investment to specific programs."[271]

237. Fortis submitted that historical spending levels are relevant in only one way. Fortis observed that historical investment becomes part of a utility's rate base. As such, all historical spending to date has led to the total capital-related revenues reflected in going-in rates. In its aggregate investment shortfall analysis, Fortis purported to demonstrate that the going-in revenue escalated by I-X would not be sufficient to fund all of the company's proposed capital expenditures in 2013. On the basis of this analysis, Fortis argued that the assumption that historical spending levels provide sufficient funding for all new capital expenditures is incorrect in cases where investment growth levels are relatively high. Fortis reached a general conclusion that its projects proposed for capital tracker treatment cannot be funded under the I-X mechanism, no matter the amount of historical spending.[272]

[271] Exhibit 265.01, ATCO argument, paragraph 108.
[272] Exhibit 262.01, Fortis argument, paragraphs 52-58.

238. As explained in Section 3.1.2.1 above, under the aggregate investment shortfall approach used by the ATCO companies and Fortis, in order to quantify the investments outside of the normal course of the company's ongoing operations, the forecast total capital costs (for the ATCO companies), or total costs including both capital and O&M (in the case of Fortis), were compared to the projected revenue to be generated under the I-X mechanism, inclusive of with the impact on revenue of any changes in billing determinants. The identified aggregate investment shortfall was proposed to be addressed by way of capital trackers and was used to estimate the 2013 K factor amount.[273]

239. AltaGas indicated that "the appropriate question is whether the revenue requirement calculated under PBR is sufficient to provide a fair rate of return to the utility for prudently incurred investments."[274] Accordingly, the question is whether the amounts requested in the capital tracker are already embedded in base rates, not what is the appropriate number of years to consider in making that determination. In AltaGas' view, "focusing on average capital expenditures of a period of 10 years, more or less, is a crude and unreliable proxy for what can be directly calculated with precision, namely the incremental amount above going-in rates (adjusted for I-X and [customer growth]) required to provide the utility with a fair return on the investments for which capital tracker treatment is being requested."[275]

240. AltaGas indicated that the company was able to reasonably calculate the amounts embedded in its base rates that are "applicable to each of the capital tracker projects."[276] Thus, having accounted for amounts in base rates, AltaGas argued its application demonstrated the forecast expenditures for the proposed capital tracker projects were not adequately funded by the PBR formula and thus qualified for capital tracker treatment.[277]

241. Based on the analysis of its historical capital additions, EPCOR noted that examining historical spending levels "provides additional confirmation to the Commission of funding inadequacy in EDTI's circumstances, and that, as such, EDTI's applied-for Capital Trackers are outside of the ordinary course of EDTI's operations, as contemplated in Criterion 1."[278] At the same time, EPCOR pointed out that historical cost analysis cannot be reasonably used to calculate specific K factor adjustments so as to avoid double recovery, because it was "clearly not as accurate for that purpose"[279] as EPCOR's project net cost approach.

242. As explained in Section 3.1.2.1 above, under the project net cost approach used by AltaGas and EPCOR, in order to quantify the amount of investments outside of the normal course of the company's ongoing operations, the forecast revenue requirement for a particular capital tracker project was compared to the projected revenue to be generated under the I-X mechanism for that project, inclusive of the impact on revenue of any changes in billing determinants. The portion of the revenue requirement for a project in a PBR year that is not funded under the I-X mechanism is included in the K factor calculation.[280] As the Commission

[273] Exhibit 37.02, Appendix E – ATCO Electric reasoned demonstration and Exhibit 220.03; Exhibit 36.04, Appendix E – ATCO Gas reasoned demonstration and Exhibit 220.02; Exhibit 196.01, Fortis rebuttal evidence, pages 4-5 and Exhibit 35.01, Fortis application, Appendix 1.
[274] Exhibit 90.01, AUC-AUI-1(a).
[275] Exhibit 90.01, AUC-AUI-1(a).
[276] Exhibit 90.01, AUC-AUI-1(a).
[277] Exhibit 267.01, AltaGas argument, paragraph 12.
[278] Exhibit 263.02, EPCOR argument, paragraph 139.
[279] Exhibit 263.02, EPCOR argument, paragraph 139.
[280] Exhibit 38.39, EPCOR application, Schedule 2; Exhibit 223.04, AltaGas schedules 4.1 to 4.3.

observed in Section 3.1.2.1 above, this calculation differs from the K factor calculation under the aggregate investment shortfall approach, where the entire revenue requirement associated with capital additions for a project in a PBR year is included in the K factor (but with the sum of revenue requirements for all capital trackers not exceeding the aggregate investment shortfall).[281]

243. Based on the testimony of its witness, Mr. Bell, the UCA recommended that when calculating historic levels of spending, a five-year average should be utilized, when available. When, as a result of the nature of the project, fewer data are available, the UCA proposed to rely on whatever actuals are available, which would then be continually updated until a five-year average can be established.[282] However, Mr. Bell acknowledged that he has not considered how to quantify the investments outside of the normal course of the company's ongoing operations under this approach at this time, and was more focused on whether "the proposed projects satisfy the three criteria."[283]

244. Calgary submitted that historical spending levels "are critical."[284] Calgary noted that in establishing the capital tracker mechanism at paragraph 589 of Decision 2012-237, the Commission relied on the testimony of Dr. Makholm with respect to a company's historical practices. Therefore, Calgary stated that "it is not now for the Commission to waiver from its rulings and determinations, after having sought clarity and obtained clarity during the PBR proceeding."[285]

Commission findings

245. In Section 3.1.1 above, the Commission concluded that, in general, in order for a capital project to be considered outside of the normal course of a company's ongoing operations, the associated revenue provided under the I-X mechanism would not be sufficient to recover the entire revenue requirement associated with the prudent capital expenditures for this project.

246. The UCA's witness, Mr. Bell,[286] proposed an approach to identify capital projects to be considered outside of the normal course of the company's ongoing operations. Mr. Bell proposed that, to be considered outside of the normal course of the company's ongoing operations, it is necessary to determine whether expenditures on capital projects are sufficiently greater than the historical expenditures of the company. This is determined by comparing the company's forecast project costs for a PBR year to the average historical expenditures for similar categories of capital over the most recent five-year period. During the hearing, however, Mr. Bell acknowledged that he had not considered how to quantify the investments outside of the normal course of the company's ongoing operations under his approach.[287] In its information requests, the Commission further queried whether a comparison over the most recent 10-year period would be of value.

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281 Exhibit 37.02, ATCO Electric application, Appendix E – reasoned demonstration; Exhibit 220.03, undertaking response of Ms. Wilson to Mr. McNulty; Exhibit 36.04, ATCO Gas application, Appendix E – reasoned demonstration; Exhibit 220.02, undertaking response of Ms. Wilson to Mr. McNulty; Exhibit 196.01, Fortis rebuttal evidence, pages 4-5; and Exhibit 35.01, Fortis application, Appendix 1.

282 Exhibit 268.02, UCA argument, paragraphs 53-54.

283 Transcript, Volume 11, page 2160, lines 6-8 (Bell).

284 Exhibit 269.01, Calgary argument, paragraph 147.

285 Exhibit 269.01, Calgary argument, paragraph 151.

286 Refer to Section 3.1.1 for Mr. Bell's complete position on the issue of outside the normal course of the company's ongoing operations.

287 Transcript, Volume 11, page 2160, lines 5-14 (Bell).

247. The Commission finds that even though comparing the five or 10-year historical average capital expenditures for comparable capital projects to the forecast capital expenditure for a proposed capital tracker project may indicate generally that a project warrants capital tracker treatment, this calculation does not provide information on the extent to which the project is underfunded by the I-X mechanism. Accordingly, the Commission will not rely on this type of calculation for the purpose of determining whether the entire revenue requirement associated with a project proposed for capital tracker treatment is not adequately funded under the I-X mechanism.

248. As an alternative to relying on a comparison of historical average capital expenditures to forecast capital expenditures, the companies pointed out that, because historical investment becomes part of a utility's rate base upon which the going-in rates are developed, the going-in rates are reflective of all historical spending to date.[288] Accordingly, the companies proposed a different approach to identify the extent to which projects are underfunded by the I-X mechanism. Under the approach used by the companies, a forecast of revenue requirement is compared to the revenue generated under the I-X mechanism, calculated as the going-in revenue requirement escalated by I-X and including the impact on revenue of any changes in billing determinants.

249. AltaGas pointed out that comparing the forecast revenue requirement to the going-in revenue requirement has an added benefit of assisting in the calculation of specific K factor adjustments "as the dollar value is what is captured in the underlying rate base and K factor calculation."[289] EPCOR pointed to this benefit as well.[290] The Commission agrees and finds that comparing the forecast revenue requirement to the going-in revenue requirement simplifies the K factor calculation and results in reduced regulatory burden and administrative costs.

250. However, the companies' approaches to calculating the extent to which projects are underfunded by the I-X mechanism differ. The specifics of this approach as used by each company are discussed further below.

251. Under the aggregate investment shortfall approach used by the ATCO companies and Fortis, the forecast aggregate capital revenue requirement (for the ATCO companies), or the total revenue requirement including both capital and O&M (for Fortis), was compared to the projected revenue generated under the I-X mechanism, calculated as the aggregate going-in revenue escalated by I-X and including the impact on revenue of any changes in billing determinants. In this way, the aggregate investment shortfall approach accounted for all the revenue requirement in the PBR year associated with total rate base to date without aligning that revenue requirement with the revenue requirement associated with specific projects or programs proposed for capital tracker treatment.

252. The aggregate investment shortfall approach used by the ATCO companies (the "Reasoned Demonstration") first calculated the revenue requirement associated with the going-in rate base. To calculate the amount of revenue generated under the I-X mechanism and notionally available to fund the revenue requirement associated with rate base including additions in the PBR year, the ATCO companies escalated the revenue associated with the going-in rate base by the I-X index and included the impact on revenue of any changes in billing determinants. This

[288] Exhibit 262.01, Fortis argument, paragraph 58; Exhibit 90.01, AUC-AUI-1(a).
[289] Exhibit 90.01, AUC-AUI-1(c).
[290] Exhibit 86.01, AUC-EDTI-1(a).

amount of revenue was then compared to the amount of money required to fund the revenue requirement associated with the rate base in the PBR year, including aggregate forecast additions to rate base in that year. The difference was proposed to be funded largely by way of capital trackers.

253. Fortis also used an aggregate investment shortfall approach. However, unlike the ATCO companies, the Fortis approach started with the total going-in revenue requirement, including the revenue requirement associated with the going-in rate base and the revenue requirement associated with O&M. To calculate the amount of revenue generated under the I-X mechanism, Fortis escalated the total going-in revenue requirement by the I-X index and included the impact on revenue of any changes in billing determinants. This amount of revenue was then compared to the amount of money required to fund the entire revenue requirement in the PBR year, including the revenue requirement associated with forecast additions to rate base in that year. Fortis proposed that the resulting difference is required to fund additions to rate base in that year, and additions other than for sustainment capital are to be funded largely by way of capital trackers.

254. The project net cost approach used by EPCOR first divided the going-in rate base into capital categories and calculated the amount of going-in revenue requirement associated with each category. EPCOR escalated the amount of going-in revenue requirement associated with each category of capital in the going-in rate base by the I-X index and included the impact on revenue of any changes in billing determinants, to calculate the amount of revenue generated under the I-X mechanism and notionally available to fund the revenue requirement associated with each category of capital in the PBR year. EPCOR then calculated the forecast revenue requirement for the PBR year in each category of capital, including proposed capital additions. EPCOR proposed that the difference between the forecast revenue requirement for each capital expenditure category for the PBR year, including proposed capital additions, and the revenue notionally available from the I-X mechanism to fund the revenue requirement associated with each category of capital in the PBR year, identifies the extent to which a capital expenditure category is underfunded by the I-X mechanism.

255. AltaGas also used the project net cost approach. However, because AltaGas had only three categories of capital projects proposed for capital tracker treatment, AltaGas started by determining the portion of the going-in rate base associated with these three categories of capital expenditures. AltaGas escalated the amount of going-in revenue requirement associated with each of the three categories of capital expenditures in the going-in rate base by the I-X index and included the impact on revenue of any changes in billing determinants to calculate the amount of revenue generated under the I-X mechanism and notionally available to fund the revenue requirement associated with each of the three categories of capital expenditures in the PBR year. AltaGas then calculated the forecast revenue requirement for the PBR year in each of the three categories of capital, including proposed capital additions. AltaGas proposed that the difference between the forecast revenue requirement for each of the three capital categories for the PBR year, including proposed capital additions, and the revenue notionally available from the I-X mechanism to fund the revenue requirement associated with each of those categories in the PBR year, identifies the extent to which a capital expenditure category is underfunded by the I-X mechanism.

256. In Section 3.1.2.1, the Commission identified several principal concerns with using the aggregate investment shortfall approach and determined that this approach should not be used to demonstrate that a particular project proposed for capital tracker treatment does not result in

double-counting, as required to satisfy Criterion 1. The Commission considers that the same concerns arise when identifying and quantifying the investments outside the normal course of the company's ongoing operations that cannot be adequately funded under the I-X mechanism.

257. The aggregate investment shortfall approach does not comport with the guidance provided in Decision 2012-237, which defined the capital tracker criteria at the project level. The aggregate investment shortfall approach does not demonstrate that a particular capital tracker project cannot be adequately funded under the I-X mechanism. The only thing that is demonstrated is that the total capital-related revenue requirement in a PBR year is greater than the total aggregate revenue notionally available under the I-X mechanism in a PBR year. Unlike the aggregate investment shortfall approach, the project net cost approach identifies specific projects for which the forecast or actual revenue requirement will not be adequately funded under the I-X mechanism.

258. The principal concern with the aggregate shortfall approach is that this analysis requires the Commission to examine the companies' total capital forecast (or a total revenue requirement forecast, including both capital and O&M in the case of Fortis), not just the forecast for the projects proposed for capital tracker treatment. In Decision 2012-237, the Commission did not contemplate evaluating the totality of the company's capital forecast or its entire forecast revenue requirement in order to determine the eligibility of a subset of the company's capital forecast for capital tracker treatment. A requirement to review a company's entire capital forecast, in effect, amounts to a return to cost-of-service testing of the full capital forecast (or a total revenue requirement forecast, including both capital and O&M in the case of Fortis). This would be inconsistent with the PBR goals of reducing regulatory burden. Unlike the aggregate investment shortfall approach, the project net cost approach does not require that the totality of a company's capital forecast or its entire forecast revenue requirement be evaluated.

259. As noted in Section 3.1.2.1, to the extent that an aggregate investment shortfall approach requires an adjustment to opening rate base for the subsequent PBR year, the Commission considers such an outcome to be inconsistent with the objective of PBR to create incentives to reduce costs by extending regulatory lag. This is because using an aggregate investment shortfall approach reduces the regulatory lag for all capital projects to be recovered under the I-X mechanism and by way of capital trackers to a single year, as opposed to the remainder of the five-year PBR term. Under the project net cost approach, the regulatory lag is reduced to one year only for those capital projects recovered by way of capital trackers.

260. Finally, the aggregate investment shortfall approach establishes the amount of forecast revenue requirement associated with total additions to rate base in the PBR year that is not recovered under the I-X mechanism. It then designates specific capital projects for capital tracker treatment because they are asserted to satisfy the Commission's capital tracker criteria. However, the Commission finds there is no way, under the aggregate investment shortfall approach, to distinguish the projects that are specifically outside the normal course of the company's ongoing operations from those that are not. This is because projects that satisfy the remaining Commission criteria may, or may not, be outside the normal course of the company's ongoing operations. The only distinguishing characteristic is that the forecast or actual revenue requirement for a project will not be funded adequately under the I-X mechanism. The aggregate investment shortfall approach does not demonstrate this for a specific project proposed for capital tracker treatment. Unlike the aggregate investment shortfall approach, the project net cost

approach does make it possible to identify those specific projects for which the forecast or actual revenue requirement will not be funded adequately under the I-X mechanism.

261. Based on the evidence in this proceeding, the Commission finds that the aggregate investment shortfall approach does not identify the extent to which revenue provided under the I-X mechanism would not be sufficient to recover the entire revenue requirement associated with the prudent capital expenditures for a project, as required to satisfy Criterion 1. Accordingly, the Commission rejects the approaches proffered by ATCO Electric, ATCO Gas and Fortis to identify and quantify the projects that are underfunded by the I-X mechanism.

262. The Commission accepts that, because a utility's rate base is reflective of all the historical investments to date (since it reflects the vintage of assets and accounts for the effects of depreciation over time), a reasonable method for calculating the extent to which a project is underfunded by the I-X mechanism is to compare the forecast or actual revenue requirement for that project to the going-in revenue historically associated with a similar type of capital expenditures escalated by I-X and including the impact on revenue of any changes in billing determinants.

263. Accordingly, the Commission finds that the project net cost approach is a reasonable method to identify the extent to which the increase in associated revenue provided under the I-X mechanism would not be sufficient to recover the entire revenue requirement associated with the prudent capital expenditures for a project, as required to satisfy Criterion 1. Therefore, the Commission accepts the approaches proffered by EPCOR and AltaGas, with the modifications to the true-up filings directed in sections 5 and 8, to identify and quantify the extent to which particular projects are underfunded by the I-X mechanism.

264. Given the Commission's determinations in Section 3.1.2 and findings in this section, the Commission finds that the accounting test should be based on the project net cost approach, because this approach is sufficient to satisfy the Commission that all of the forecast or actual expenditures for a capital project are, or a portion is, outside the normal course of the company's ongoing operations.

3.1.4 The role of a business case and an engineering study

265. Parties to this proceeding acknowledged the need to support a project proposed for capital tracker treatment with some form of engineering or technical assessment to demonstrate that the capital expenditures are required. However, considerable discussion ensued regarding the role of engineering studies in supporting a project proposed for capital tracker treatment.

266. According to the UCA, a properly performed engineering study is necessary to determine whether the proposed project is required to prevent deterioration in service quality and safety and also to evaluate alternatives to the project. The UCA further stated that an "engineering study allows the parties to test the requested capital and proposed budget to ensure that the proposed capital tracker is needed, when it is needed, and that the method of delivery is efficient."[291]

267. Given that capital trackers were expected to be an exceptional feature of PBR plans, the UCA argued that the level of engineering support for a capital project proposed for capital tracker treatment needs to exceed the level of support for capital projects under cost-of-service

[291] Exhibit 268.02, UCA argument, paragraph 46.

regulation in order to demonstrate the need for treatment outside of the I-X mechanism. In this regard, the UCA did not agree with the companies' view that a business case analysis of the type filed for capital projects under cost-of-service regulation is sufficient. According to the UCA, since "engineers are bound by their professional obligations, there is a higher level of reliability associated with a properly performed, sealed engineering study which is not present in a business case analysis alone."[292]

268. Overall, the companies expressed their views that the engineering studies provided with the applications were sufficient to meet the purpose for which they were required. The ATCO companies stated that the purpose of an engineering study is to ensure the professional application of the principles of mathematics and physics.[293]

269. AltaGas,[294] EPCOR,[295] and Fortis[296] indicated that the level of detail and specifics of an engineering study should correspond to the nature, complexity, and magnitude of the proposed capital tracker project. The UCA's engineering witness, Mr. Baker, representing Teshmont, agreed with this notion.[297]

270. Furthermore, the ATCO companies and Fortis indicated that for some capital tracker projects, engineering studies are not appropriate, practicable or useful. In particular, the ATCO companies explained that capital programs driven by third parties or operating conditions often do not require engineering studies to define the business need, nor are they required as part of the design solution. During the hearing, the ATCO companies explained further why engineering studies are deemed to be inapplicable when certain standardized evaluation criteria are used.[298] According to the ATCO companies, comprehensive business cases, supported by engineering studies where applicable, define the need for the programs.[299]

271. In a similar vein, Fortis indicated that the need for customer growth and line move projects is not determined by an engineering study but rather by the request for service from a customer or a third party. Well-accepted and established engineering standards are applied to fulfil such requests, and Commission-approved investment policies are applied. Fortis expressed its view that engineering studies "broader than those which have existed to date are neither required nor would be appropriate going forward."[300]

272. By way of another example, Fortis pointed out that AESO contributions and substation-associated upgrades result from a well-established process that involves Fortis, the AESO and AltaLink. This process includes a needs assessment, consideration of solutions that may be distribution-related or transmission-related or both, and approval of the results by the Commission. Fortis pointed out that given the comprehensive nature of the process, the

[292] Exhibit 268.02, UCA argument, paragraph 43.
[293] Exhibit 265.01, ATCO argument, paragraph 116.
[294] Exhibit 267.01, AltaGas argument, paragraph 54.
[295] Transcript, Volume 6, page 1065, lines 9-15 (Elford).
[296] Exhibit 262.01, Fortis argument, paragraph 62.
[297] Transcript, Volume 9, page 1749, line 22 to page 1750, line 5 (Baker).
[298] Transcript, Volume 2, pages 286-289 (Howell).
[299] Exhibit 265.01, ATCO argument, paragraph 115.
[300] Exhibit 262.01, Fortis argument, paragraph 63.

Commission has earlier determined, in Decision 2010-309,[301] that a duplicative review of the resulting distribution elements is not appropriate.[302]

273. EPCOR expressed a similar view with respect to its projects proposed for capital tracker treatment arising from 2012. EPCOR noted that since "these projects and their associated capital additions have been previously approved by the Commission as being prudent and in the public interest, EDTI did not see any need to provide business cases or engineering studies in support of these Trackers."[303]

274. The UCA's engineering expert, Mr. Baker of Teshmont, indicated that when distribution companies rely on standards to build business cases to ensure safety, reliability, and operability of both large and small distribution systems, some type of engineering assessment is still required.[304] Another expert, Mr. Roberts of SMi, noted it may not be necessary to perform an engineering study if there is an existing standard that has been certified, approved and for which there is a template format that is being followed for a particular project. This ensures that some measure of engineering oversight is being applied. Mr. Roberts acknowledged that the engineering standard could be either an industry standard or a standard developed by a company.[305]

275. EPCOR proposed that a practical aspect requiring clarification is whether the engineering studies for projects proposed for capital tracker treatment could be performed by the company's internal engineers or must be performed by external engineering consultants.[306] In this regard, EPCOR noted that it has "its own experienced and highly qualified engineering personnel who are intimately involved in the planning and design of EDTI's distribution system and the preparation of EDTI's capital projects and forecasts."[307] In most cases, it is unlikely that additional engineering information could be provided, including by a third-party engineering consultant. Nevertheless, EPCOR indicated it may engage a third-party engineering consultant when there is no internal expertise on a particular matter.[308]

276. In a similar vein, AltaGas pointed out that it has significant engineering expertise in-house:

> MR. LESAGE: Within our engineering department, we have close to a century worth of engineering knowledge; and in some instances, we have people in that department that have operated the equipment we're looking at or close to four decades. So there hasn't been an instance, nor do I envision an instance, where it would necessitate going outside of our department to take a look at our assets and determine what type of work or what type of assessment is required.[309]

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301 Decision 2010-309: FortisAlberta Inc. 2010-2011 Distribution Tariff – Phase I, Application No. 1605170, Proceeding ID. 212, July 6, 2010.
302 Decision 2010-309, paragraph 63.
303 Exhibit 38.01, EPCOR application, paragraph 114.
304 Transcript, Volume 9, pages 1748-1750 (Baker).
305 Transcript, Volume 10, pages 1910-1911 (Roberts).
306 Exhibit 38.01, EPCOR application, paragraph 115.
307 Exhibit 38.01, EPCOR application, paragraph 115.
308 Transcript, Volume 6, pages 1066 and 1070 (Hull, Elford).
309 Transcript, Volume 5, pages 846, lines 14-23 (Lesage).

277. The UCA engineering witnesses agreed that either an internal approval process by engineers or a third-party external review are appropriate and depend on the availability of the relevant expertise.[310]

Commission findings

278. In Section 3.1.1 of this decision, the Commission determined that the applicant must satisfy the Commission's requirements for both the accounting test and the project assessment in order to satisfy the requirements of Criterion 1. The purpose of the project assessment is to demonstrate that a project proposed for capital tracker treatment is (i) required to provide utility service at adequate levels and, if so, (ii) the scope, level and timing of the project are prudent, and the forecast or actual costs of the project are reasonable. This is consistent with the project assessment requirements set out in paragraph 594, of Decision 2012-237:

- Projects proposed for capital tracker treatment are of sufficient importance that the company's ability to provide utility service at adequate levels would be compromised if these expenditures were not undertaken.
- Projects proposed for capital tracker treatment are required to prevent deterioration in service quality and safety.
- Service quality and safety cannot be maintained by continuing with O&M and capital spending at levels that are not substantially different from historical levels.
- Capital projects could not have been undertaken in the past as part of a prudent capital maintenance and replacement program.

279. To that end, a business case and an engineering study will generally aid the Commission in conducting project assessments under Criterion 1.

280. The project assessment is required because, as the CCA and Calgary pointed out, there is no incentive to minimize the costs of these projects since capital trackers would be treated under a cost-of-service framework.[311] In addition, the companies may propose projects that are not required to provide utility service at adequate levels. Calgary noted that "conceptually, a utility might propose a project that would grow its rate base, irrespective of whether or not the project is needed."[312]

281. In Decision 2012-237, the Commission determined that Criterion 1 requires that a capital tracker project be supported by an engineering study to justify the capital expenditures being proposed.[313] In that decision, the Commission also indicated that the "annual March 1st capital tracker filing must include a business case with respect to each proposed capital tracker."[314] In this proceeding, the Commission has considered the views of parties in assessing the roles of a business case and an engineering study.

282. In the Commission's view, a business case is intended to support the need for a project proposed for capital tracker treatment by evaluating the available alternatives and providing an overview of the forecast costs for each alternative to demonstrate that a project proposed for

[310] Transcript, Volume 10, page 1911, lines 19-25 (Roberts).
[311] Exhibit 270.02, CCA argument, paragraph 39 (e) and Exhibit 269.01, Calgary argument, paragraph 146.
[312] Exhibit 269.01, Calgary argument, paragraph 146.
[313] Decision 2012-237, paragraph 594.
[314] Decision 2012-237, paragraph 975.

capital tracker treatment is necessary and that the associated forecast or actual costs are reasonable. An engineering study may be required to support the technical analysis of the available alternatives and to provide a more detailed justification for the forecast or actual costs of the chosen alternative.

283. Accordingly, the Commission remains of the view that a business case and an engineering study should generally be provided for each project proposed for capital tracker treatment. At the same time, the Commission agrees with the parties' views that the level of detail and specifics of a business case and an engineering study may differ given the nature, complexity, and magnitude of the project proposed for capital tracker treatment. In this regard, the onus remains with the company applying for capital tracker treatment to provide sufficient evidence in support of its application.

284. In addition, the Commission accepts the companies' position that there is no need to engage external engineering consultants when a utility has sufficient in-house expertise on the type of activity undertaken in a capital project. The Commission considers that the following exchange with EPCOR's witness provides an example of when a company may need to rely on an external engineering resource to support a project proposed for capital tracker treatment:

> Q. Okay. So how do you determine that when you need an outside engineering study? Can you just walk me through kind of how that happens?
> A. MS. HULL: So it would be on a case-by-case basis. So, for instance, if we're having to install a power cable underneath, let's say, a highway or underneath a river or a big long drill, we'd go out and get the expertise in terms of helping us design the drill path for, let's say, a horizontal directional drill of a length that we don't usually do, let's say, underneath an urban roadway or an alley or a driveway. So when we don't have the expertise in-house, we go and seek it out in industry.[315]

285. As well, the Commission agrees with the companies' view that an engineering study does not necessarily have to be a "stamped and sealed" engineering study. As the ATCO companies explained, "engineers are bound by their professional obligations at all times, not just when stamping or sealing an engineering drawing or study."[316] Again, the Commission recognizes that the onus remains with the company applying for capital tracker treatment to provide sufficient evidence in support of its application.

286. The Commission agrees with the views of the companies that for some projects proposed for capital tracker treatment, engineering studies are not "appropriate, practicable or useful."[317] In particular, the Commission notes the submissions of the companies and the UCA's engineering experts that it may not be necessary to undertake an engineering study if there is an existing standard in place. This standard may be either an industry standard or a standard developed by a company.[318] An example of such standards are ATCO Electric's "Wood pole asset management guidelines"[319] and "Street light maintenance program."[320] However, a business case would still be required to support such projects. If standard evaluation criteria are applied to determine the need for a project, these standards must be referenced (if available online) or attached to a business

[315] Transcript, Volume 6, page 1065, line 25 to page 1066, line 12 (Hull).
[316] Exhibit 275.01, ATCO reply argument, paragraph 100.
[317] Exhibit 265.01, ATCO argument, paragraph 116.
[318] Transcript, Volume 10, pages 1910-1911 (Roberts).
[319] Exhibit 198.01, ATCO Electric rebuttal evidence to the UCA, Attachment 2.
[320] Exhibit 198.01, ATCO Electric rebuttal evidence to the UCA, Attachment 5.

case (if not available online). A short description must be provided to describe how an engineering standard relates to a project proposed for capital tracker treatment.

287. The general requirements of a typical business case and an engineering study supporting a project proposed for capital tracker treatment are set out in Section 10.2 of this decision dealing with minimum filing requirements for capital tracker applications.

3.2 Criterion 2 – Ordinarily the project must be for replacement of existing capital assets or undertaking the project must be required by an external party

3.2.1 "Ordinarily" and eligibility of growth projects for capital tracker treatment

288. The interpretation and application of the word "ordinarily" became the central focus of parties' submissions on Criterion 2 in this proceeding. In particular, parties differed on whether "ordinarily" could be interpreted to allow capital tracker treatment for projects related to either customer growth or load growth.

289. In Decision 2012-237, the Commission stated the following with respect to Criterion 2 and growth-related projects:

> 595. The second criterion generally limits the scope of eligible capital projects to those required for replacement of aged infrastructure that has come to the end of its useful life and those that are required by third parties, such as projects ordered by government agencies. It excludes projects required to accommodate customer or demand growth because a certain amount of capital growth is expected to occur as the system grows and system growth generates new sources of revenue that offset the costs of the new capital. The new sources of revenue can come in the form of increased customers and load growth, and also through contributions in aid of construction as prescribed by maximum investment level (MIL) policies.[321] (footnotes omitted)

290. Decision 2012-237 also considered the applicability of growth related projects for capital tracker treatment as part of its findings on capital trackers.

> 591. … In addition, as stated by the CCA "investments to meet customer and load growth trigger revenue growth and are largely self-funding," therefore these projects should not be eligible for capital tracker treatment if they result in customer and load growth because the incremental costs should be funded by other features of the PBR formula.[322] (footnote omitted)

291. AltaGas interpreted the word "ordinarily" to mean that, in most cases, a capital tracker project should be for asset replacement or for reasons imposed by a third party. To this end, AltaGas noted that it has not proposed any growth related projects for capital tracker treatment in 2013. However, AltaGas contended that Criterion 2 did not imply that a growth-related capital tracker could never be approved. AltaGas observed that the Commission's stated rationale for denying capital tracker treatment for growth-related expenditures in paragraph 595 of Decision 2012-237 was that there are alternative sources of revenue available to the utility to fund these costs. AltaGas noted that there may be instances "where new growth related additions,

[321] Decision 2012-237, paragraph 595.
[322] Decision 2012-237, paragraph 591.

by the sheer quantum of the rate base increase triggered by an identifiable project, may qualify for capital tracker treatment as an out of phase or lumpy investment."[323]

292. The ATCO companies submitted that, "once it is shown that the incremental revenues derived from growth are simply inadequate to cover the costs, Capital Tracker treatment should be granted."[324] In this regard, the ATCO companies submitted that the inclusion of the word "ordinarily" in the second criterion conveys the view that one would generally expect to see the project fall into either asset replacement or third-party-driven categories. However, according to ATCO, the word "ordinarily" is clearly not meant to be exclusive or meant to convey that there cannot be circumstances where projects would be able to satisfy this criterion without fitting into one of the two enumerated categories. According to the ATCO companies, the word "ordinarily" is intended to connote a degree of flexibility in the parameters required to satisfy Criterion 2.[325]

293. In a letter dated May 8, 2013, wherein EPCOR provided comments on the Commission's draft issues list, EPCOR commented on Criterion 2 and the availability of capital tracker treatment for growth related projects as follows:

> 8. Contrary to the UCA's position, the Commission did not expressly rule that such projects would never be approved under the capital tracker mechanism. The Commission's comments on growth projects in the Decision were clearly premised on its expectation at the time that a utility could adequately fund growth projects through incremental revenue (Decision 2012-237, paragraphs 591 and 595).
>
> 9. If, however, the underlying premise is not correct in the context of a growth project, then the conclusion that the project can be adequately funded within the PBR Plan (and thus outside of a capital tracker) does not hold. EDTI submits that the Commission's Decision does not stand for the proposition that the premise will always be accurate, or that it is unchallengeable. This is particularly evident when one considers that the Commission's primary rationale behind capital trackers is to provide a mechanism to fund capital requirements that are not otherwise funded by the I-X mechanism or through a Y or Z factor adjustment….[326]

294. EPCOR submitted in argument that the Commission's explanation of Criterion 2 is sufficiently broad to recognize that, if a company can demonstrate that a growth related project is not adequately funded under the I-X mechanism, then that project should be held to have met Criterion 2 and thereby qualifies for capital tracker treatment, providing the Commission's other criteria are met.[327]

295. Similarly, Fortis stated that the need to consider revenues related to projects proposed for capital tracker treatment was identified in paragraph 595 of Decision 2012-237. Accordingly, Fortis argued:

> The Customer Growth and Externally Driven capital expenditures are for new assets and the incremental costs associated with such incremental assets are in no way included in the prior year's rates. The expenditures are made either without any incremental revenue being generated (in the case of Externally Driven) or with only a fraction of the

[323] Exhibit 267.01, AltaGas argument, paragraph 82.
[324] Exhibit 275.01, ATCO reply argument, paragraph 123.
[325] Exhibit 265.01, ATCO argument, paragraph 123.
[326] Exhibit 138.01, EPCOR issues list reply comments, paragraphs 8 and 9.
[327] Exhibit 263.02, EPCOR argument, paragraph 240.

> incremental costs being covered by incremental revenue (in the case of Customer Growth). As a result, the I–X formula established in the Decision, taken alone, falls far short of providing the required opportunity to recover the cost of those incremental investments in response to growth made over the PBR term.[328]

296. The interveners did not agree with the companies' view that Criterion 2 permits capital tracker treatment for growth related projects. The UCA submitted that the inclusion by the Commission of the word "ordinarily" in the second criterion cannot be interpreted as allowing exceptions to the strict requirements outlined in that criterion. Such an interpretation would transform the second criterion from a requirement to a guideline.[329] According to the UCA, "this is contrary to the clear direction of the Commission that a 'structured, criteria based' approach is the preferable, and most objective approach for assessing capital trackers."[330]

297. In addition, the UCA argued specifically that growth projects should not be considered eligible for capital tracker treatment. In support of its position, the UCA offered a number of arguments. The UCA observed that, with the exception of few instances identified by Dr. Lowry, there are no precedents from other jurisdictions to support the inclusion of growth related projects as capital trackers.

298. The UCA submitted that allowing capital tracker treatment for growth projects must be considered with reference to the two underlying principles of a PBR regime. Because "unlike other projects, growth projects necessarily result in incremental revenues and, potentially costs,"[331] the UCA submitted the PBR principle that customers and utilities share in the benefits of a PBR plan requires that "these revenues and costs must be properly tracked and allocated to the capital tracker."[332] Similarly, the UCA noted that "fairness would require that incremental operating costs related to maintaining the assets be tracked to, and included within, the capital tracker."[333]

299. The UCA also referred to the PBR principle that plans should be easy to implement and administer, and should reduce the regulatory burden over time. The UCA noted that if growth projects are accepted as eligible for a capital tracker treatment by the Commission, this will increase the cost and regulatory burden of the PBR regime because of the need to ensure the proper matching of costs and revenues for growth projects. In light of these considerations, the UCA recommended that the Commission "confirm its initial conclusion in [paragraph 595 of Decision 2012-237] that the second criterion 'excludes projects required to accommodate customer or demand growth.'"[334]

300. Similarly, the CCA stated that a narrow interpretation of "ordinarily" is "vitally important to the realization of satisfactory capital tracker outcomes."[335] In this regard, the CCA expressed its view that growth-related projects should generally not be deemed eligible for capital tracker treatment. This is because "[b]risk system growth gives rise to scale economies, especially in the

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328 Exhibit 196.01, Fortis rebuttal evidence, paragraph 22.
329 Exhibit 268.02, UCA argument, paragraphs 112-113.
330 Exhibit 268.02, UCA argument, paragraph 163. Omitted footnote 134 in that paragraph refers to Decision 2012-237 at paragraph 587.
331 Exhibit 274.02, UCA reply argument, paragraph 158.
332 Exhibit 274.02, UCA reply argument, paragraph 158.
333 Exhibit 268.02, UCA argument, paragraph 134.
334 Exhibit 268.02, UCA argument, paragraph 169.
335 Exhibit 270.02, CCA argument, paragraph 40.

areas of O&M expenses," and growth-related investments "give rise to new customers and loads that provide additional funding for the cost of older plant as well as for the cost of the growth-related plant."[336]

301. In response to AUC-CCA-4, Dr. Lowry expressed his view that "few if any growth-related projects nominated by the utilities" should be afforded capital tracker treatment. However, Dr. Lowry conceded that "an extraordinary customer growth surge could potentially quality for K factor treatment on the grounds that i) it happens to occur in the first PBR period and may therefore jeopardize realization of the NPV version of the compensation principle and 2) it produces a temporary cost bump that increases operating risk."[337] During the hearing, Dr. Lowry agreed with Commission counsel that growth-related projects may qualify for capital tracker treatment based on an assessment of each project to determine the degree to which new revenue is generated in excess of costs associated with that project.[338]

302. The CCA submitted that these considerations help to explain why growth-related capital expenditures have rarely been recovered in capital trackers in the U.S. or Ontario except in special circumstances that did not apply in Alberta. The CCA also expressed its concern that, in the absence of multiyear capital cost projections, the companies "have an incentive 'to bunch' growth-related projects in 2013 in order to broaden the Commission's eligibility guidelines to include such projects."[339]

303. Calgary submitted that growth projects were specifically prohibited from capital tracker treatment in Decision 2012-237. In Calgary's submission, the word "ordinarily" speaks for itself on a plain and simple reading, that is, the proposed capital tracker projects must be shown to be for asset replacement purposes or driven by third-party requirements.[340]

304. In response to the interveners' arguments, Fortis noted that there is nothing ordinary about growth-related capital. Fortis submitted that, in paragraph 595 of Decision 2012-237, the Commission listed factors that are to be assessed to determine how much capital investment can be funded through system growth, including incremental revenue from increased customer and load growth, and contributions in aid of construction, as prescribed by MIL policies. Fortis clarified that its analysis and proposals expressly and fully account for such factors.[341] The ATCO companies[342] and EPCOR[343] also indicated that their respective analyses account for the incremental revenue arising from growth in billing determinants.

305. In addition, Fortis pointed to the fact that when the UCA's interpretations of Criterion 1 and Criterion 2 are considered together, no projects can qualify for capital tracker treatment:

> The UCA's perspective on Criterion 1 amounts to saying 'if the utility has made a certain type of investment earlier, that type of investment cannot meet Criterion 1 for tracker eligibility'. But, Criterion 2 is express on tracker eligibility "for replacement of existing

336 Exhibit 280.01, CCA reply argument, paragraphs 79-80.
337 Exhibit 163.01, AUC-CCA-4(a) and (b).
338 Transcript, Volume 12, page 2282, line 16 to page 2283, line 10 (Lowry).
339 Exhibit 270.02, CCA argument, paragraph 50.
340 Exhibit 269.01, Calgary argument, paragraph 160.
341 Exhibit 276.01, Fortis reply argument, paragraph 46.
342 Exhibit 265.01, ATCO argument, paragraph 161.
343 Exhibit 263.02, EPCOR argument, paragraph 265.

> capital assets". The UCA's interpretation of Criterion 1 thus directly contradicts an express aspect of Criterion 2, and the UCA's interpretation cannot hold.[344]

Commission findings

306. The word "ordinarily" in Criterion 2 at paragraph 592 of Decision 2012-237 was intended to have its commonly understood meaning of "usually" or "normally." Accordingly, Criterion 2 requires that in most cases a project proposed for capital tracker treatment should be for asset replacement or required by an external party. However, Criterion 2 does not restrict capital tracker treatment to projects that fall into one of these two categories. As noted above, Decision 2012-237 excluded projects required to accommodate customer, load or demand growth (growth-related projects) from capital tracker treatment on the basis that they are expected to generate "new sources of revenue that offset the costs of the new capital."[345]

307. In this proceeding, the companies asserted that this assumption of the Commission regarding growth-related projects may not necessarily hold in all cases. As noted above, while Dr. Lowry, on behalf of the CCA, did not support the inclusion of growth-related projects as capital trackers, he acknowledged that in some circumstances the Commission may want to consider growth-related projects for capital tracker treatment based on an assessment for each project to determine the degree to which new revenue is generated in excess of costs associated with that project.[346]

308. The Commission considers that the premise underlying the exclusion of growth-related projects requires some elaboration. To determine whether a growth related project qualifies for capital tracker treatment, the companies must first demonstrate that a project is outside of the normal course of the company's ongoing operations, as required by Criterion 1. As the Commission explained in Section 3.1.1, in order for a capital project to be considered outside of the normal course of the company's ongoing operations, the revenue provided under the I-X mechanism must not be sufficient to provide the entire revenue requirement associated with the projected capital expenditures for this project in a PBR year.

309. The Commission considers that, in principle, a growth-related project will satisfy the requirements of Criterion 2 where it can be demonstrated that customer contributions, together with incremental revenues allocated to the project on some reasonable basis, when added to the revenue provided under the I-X mechanism, are insufficient to offset the revenue requirement associated with the project in a PBR year.

310. In any event, as discussed in Section 4.3 of this decision, while a company may apply for capital tracker treatment for growth-related projects, the incremental revenues and customer contributions for growth-related projects are accounted for adequately in applying the criteria and calculating the K factor, as approved by the Commission. As a result, if a project, including a growth project, proposed for capital tracker treatment is self-funded (i.e., revenue provided under the I-X mechanism together with customer contributions and incremental revenues allocated to it largely offset the revenue requirement associated with the project in a PBR year), that project will not receive capital tracker treatment.

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344 Exhibit 276.01, Fortis reply argument, paragraph 45.
345 Decision 2012-237, paragraph 595.
346 Transcript, Volume 12, page 2282, line 16 to page 2283, line 10 (Lowry).

311. Although the UCA took the position that growth projects should not be approved as capital trackers, in the event the Commission approved a growth-related capital tracker, it should only do so on the basis that "revenues and costs must be properly tracked and allocated to the capital tracker."[347] The UCA recognized that tracking these revenues and costs would increase the cost and regulatory burden of the PBR regime. As discussed in Section 4.3, the Commission accepted a simplified methodology that allocates the impact on revenue of any changes in billing determinants to capital tracker projects, without the need to identify specifically the projects or portions of a project that give rise to the increase in billing determinants and the associated incremental revenues that will accrue in a PBR year, therefore avoiding the increased regulatory burden predicted by the UCA.

312. The CCA contended that growth-related projects should generally not be deemed eligible for capital tracker treatment because "[b]risk system growth gives rise to scale economies, especially in the areas of O&M expenses."[348] The UCA agreed with its witness, Mr. Bell that "[i]n order to be fair, if incremental revenues relate to new load, then incremental operating costs related to maintaining the assets that serve new load should also be included in the tracker."[349] As set out in sections 3.1.2.2 and 3.1.2.3, the Commission considered this issue and found that neither O&M savings and potential productivity offsets (including economies of scale) nor O&M incremental costs will be considered by the Commission in assessing the eligibility of a capital project for capital tracker treatment.

313. The UCA and the CCA also pointed out that, with the exception of a few instances identified by Dr. Lowry, there are no precedents from other jurisdictions to support the inclusion of growth-related projects as capital trackers. The Commission agrees with Dr. Weisman's view that "the CCA's observation cuts both ways – just as the pervasive use of capital trackers in the U.S. does not, in and of itself, validate their applicability in Alberta, nor does it establish conclusively that they are not appropriate."[350]

314. Finally, as discussed in Section 3.2.4, Criterion 2 permits consideration of certain projects for capital tracker treatment that do not fall into any of the growth-related, asset replacement or external party related categories.

3.2.2 Asset replacement

315. The second criterion for capital trackers contemplates that projects to replace existing capital assets may qualify for capital tracker treatment. Parties agreed that capital projects required for the replacement of aged infrastructure that has come to the end of its useful life may qualify for capital tracker treatment, subject to satisfying the Commission's other capital tracker criteria.

316. While agreeing that some capital replacement projects may qualify for capital tracker treatment, the CCA commented that while "supplemental funding for asset replacement projects may be warranted in some cases, it is nonetheless regrettable because deferral of such projects is a key source of productivity gains under PBR."[351] In response to AG-CCA-9, Dr. Lowry quoted a paper by a British regulator stating that "in recent years, companies have tended to extend the

[347] Exhibit 274.02, UCA reply argument, paragraph 158.
[348] Exhibit 280.01, CCA reply argument, paragraph 80.
[349] Exhibit 176.03, supplemental evidence of R. Bell, page 5, lines 14-16.
[350] Exhibit 199.02, rebuttal evidence of Dr. Weisman, page 11.
[351] Exhibit 270.02, CCA argument, paragraph 43.

lives of most asset types without apparent deterioration in network performance during the price control period."[352]

317. Other than the above comment by the CCA, two issues arose in this proceeding with respect to the eligibility of asset replacement projects for capital tracker treatment under Criterion 2.

318. The first issue involves the replacement of an aged asset that results in the addition of incremental capacity. With respect to this issue, the UCA submitted that for projects which seek to replace aged or depreciated assets with new assets with an increased capacity, capital tracker treatment must only be afforded to that portion of the project which represents a "like for like" replacement, subject to satisfying the other criteria for capital tracker treatment. To the extent that a new asset results in increased capacity, thereby allowing for customer or demand growth, that portion of the asset cost should be funded by the associated incremental revenues.[353]

319. In response, the ATCO companies submitted that "it would not be appropriate to install new facilities without giving full consideration to the lifecycle costs of the assets, ensuring that they are sufficient to perform the intended function for their full life span as economically as possible."[354] As well, in many circumstances, like-for-like replacement of assets is not possible since the original equipment or materials are now obsolete and impossible to procure. The ATCO companies also noted that sometimes additional capacity occurs simply because there is a standard size of asset that must be used. Design standards specify the most economical materials currently available.[355]

320. In a similar vein, AltaGas acknowledged that there may be cases where assets are replaced with assets better suited to meet current demand. However, AltaGas indicated that "while such replacements may allow for increased capacity, the increase is incidental and not the primary driver for the project."[356] Further, AltaGas submitted the incremental cost associated with incidental capacity increases are "generally not significant."[357]

321. The second issue with respect to asset replacement was raised by the ATCO companies. The ATCO companies submitted that the Commission should allow capital tracker treatment to capital projects required to extend the life of an asset rather than to replace it, when extending the life of the asset is the prudent course of action.

322. In this regard, the ATCO companies stated that life extension is an integral part of the management of the life cycle of assets. By way of example, the ATCO companies pointed out that the life extension activities on underground cable can be expected to extend the life of some cables for 20 years or more. In essence, that results in the replacement of the asset, which can no longer be used in its current condition, but at a lower cost than completely removing the existing cable and replacing it.[358]

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[352] Exhibit 164.01, AG-CCA-9(a). Footnote 1 refers to the following paper: Offer, Review of Public Electricity Suppliers: 1998-2000, Distribution Price Control Review: Consultation Paper, May 1999, page 46.
[353] Exhibit 268.02, UCA argument, paragraphs 117-118.
[354] Exhibit 275.01, ATCO reply argument, paragraph 129.
[355] Exhibit 275.01, ATCO reply argument, paragraph 129.
[356] Exhibit 279.01, AltaGas reply argument, paragraph 76.
[357] Exhibit 279.01, AltaGas reply argument, paragraph 76.
[358] Exhibit 265.01, ATCO argument, paragraphs 125-126.

323. The UCA submitted that life extension projects result in efficiencies through substitution among various types of inputs and the minimization of overall capital costs. According to the UCA, rather than constituting an exception to the PBR regime in the form of a capital tracker, "these projects appear to be a perfect example of the efficiencies which the incentives under PBR are designed to induce."[359] Therefore, the UCA concluded that life extension projects "are best funded under the I-X mechanism of PBR and should not be treated as a capital tracker."[360]

324. In addition, the UCA observed that, if the life of an asset has been extended, then the expected depreciation life should increase as a result, and the annual depreciation expense will thereby be reduced. If life extension projects qualify for capital tracker treatment, it is unfair that the impact on depreciation rates is not credited to customers.[361]

325. Calgary shared the UCA's view that life extension projects should not qualify for capital tracker treatment under Criterion 2. In support of its position, Calgary noted that Decision 2012-237 contains no references, either explicitly or implicitly, to the term "life extension."[362]

Commission findings

326. With respect to the CCA's comment that it is possible to extend the lives of most asset types without apparent deterioration in network performance during the PBR term, the Commission observes that, as part of the project assessment requirements under Criterion 1, the companies must file a business case and potentially an engineering study to demonstrate that capital tracker projects are of sufficient importance that the company's ability to provide utility service at adequate levels would be compromised if the expenditures are not undertaken. In Section 3.1.4 of this decision, the Commission has determined that it will assess a business case and an engineering study for each project provided by the companies, as well as engineering or other evidence provided by interveners, to determine whether the project could be deferred or an alternative project (e.g., life extension) could be undertaken at a lower cost, without compromising the quality of service.

327. With respect to the replacement of aging infrastructure that results in the addition of incremental capacity, the UCA submitted that, because new assets resulting in increased capacity also result in an increase in billing determinants, the incremental cost of these assets should be funded by the resulting incremental revenues.[363] In this regard, the Commission notes that increased capacity may not always result in an increase in billing determinants and associated incremental revenues in the PBR year. As the ATCO companies stated, when installing new assets, it is necessary to consider "the lifecycle costs of the assets, ensuring that they are sufficient to perform the intended function for their full life span as economically as possible."[364] Further, the Commission notes the view of AltaGas that, while some asset replacement projects may allow for increased capacity, "the increase is incidental and not the primary driver for the project."[365] Likewise, the ATCO companies stated that an increase in capacity may occur as a by-product of a project design or because a like-for-like replacement of assets is not possible, either because there is a new standard in place or because the original equipment or materials are

[359] Exhibit 274.02, UCA reply argument, paragraph 173.
[360] Exhibit 274.02, UCA reply argument, paragraph 174.
[361] Exhibit 274.02, UCA reply argument, paragraph 176.
[362] Exhibit 277.01, Calgary reply argument, paragraph 186.
[363] Exhibit 268.02, UCA argument, paragraphs 117-118.
[364] Exhibit 275.01, ATCO reply argument, paragraph 129.
[365] Exhibit 279.01, AltaGas reply argument, paragraph 76.

obsolete and impossible to procure.[366] The Commission agrees and finds that it is not possible to determine easily when an asset replacement project or a portion of a project, resulting in incremental capacity, is required to accommodate customer growth, load growth, or demand growth, or when it results in an increase in billing determinants and associated incremental revenues in the PBR year.

328. Nonetheless, as detailed in Section 4.3 of this decision, any incremental revenues arising from projects resulting in incremental capacity are accounted for adequately in applying the criteria and calculating the K factor, as approved by the Commission. Under the Commission-approved K factor calculation methodology, the impact on revenue of any changes in billing determinants, including any increase in billing determinants that may be driven by incremental capacity, is allocated proportionally to capital tracker projects without the need to identify specifically the projects or portions of a project that result in incremental capacity and the associated incremental revenues that will accrue in a PBR year.

329. The Commission agrees with the ATCO companies' proposal that capital tracker treatment be afforded to capital projects required to extend the life of an asset, rather than to replace it, when extending the life of the asset is the prudent course of action. Life extension is part of asset life cycle management. As the ATCO companies explained, they rely on their long-standing practices to determine when to undertake capital projects for life extension, replacement, or repair.[367] Because a capital life extension project has the same objective as a replacement project, namely to ensure continued quality service, the Commission does not consider that one form of capital investment should be excluded from capital tracker treatment while the other is permitted. If life extension projects were ineligible for capital tracker treatment, a company may be incented to replace capital assets (for which capital tracker treatment is available) rather than undertake a less expensive capital project to extend the life of the asset. Accordingly, the Commission finds that for the purpose of capital tracker applications, life extension capital projects, as defined by a company's existing capitalization policy, may be considered for capital tracker treatment under Criterion 2, when they satisfy the other capital tracker criteria.

330. Given this finding, the Commission notes that the companies' respective capitalization policies cannot be altered without informing the Commission. As set out in paragraph 862 of Decision 2012-237, the companies are required to inform the Commission of "any changes in accounting methods, including assumptions respecting capitalization of labour and overhead and associated impacts."

3.2.3 Required by an external party

331. The second criterion for capital tracker treatment contemplates that capital projects required by an external party, such as projects ordered by government agencies, may qualify for capital tracker treatment.[368] The Commission's reasoning for consideration of such projects is demonstrated in the following statement:

> 599. The Commission is aware that some of the capital costs for distribution utilities would otherwise not be required were it not for the activities of transmission or system operator entities or other external parties, and that the costs to the distribution utilities can

[366] Exhibit 275.01, ATCO reply argument, paragraph 129.
[367] Exhibit 265.01, ATCO argument, paragraph 127.
[368] Decision 2012-237, paragraph 595.

> be material and can vary significantly from year-to-year. Due to a company's obligation to provide service there is no opportunity for the company to turn down the project on the basis that company could not recover its costs because the project may not meet the capital tracker criteria, and therefore the company would be exposed to not receiving adequate compensation for undertaking the project.[369]

332. At the same time, the Commission stressed that while there is an obligation on the company to perform the work, "a company must demonstrate that such costs are significantly different than historical trends to qualify for capital tracker treatment, otherwise there is a likelihood for double-counting."[370]

333. Parties to this proceeding advanced varying positions on who should be considered an external party and which projects should be considered externally driven.

334. The ATCO companies submitted that external parties included customers, governments, government agencies, municipalities, and transmission service providers. They also submitted that growth and capacity-related investments should qualify as being required by an external party because those investments are driven solely by these parties and the companies have no choice but to complete this work when it is required.[371]

335. Fortis noted that all of its proposed externally driven and customer growth projects should be recognized and accepted as driven by external parties. Fortis explained that it "cannot decline the external requests of customers for new or increased service, nor can it deny the requests of other third parties such as the AESO, Alberta Transportation, and so forth."[372]

336. EPCOR indicated that some of its proposed capital tracker projects must be undertaken by the company at the behest of external parties. Specifically, EPCOR classified distribution system franchise relocations driven by southeast and west LRT expansion, the Walterdale Bridge replacement, the Queen Elizabeth II Highway and 41st Avenue interchange projects and other franchise agreement-driven relocations and conversions as capital trackers driven by an external party.[373] EPCOR pointed out that it is not in a position to reject these projects on the basis that it might not recover its costs.[374]

337. During the hearing, EPCOR's witness, Mr. Elford, appeared to suggest that projects driven by customer growth may also be considered externally driven:

> And then within that list all those projects are either related to lifecycle replacement of existing assets or are required by a third party, be it our franchise agreement, Measurement Canada, or in other cases driven by customer growth, which from our perspective is a third party requiring service that we can not refuse.[375]

[369] Decision 2012-237, paragraph 599.
[370] Decision 2012-237, paragraph 600.
[371] Exhibit 265.01, ATCO argument, paragraphs 128-129.
[372] Exhibit 196.01, Fortis rebuttal evidence, paragraph 27.
[373] Exhibit 199.01, EPCOR rebuttal evidence, Table 1-1, page 4.
[374] Exhibit 263.02, EPCOR argument, paragraph 243.
[375] Transcript, Volume 6, page 1104, lines 5-10 (Elford).

338. AltaGas submitted that its two gas supply projects proposed for capital tracker treatment are primarily driven by the actions of external parties, AltaGas' gas suppliers, and are beyond the company's control.[376]

339. The UCA did not agree with the definition of an external party as advanced by some of the companies. Specifically, the UCA did not agree that projects initiated to accommodate customer or demand growth should be viewed as externally driven or required by third parties. According to the UCA, to "allow a broad reading of the term will prompt the Utilities to engage in a self-serving characterization of otherwise routine expenditures in an attempt to satisfy this criteria, thereby weakening the restrictive application of the second criterion."[377] The UCA concluded that merely because a project is, arguably, not internally driven, does not mean that it is "required by third parties," as that term was intended by the Commission in Decision 2012-237.[378]

340. In Calgary's submission, the definition of external party should refer to an independent third party at arms-length from the utility. Otherwise, a non-arms-length party, for example an affiliate, could and, likely would, work in the interest of their common ownership to maximize return.[379]

341. PEG, on behalf of the CCA, indicated that externally driven projects are those required by government agencies. By way of example, PEG noted that an energy distributor might "be compelled to make capital expenditures due to highway relocations, new transmission line construction, or changes in government safety or reliability standards or conductor undergrounding requirements."[380] During the hearing, Dr. Lowry confirmed that externally-driven projects are directed by government agencies and do not include projects driven by customers.[381] Dr. Lowry summarized his views as follows:

> Q. And again, we're talking about government-directed types of activity; is that right?
> A. Government. And the utilities made the point that, well, sometimes the transmission system wants to you do something and you have to comply with that, too. And fair enough, I guess, that that's true. And so any time that someone, other than a customer, at least, can make you do something that costs money.[382]

342. The CCA indicated that externally driven projects "are another sensible K factor eligibility category."[383] According to the CCA, the projects are non-discretionary, and the capital tracker treatment of these investments "provides a feedback mechanism to government agencies which encourages them to make more reasonable requests."[384] The CCA pointed out that externally driven projects were awarded capital tracker treatment for several U.S. energy

[376] Exhibit 267.01, AltaGas argument, paragraph 76 and Exhibit 279.01, AltaGas reply argument, paragraph 81.
[377] Exhibit 268.02, UCA argument, paragraph 121.
[378] Exhibit 268.02, UCA argument, paragraph 164. Omitted footnote 135 in that paragraph refers to paragraph 595 of Decision 2012-237.
[379] Exhibit 269.01, Calgary argument, paragraphs 174-175, and Exhibit 277.01, Calgary reply argument, paragraph 188.
[380] Exhibit 108.01, PEG evidence, page 12.
[381] Transcript, Volume 12, page 2371, lines 6-16 (Lowry).
[382] Transcript, Volume 12, page 2372, lines 10-17 (Lowry).
[383] Exhibit 270.02, CCA argument, paragraph 44.
[384] Exhibit 270.02, CCA argument, paragraph 44.

distributors. Externally driven projects are also commonly eligible for Z factor treatment in PBR plans.

Commission findings

343. The Commission considers that externally driven projects are those required by external parties such as federal and provincial governments and government agencies, municipalities, gas and electric transmission service providers, and similar entities. This finding is consistent with the Commission's references to government agencies and transmission or system operator entities in Decision 2012-237.[385]

344. Parties to this proceeding could not agree on whether projects undertaken to accommodate customer growth, load growth, or demand growth should be viewed as externally driven. The Commission determined in Section 3.2.1, that a growth-related project will satisfy the requirements of Criterion 2 where it can be demonstrated that customer contributions together with the incremental revenues allocated to the project on some reasonable basis, when added to the revenue provided under the I-X mechanism, are insufficient to largely offset the revenue requirement associated with the project in a PBR year. Further, as set out in Section 4.3 of this decision, under the Commission-approved K factor calculation methodology, the impact on revenue of any changes in billing determinants is proportionally allocated to capital tracker projects without the need to specifically identify the projects or portions of a project that give rise to the increase in billing determinants and the associated incremental revenues that will accrue in a PBR year. Accordingly, the Commission considers that the issue of whether projects undertaken to accommodate customer growth, load growth, or demand growth should be viewed as externally driven and, therefore, eligible for capital tracker treatment under Criterion 2, has been addressed.

345. Calgary submitted that the definition of external party should refer to an independent third party at arms-length from the utility.[386] The Commission considers that Calgary's concern has been addressed by the requirement to file a business case and an engineering study for each capital tracker project under the project assessment requirement of Criterion 1, including the requirement to demonstrate that capital tracker projects are of sufficient importance that the company's ability to provide utility service at adequate levels would be compromised if the expenditures are not undertaken. The Commission's review of a business case and an engineering study for each project proposed for capital tracker treatment, including projects involving a non-arms-length third party, would necessarily consider whether a project is the best alternative to provide utility service at adequate levels.

3.2.4 Other types of projects that may be eligible under Criterion 2

346. Several of the companies applied for capital tracker treatment for projects that are not related to capital asset replacement, are not required by external parties and are not growth-related. This section will consider if these projects are eligible for capital tracker treatment under Criterion 2.

347. In its argument, Fortis discussed its DCC/SCADA as an example of other types of projects that cannot be funded under the I-X mechanism that should be subject to capital tracker treatment. Fortis explained that the DCC/SCADA project is a new investment that will replace,

[385] Decision 2012-237, paragraphs 595 and 599.
[386] Exhibit 269.01, Calgary argument, paragraph 175.

with an automated outage management system, antiquated manual systems that rely on customer calls to identify and troubleshoot power outages. Fortis argued that this project is outside the normal course of the company's ongoing operations, has a material financial impact on the company, and replaces and/or enhances existing technology, processes and procedures, and therefore fits the criteria for capital tracker treatment.[387]

348. AltaGas provided examples of other types of projects that could potentially be eligible for capital tracker treatment:

> At the hearing and as noted in its Argument, AUI suggested upgrading the gas supply to an entire town was an example of a project where the substantial upfront costs would take many years to recover and might be out of sync with the revenue required to fund the investment. [X267.01, para.83] A further example consistent with the objectives of AUI's gas supply program could be establishing a secondary, redundant gas supply for customers currently dependent on a single source. The primary driver for such projects would not be to generate additional revenue, but rather mitigate the risk of human loss and property damage.[388]

349. The CCA acknowledged that some other types of projects undertaken by energy distributors could potentially be eligible for capital tracker treatment.[389] The CCA noted that PEG, in its testimony, provided examples of projects that may qualify for capital tracker treatment, as including automated metering infrastructure, projects to comply with rising reliability standards, and large gas transmission and storage projects that fundamentally change the mission of a natural gas distributor.[390] In his oral testimony, Dr. Lowry stated that if the Commission wishes to broaden eligibility for capital tracker treatment to enhance utility revenue, DCC/SCADA systems would be a good candidate.[391]

Commission findings

350. As set out in sections 3.2.1 to 3.2.3 of this decision, Criterion 2 generally permits consideration of projects for capital tracker treatment that are required for asset replacement, projects required by external parties, and those growth-related projects where it can be demonstrated that customer contributions together with the incremental revenues allocated to the project on some reasonable basis, when added to the revenue provided under the I-X mechanism, are insufficient to largely offset the revenue requirement associated with the project in a PBR year.

351. As noted in Section 3.2.1 of this decision, the inclusion of the word "ordinarily" in Criterion 2 means that the criterion does not necessarily restrict capital tracker treatment to projects that fall into one of the above categories (asset replacement, externally driven, and growth-related). Capital projects may arise during the PBR term that do not precisely fit into any of these three categories, but may still be eligible for capital tracker treatment where it can be demonstrated that a project is not adequately funded under the I-X mechanism, and is sufficiently important to the company, so that its ability to provide utility service at adequate

[387] Exhibit 262.01, Fortis argument, paragraphs 84-89.
[388] Exhibit 279.01, AltaGas reply argument, paragraph 90.
[389] Exhibit 270.02, CCA argument, paragraph 45.
[390] Exhibit 108.01, PEG evidence, page 3.
[391] Transcript, Volume 12, page 2283, line 11 to page 2284, line 25 (Lowry).

levels would be compromised if the expenditures are not undertaken. The Commission will consider these projects on an individual, case-by-case basis.

3.3 Criterion 3 – The project must have a material effect on the company's finances

352. In Decision 2012-237, the Commission established a materiality test as the third capital tracker criterion. The third criterion provides that the "project must have a material effect on the company's finances."[392] The Commission considered that a materiality test was required in part because of the regulatory burden associated with the administration of a tracker.[393]

353. Each of the companies addressed the materiality test under Criterion 3 in their applications. In addition, the Commission sought parties' views on the application and quantification of the materiality test.[394] The Commission inquired how a materiality threshold should be determined, tested and applied, and whether the threshold should be unique to a specific company or the same for all companies. Further, parties were asked to comment on whether a threshold calculation based on a pre-determined basis point effect on return on equity (ROE), as used for Z factors and Y factors under PBR, would be appropriate.

354. In the applications submitted by the companies, only EPCOR subjected its projects proposed for capital tracker treatment to a materiality threshold, which was set at $100,000 applied to the portion of the revenue requirement for a project that is not funded under the I-X mechanism.[395] EPCOR stated that a company-specific threshold created efficiency incentives and would ensure that service quality is maintained while providing an opportunity for the utility to recover its prudently incurred costs.[396] EPCOR also stated that a materiality threshold, based on the level used to evaluate Z factors, would not result in an appropriate materiality threshold, citing that in the case of EPCOR, a 40 basis point threshold would be equivalent to a threshold of $1.0 million.

355. EPCOR applied for two Category 1 projects, the QEII and Life Cycle PILC Cable projects, that did not meet EPCOR's proposed materiality threshold of $100,000. EPCOR submitted that the projects in question represented $2.0 million and $1.04 million in capital additions in 2013, respectively, would have a larger impact when all capital additions over the PBR term were considered, and should therefore still qualify for capital tracker treatment.[397] EPCOR submitted that its Category 1 capital tracker materiality threshold should be applied to the total cost impact of the project over the PBR term and not the current year cost impact, whereas its Category 2 capital tracker projects met the threshold in the first year.[398]

356. AltaGas provided some guidance on why a materiality threshold is necessary for projects proposed for capital tracker treatment, identifying two basic purposes for the threshold:

- To avoid the potential regulatory burden associated with items that are clearly insignificant; and

[392] Decision 2012-237, paragraph 592.
[393] Decision 2012-237, paragraph 601.
[394] Exhibit 49.01, AUC-AUI-2; Exhibit 50.01, AUC-AG-2; Exhibit 51.01, AUC-AE-2; Exhibit 53.01, AUC-EDTI-2; Exhibit 55.01, AUC-FAI-2.
[395] Exhibit 38.39, EPCOR submission, Schedule 2, Tab 3. 2012 RR, column BF.
[396] Exhibit 86.01, AUC-EDTI-2.
[397] Exhibit 263.02, EPCOR argument, paragraph 253.
[398] Transcript, Volume 6, pages 1085 to 1088.

- To recognize the PBR model, like any regulatory model, is inherently imprecise. Even if the model attempts to be fair as far as possible, not all items can be precisely measured at any moment in time. This imprecision may favour or hurt the utility. For example, a capital tracker investment may result in incidental O&M savings—use of a materiality threshold would simply mean the investment and/or related return at stake must be greater than such savings. The use of a materiality threshold can be seen as a way to smooth deficiencies in the model so not every dollar that might otherwise be considered for capital tracker treatment may actually receive it.[399]

357. AltaGas did not propose a specific materiality threshold in its application but stated that the investment in each project represented a significant and material cost with multi-year impacts.[400] In response to a Commission information request, AltaGas clarified that a company-specific materiality threshold of no greater than 10 to 20 basis points of ROE should be applied. AltaGas stated that the threshold should be related to the capital expenditure proposed for capital tracker treatment because that is the amount the utility must finance. AltaGas further proposed that the threshold should be applied on a cumulative basis because every dollar a company invests in capital must generate a fair return.[401] In reply argument, AltaGas submitted that, while it is appropriate to consider the materiality of individual capital tracker projects, any threshold should ultimately take into account, and be applied in relation to, the cumulative impact on the company's finances.[402]

358. Fortis did not specify a materiality threshold. In response to a Commission information request, Fortis stated that such thresholds are largely inappropriate and should not be applied to capital tracker projects.[403] During the hearing, Fortis clarified that the nature of the capital tracker projects, in that they are unavoidable costs demonstrated to be outside of what the PBR formula provides in revenues, speaks to the fact that they should not be subject to materiality. When responding to Commission counsel's question asked with respect to a single project, Fortis proposed that the materiality criterion, if applied, needs to be considered on a "project-by-project basis without losing sight for the cumulative impacts on materiality of the entire revenue shortfall…"[404] In argument, Fortis reiterated that all prudently incurred capital tracker costs should be eligible for recovery, stating that the data provided in its revenue shortfall table[405] confirm the materiality of the capital trackers requested both individually and collectively.[406] Further, "a tariff for FortisAlberta is required by law to provide it with a reasonable opportunity to recover, *inter alia*, all its capital-driven costs, so long as those costs are prudently incurred to provide the services required of it."[407]

359. Neither ATCO Gas nor ATCO Electric quantified a materiality threshold in their applications and stated in response to Commission information requests that their "Reasoned

399 Exhibit 90.01, AUC-AUI-2(a).
400 Exhibit 39.01, AltaGas application, paragraph 20.
401 Exhibit 90.01, AUC-AUI-2.
402 Exhibit 279.01, AltaGas reply argument, paragraph 99.
403 Exhibit 75.02, AUC-FAI-2.
404 Transcript, Volume 8, page 1542.
405 Exhibit 262.01, Fortis argument, paragraph 93.
406 Exhibit 262.01, Fortis argument, paragraph 90-95.
407 Exhibit 276.01, Fortis reply argument, paragraph 58.

Demonstration" analysis, in effect, established a materiality threshold by identifying a funding shortfall for each company.[408]

360. The ATCO companies submitted that denying capital tracker treatment that has been designed to recover prudently incurred costs for a project that is not funded under the I-X mechanism because the costs do not meet some project-by-project materiality threshold would impair the companies' ability to recover capital investments and would be contrary to its legislative mandate to provide service.[409] The ATCO companies asserted that this would occur not only in the year in which the expenditures were made but over the entire term of the PBR plan, thereby compounding the impact on the company.

361. Further, the ATCO companies noted that "as a result of the use of the mid-year convention in the determination of the K Factor, while a change in K Factor may appear immaterial, the amount of capital investment it relates to would not be immaterial."[410]

362. In argument, the ATCO companies expressed their view that Decision 2012-237 did not contemplate the imposition of a numerical materiality threshold and further that the companies were already subject to PBR-related materiality thresholds with respect to the calculation of Z factors and Y factors.[411] The ATCO companies contended that the assessment of an additional materiality threshold for capital trackers would further reduce their reasonable opportunity to recover their prudently incurred capital costs.

363. In his evidence for the ATCO companies, Dr. Makholm indicated that a materiality criterion was a practical one, serving to weigh the justification for a capital tracker against the regulatory burden of addressing each capital tracker.[412] During the oral hearing, Dr. Makholm indicated that the materiality criterion has two elements to it, the first being "whether it's worth the expense to go after" and the second being "whether it has an effect on the company."[413] Dr. Makholm explained: "[c]ertainly it would be no point in evaluating a tracker that had no material effect on the company's finances."[414]

364. When asked at the hearing whether the reasoned demonstration analysis performed by the ATCO companies was sufficient to demonstrate the materiality of the requested capital trackers, Dr. Makholm responded: "I think for all practical purposes, yes, it's sufficient."[415] Dr. Makholm later offered that, while the third criterion is useful, defining it numerically would be counterproductive because establishing such a threshold would affect company behavior.[416]

365. Dr. Lowry, on behalf of the CCA, indicated during the hearing that he had not fully developed a view on how to apply the materiality criterion. He did, however, indicate "there is benefit to having one threshold for individual claims and another for the aggregated claims."[417]

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408 Exhibit 81.01, AUC-AE-2(c) and Exhibit 74.01, AUC-AG-2(c).
409 Exhibit 275.01, ATCO reply argument, paragraph 142.
410 Exhibit 81.01, AUC-AE-2(a-b); Exhibit 74.01, AUC-AG-2(a-b).
411 Exhibit 265.01, ATCO argument, paragraphs 135 and 137.
412 Exhibit 36.01, ATCO Gas application, Appendix A, page 8.
413 Transcript, Volume 1, page 174, lines 1-5.
414 Transcript, Volume 1, page 174, lines 8-10.
415 Transcript, Volume 1, page 177, lines 3-4.
416 Transcript, Volume 2, page 272.
417 Exhibit 163.01, AUC-CCA-1(c).

366. Calgary submitted in argument that a company must show an effect on financing costs before a capital tracker would satisfy the third criterion. Calgary submitted that ATCO Gas had not provided any evidence demonstrating that there would be a material effect on the company if its capital tracker proposals were denied.[418] Calgary stated that ATCO Gas "erroneously uses unconnected logic or flawed rationale" when it concludes that a denial of a material expenditure results in a material effect on its finances, and requested the Commission to reject ATCO Gas' arguments that it would suffer adverse effects on its finances if its capital trackers were denied.[419]

367. Mr. Bell on behalf of the UCA, did not provide specific recommendations for a materiality threshold to be applied to each company's capital trackers in his evidence. With respect to EPCOR, he suggested that projects with K factor adjustments of less than of $0.200 million were not material.[420] Mr. Bell commented during the hearing that the inability of a company to qualify a multi-year project for capital tracker treatment in one year, because it did not meet the materiality threshold, should not preclude recovery of the total project costs in subsequent years when spending had increased sufficiently to meet the threshold.[421] Mr. Bell provided the following example where, in the years 2013 and 2014, a project incurred costs which did not qualify for capital tracker treatment due to materiality:

> In 2015 when the project is complete and it has an impact on rates, it should include the whole project. Just because it took three years to build and commission or two and a half years, or whatever the project was, I don't think you should hinder the utility from getting recovery of costs just because they have spread it out. But it's still contingent upon them demonstrating materiality and demonstrating that it meets the other two criteria.[422]

368. The UCA submitted that the Commission acceptance of any of the companies' arguments that the consideration of materiality must examine the cumulative capital shortfall throughout the PBR term would be in error. In the UCA's opinion, the Commission intended materiality to apply to a specific project or appropriate grouping of projects and was meant to limit the use of capital trackers.

369. In argument and reply argument, the UCA modified its position on the determination of a materiality threshold to provide clearer guidance on how to approach materiality.[423] The UCA, in its reply argument, stated that "it would be in the best interest of the Commission, the utilities, customers and the PBR regime, to adopt a certain, objective materiality threshold to be utilized in the application of the third criterion."[424] The UCA recommended that:

> …the Commission direct and adopt a specific formula for assessing materiality under the third criterion. In doing such, the UCA submits that it would be appropriate and practical for the Commission to borrow from and adapt the formula for a materiality assessment put forward by the Commission for the application of the Z factor, having specific regard to the restrictive approach in which applications for treatment as a capital tracker must be assessed.[425]

[418] Exhibit 269.01, Calgary argument, paragraph 229.
[419] Exhibit 277.01, Calgary reply argument, paragraphs 28 and 29.
[420] Exhibit 111.03, UCA evidence of R. Bell, page 17, lines 10 to 13.
[421] Transcript, Volume 11, page 2121.
[422] Transcript, Volume 11, page 2123.
[423] Exhibit 266.02, UCA argument, paragraph 182.
[424] Exhibit 274.02, UCA reply argument, paragraph 206.
[425] Exhibit 268.02, UCA argument, paragraph 216.

370. The UCA further clarified that the Commission should establish "a specific materiality threshold under the third criterion, to be expressed as a dollar value of the 50 basis point change in ROE, on an after tax basis, on the Utility's equity used to determine the revenue requirement on which going-in rates were established. This dollar amount should then be escalated by I minus X, annually."[426]

371. In reply argument, Fortis stated that the UCA's recommendation to adopt a materiality threshold with a dollar value equivalent to a 50 basis points change in ROE was unsupported by evidence and, further, by being proposed during the argument phase, was both procedurally wrong and inappropriate in nature.[427] A similar view was expressed by the ATCO companies. Both Fortis and the ATCO companies indicated that the threshold suggested by the UCA would be too high. The ATCO companies estimated the UCA recommendation to be a threshold of $4.4 million for ATCO Gas, and a comparable value for ATCO Electric.[428] Fortis estimated that the UCA's recommendation would establish a threshold of $4.5 million in 2013.[429]

Commission findings

372. The Commission considers that a materiality threshold will contribute to regulatory efficiency in a PBR environment. As described by NERA during the PBR proceeding and highlighted in Decision 2012-237, in order to justify the regulatory burden associated with the administration of a capital tracker, the costs associated with projects proposed for capital tracker treatment should be substantial.[430] Projects that are small and have a minimal impact on a company's finances would still require regulatory resources from the company to produce an application and for other parties to assess the application, and, therefore, it is reasonable to exclude some projects on the basis of regulatory efficiency.

373. K factors, like Y factors and Z factors, are intended to provide a company with the opportunity to recover additional funds in circumstances where the I-X mechanism does not provide sufficient revenue. Each of these potential sources of additional revenue is intended to fund only actual, prudently incurred costs not otherwise provided for under the I-X mechanism. Y factors provide additional revenue in circumstances where prudently incurred and material costs are beyond the control of management, are not addressed through the I factor and are of a recurring nature and potentially highly variable. Z factors have similar criteria but do not deal with costs of a recurring nature. Rather they address the impact of unforeseen events.

374. Capital trackers, recovered through a K factor, address certain capital requirements outside of the ordinary course of the company's ongoing operations. In Decision 2012-237, the Commission imposed a requirement that the additional revenue applied for through a Y factor or Z factor or by way of a capital tracker must be material so as to preserve the regulatory efficiencies intended by PBR. A decreased regulatory burden allows a company to focus on the cost efficient management of its business in the incentive environment created under PBR, ultimately achieving productivity improvements that would benefit both the companies and customers.

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426 Exhibit 268.02, UCA argument, paragraph 217.
427 Exhibit 276.01, Fortis reply argument, paragraph 57.
428 Exhibit 275.01, ATCO Gas and ATCO Electric reply argument, paragraph 139.
429 Exhibit 276.01, Fortis reply argument, paragraph 60.
430 Decision 2012-237, paragraph 601. Footnote 740 in that paragraph refers to Proceeding ID No. 566, Transcript, Dr. Makholm, Volume 1, page 171.

375. The Commission established a materiality threshold for both a Y factor and a Z factor as the dollar value of a 40 basis point change in ROE on an after tax basis calculated on the company's equity used to determine the revenue requirement on which going-in rates were established. This dollar amount threshold is escalated by I-X annually.[431]

376. In setting this threshold for Z factor amounts, the Commission stated in Decision 2012-237:

> 533. Setting a Z factor threshold too low invites parties to submit applications on too frequent a basis, and undermines the regulatory efficiency that PBR seeks to achieve. Setting a Z factor threshold too high may limit a company's reasonable opportunity to recover prudently incurred costs, or conversely may prevent customers from realizing the benefit of a reduction in costs.[432]

377. Given that the common overall purpose of capital trackers, Y factors and Z factors is to provide a company with additional revenue in specific circumstances where the I-X mechanism is shown to be insufficient and the shared objective of preserving regulatory efficiencies through the imposition of a materiality requirement, the Commission considers that the same materiality threshold should apply to capital trackers.

378. In the case of capital trackers, the Commission finds that the 40 basis point threshold adopted for Y factors and Z factors should apply to the annual revenue requirement to be recovered by way of all capital trackers in the aggregate (i.e., the proposed K factor amount for a PBR year), rather than being applied to individual capital tracker projects. In light of the number and breadth of capital trackers applied for in this proceeding, the Commission considers that applying this 40 basis point threshold on an individual project level has the potential to result in undue hardship to a company. Applying this threshold at the aggregate level is consistent with the regulatory efficiency objectives established for the Y factor and Z factor. Consistent with the findings in Decision 2012-237, this 40 basis point threshold is to be calculated by escalating the dollar value of a 40 basis point change in ROE in 2012 by I-X each year.

379. However, in light of the potential that a company may propose many capital trackers which collectively surpass the 40 basis point threshold but are individually minor in nature, the Commission considers that applying the 40 basis point threshold at the aggregate level alone is insufficient to achieve the objective of promoting regulatory efficiencies.

380. The Commission agrees with AltaGas when it stated that a materiality threshold is necessary in order "to avoid the potential regulatory burden associated with items that are clearly insignificant."[433] The Commission also agrees with Dr. Makholm when he indicated that a materiality criterion is a practical one, serving to weigh the justification for a capital tracker against the regulatory burden of addressing each capital tracker.[434] To address this issue, the Commission considers that a program-specific or project-specific threshold, depending on the approved level of grouping, is also required.

[431] Decision 2012-237 paragraphs 535 and 636.
[432] Decision 2012-237, paragraph 533.
[433] Exhibit 90.01, AUC-AUI-2(a).
[434] Exhibit 36.01, ATCO Gas submission, Appendix A, page 8.

381. Dr. Lowry indicated "there is benefit to having one threshold for individual claims and another for the aggregated claims."[435] The Commission agrees, and finds that a two-tier materiality threshold should be adopted for capital trackers.

382. To give effect to this finding, the Commission considers that applying the materiality threshold to that portion of the revenue requirement for a project that is not funded under the I-X mechanism, as proposed by EPCOR, is warranted. The Commission notes that, for a capital project to qualify for capital tracker treatment, EPCOR proposed a threshold of $100,000.[436] By applying this threshold, EPCOR eliminated from its capital tracker application several capital projects that failed to reach this threshold level, thereby reducing the regulatory burden associated with reviewing these projects.

383. The Commission has evaluated the potential of stipulating a proportionately equivalent threshold for each of the companies. Employing the methodology used to calculate the Z factor materiality thresholds determined in Decision 2013-072,[437] the Commission observes that EPCOR's proposed $100,000 materiality threshold is approximately equal to four basis points of the company's ROE on an after tax basis in 2012. The Commission has used this same methodology in Table 8 below to calculate this materiality threshold as a four basis point change in ROE on an after tax basis for each company in 2012.

384. The Commission finds a four basis point threshold calculated separately for each company and applied to each project proposed for capital tracker treatment (grouped in the manner approved by the Commission) to be a reasonable requirement in order to avoid the potential regulatory burden associated with considering capital tracker treatment for individual projects or programs that are immaterial. Consistent with the findings in Decision 2012-237, this project-specific materiality threshold is to be calculated by escalating the dollar value of a four basis point change in ROE in 2012 by I-X each year.

385. Accordingly, the Commission will refer to the first tier of the materiality threshold as a "four basis point threshold." The second tier of the materiality threshold will be referred to as a "40 basis point threshold." Table 8 below sets out for each company the 2013 dollar value of the four basis point threshold to be applied at a project level (grouped in the manner approved by the Commission) as well as the 40 basis point threshold to be applied to the aggregate revenue requirement proposed to be recovered by way of all capital trackers.

[435] Exhibit 163.01, AUC-CCA-1(c).
[436] As explained earlier in this section, EPCOR proposed that a materiality threshold should apply to its Category 1 projects over the PBR term in aggregate, rather than in a given year.
[437] Decision 2013-072, Table 2, page 18.

Table 8. Materiality threshold calculations

Company	40 basis points of 2012 ROE ($ million)	4 basis points of 2012 ROE ($)	2013 1+(I-X) index	2013 40 basis point threshold ($ million)	2013 4 basis point threshold ($)
	A[438]	B=A/10	C[439]	D=AxC[440]	E=BxC
AltaGas	0.308	30,000	1.0171	0.313	31,000
ATCO Electric	2.2	220,000	1.0171	2.238	224,000
ATCO Gas	2.591	259,000	1.0171	2.635	264,000
EPCOR	1.0	100,000	1.0171	1.017	102,000
Fortis	3.3	330,000	1.0171	3.356	336,000

386. On balance, the Commission considers that the combination of the 40 basis point threshold applied to all capital tracker projects in the aggregate and the four basis point threshold for individual projects is sufficient to discourage minor capital tracker applications, thereby reducing regulatory burden. At the same time, these thresholds are low enough to address circumstances where capital projects require material funding outside of the I-X mechanism.

3.4 Grouping of projects proposed for capital tracker treatment

387. In Decision 2012-237, the Commission recognized the significance of the grouping of projects proposed for capital tracker treatment when it stated in paragraph 601:

> 601. … The Commission also considers that it would not be suitable to group together several dissimilar projects into a single large project to give the appearance of materiality. However, a number of smaller related items required as part of a larger project might qualify for capital tracker treatment.[441]

388. In its application, AltaGas proposed three capital tracker programs,[442] with each program made up of a number of individual projects or components. AltaGas expressed its view that the Commission's three criteria should be applied to each capital tracker program, as a whole, rather than to individual projects included within a capital tracker program. According to AltaGas, "attempting to evaluate each project based on the three criteria would create an, artificial distinction as, in the case of each of AUI's capital tracker programs, the projects are the same in terms of end objective, with the key difference being location or size of each project and any factors impacting the type of installation required for the replacements or refurbishments."[443] AltaGas argued that its approach to grouping was consistent with the findings in paragraph 601 of Decision 2012-237 that a number of smaller related items required as part of a larger project might qualify for capital tracker treatment.[444]

389. In AltaGas' submission, grouping capital tracker projects should be based on the primary objective of, or a common driver for, the program, such as the replacement of specified assets. At

[438] Decision 2013-072, Table 2, page 18.
[439] Decision 2013-072, Table 2, page 18.
[440] Decision 2013-072, Table 2 with rounding to three decimal places.
[441] Decision 2012-237, paragraph 601.
[442] Exhibit 223.04, AltaGas revised capital tracker schedules, Schedule 4.0 K factors.
[443] Exhibit 267.01, AltaGas argument, paragraph 108.
[444] Exhibit 267.01, AltaGas argument, paragraph 108.

the same time, AltaGas acknowledged that the Commission and interested parties "will, as part of [the] assessment as to the need and reasonableness of the forecast, examine the component projects to ensure they are, in fact, consistent with the objective of the capital tracker program, have been appropriately identified and prioritized based on methods outlined in the business case(s) and engineering assessments and the forecast units and costs are appropriate."[445]

390. ATCO Electric, in its 2013 capital tracker application, applied for capital tracker treatment for eight programs, each of which included several project sub-categories. ATCO Gas applied for six capital tracker programs in 2013, with some of these programs consisting of individual projects. Similar to the position advanced by AltaGas, the ATCO companies submitted that, while it is recognized that the companies must justify the necessity for capital expenditures on a project-specific basis, the Commission's assessment of the three criteria should be applied on a capital tracker program basis.[446]

391. The ATCO companies also indicated that the assessment of the programs against the Commission's criteria should "occur with an understanding and view to the overall incremental funding requirements"[447] of the company. The ATCO companies stated that "the Commission should not get caught up in the semantics associated with defining a capital project versus a capital program, so as to use this nuance as a basis to deny the inclusion of a given capital expenditure in the Capital Tracker program."[448] In the ATCO companies' view, it is not the specific number of capital tracker programs (or the number of projects that make up the capital tracker programs) which matters. Rather, "it is whether or not empirical evidence has been presented to show that the costs of the required capital investments are not in fact covered by the I-X mechanism and that the underlying projects driving those costs are required for the provision of safe reliable service."[449]

392. EPCOR based its proposed capital tracker projects on the approximately 60 capital project categories that the company used for purposes of its last three cost-of-service general tariff applications.[450] EPCOR explained that it chose this project grouping "for purposes of transparency to facilitate comparisons with past cost levels, but also to enable the Commission to examine the projects and their associated capital cost forecasts at a relatively detailed level, and to avoid any contention that EDTI had somehow inappropriately grouped projects contrary to the Commission's instructions in Decision 2012-237."[451] For the purpose of its 2013 capital tracker application, EPCOR submitted that applying the three criteria on a "Tracker-by-Tracker basis (with each Tracker essentially consisting of individual capital projects and programs as described in EDTI's Application) is reasonable and appropriate, balancing concerns over regulatory burden versus transparency and clarity."[452]

393. In its application, Fortis combined its proposed capital tracker projects into three groups: customer growth, externally driven and DCC/SCADA; each consisting of a set of projects. According to Fortis, each of the Commission's criteria should be applied "according to its

[445] Exhibit 267.01, AltaGas argument, paragraph 110.
[446] Exhibit 265.01, ATCO argument, paragraph 145.
[447] Exhibit 265.01, ATCO argument, paragraph 144.
[448] Exhibit 265.01, ATCO argument, paragraph 146.
[449] Exhibit 265.01, ATCO argument, paragraph 147.
[450] Exhibit 38.01, EPCOR application, Table 2.2.1-1, pages 22-25.
[451] Exhibit 263.02, EPCOR argument, paragraph 255.
[452] Exhibit 263.02, EPCOR argument, paragraph 256.

nature."[453] Specifically, Fortis indicated that "Criteria 1 and 2 are such that each element or project within a tracker may be expected to meet a reasonable interpretation of both criteria."[454] With respect to Criterion 3, Fortis noted that applying this criterion "at the level of 'all capital trackers together' best fits the purpose of Capital Trackers."[455]

394. The UCA submitted that, in applying the capital tracker criteria, the appropriate grouping of projects will change depending on the step in the inquiry. Specifically, the UCA recommended that all the criteria should be applied on a project-by-project basis with the exception of determining whether the expenditures are "outside historic levels of spending," which should be determined at the program level.[456]

395. The UCA acknowledged the impact grouping has on the application of criteria by noting that "the method of aggregating projects into a program-level will require close scrutiny. Without sufficient oversight it would be possible for Utilities to group projects together in such a way as to artificially inflate the numbers in a single program to fall outside historic levels of spending."[457] In addition, the UCA stated that "financial analysis should be completed on an appropriately grouped project or a program level to avoid any skewing resulting from the yearly changes in individual projects."[458]

396. In the UCA's view, grouping of projects is applicable in two distinct circumstances: as a useful aid in comparing historic spending levels, and in the determination of materiality under Criterion 3. However, the UCA submitted that "any such grouping must occur in a very restrictive fashion."[459] Projects that can be grouped together will share the same driver, the same project management and the same engineering considerations. In this regard, the UCA took issue with AltaGas' view that a common driver alone was sufficient to form the basis for grouping of capital tracker projects. In the UCA's view, the:

> …use of a common driver serves to expand the grouping to projects which are not sufficiently similar and should not be aggregated together. By way of example, if one uses end of life as the driver, then nearly all assets could be grouped into one large capital tracker. Clearly this is not what was intended.[460]

397. The UCA did not take issue with grouping together similar projects occurring throughout the province, such as pole replacement programs or new extension programs. However, the UCA disagreed with "attempts to roll projects together to meet the materiality criterion."[461]

398. Calgary understood the issues associated with grouping to be only with reference to materiality and Criterion 3, as outlined in Decision 2012-237. Given the provisions of Decision 2012-237, Calgary submitted "it would not be appropriate to lump all capital tracker proposals together to assess materiality."[462] Calgary observed that ATCO Gas has grouped

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453 Exhibit 262.01, Fortis argument, recommendation on page 35.
454 Exhibit 262.01, Fortis argument, paragraph 97.
455 Exhibit 262.01, Fortis argument, paragraph 98.
456 Exhibit 268.02, UCA argument, paragraph 218.
457 Exhibit 268.02, UCA argument, paragraph 226.
458 Exhibit 268.02, UCA argument, paragraph 39.
459 Exhibit 268.02, UCA argument, paragraph 230.
460 Exhibit 274.02, UCA reply argument, paragraph 270.
461 Exhibit 268.02, UCA argument, paragraph 230.
462 Exhibit 269.01, Calgary argument, paragraph 233.

expenditures at the program level in order to demonstrate a funding shortfall. Calgary submitted that this approach is contrary to Decision 2012-237 and should be rejected. Instead, to be consistent with Decision 2012-237, projects must be applied for and assessed at the individual project level.[463]

399. In response, the ATCO companies[464] and Fortis[465] indicated that none of the interveners demonstrated that the companies' grouping of capital trackers was inappropriate. AltaGas submitted that Calgary's suggestion that consideration of eligibility for capital tracker treatment be limited to a specific project, rather than a program of related projects, was "unreasonably simplistic."[466] Referring to its pipe replacement program, by way of example, AltaGas explained:

> For example, with reference to AUI's proposed capital trackers, each of the included projects within its pipe replacement and station refurbishment capital trackers is part and parcel of the same program, separately identified primarily due to differences in location. In the case of pipe replacement, each type of replacement could stand alone as a capital tracker. However, given the common drivers behind the replacements and for simplicity of administration and regulatory processing, these common projects have been grouped together into a single tracker for the AUC's consideration.[467]

400. AltaGas argued that "[a]rtificially limiting trackers to specific projects without taking into account the clear linkage between substantively identical projects differentiated primarily due to disparate locations is an unreasonably limited and unwarranted interpretation of the capital tracker criteria and is more a matter of semantics than substance in terms of what constitutes a 'project.'"[468] AltaGas reiterated its position, expressed in argument, that Decision 2012-237 envisioned the grouping of similar projects into a single tracker.

Commission findings

401. In Decision 2012-237, the Commission stated that each project proposed for capital tracker treatment must be assessed against the Commission's three criteria.[469] The Commission recognized that an individual capital tracker may consist of a single project or "a number of smaller related items required as part of a larger project."[470]

402. Consistent with these findings in Decision 2012-237, the Commission agrees with the companies' view that individual projects may be combined into a larger capital program, and considered for capital tracker treatment together, when it is reasonable to treat a number of smaller projects collectively. The Commission agrees with the ATCO companies' view that it is not the specific number of capital tracker programs (or the number of projects that make up a capital tracker program) that matters.[471] Rather, it is whether or not a proposed capital project or a combination of properly grouped projects satisfies the Commission's criteria.

[463] Exhibit 269.01, Calgary argument, paragraph 146.
[464] Exhibit 275.01, ATCO reply argument, paragraph 160.
[465] Exhibit 276.01, Fortis reply argument, paragraph 62.
[466] Exhibit 279.01, AltaGas reply argument, paragraph 100.
[467] Exhibit 279.01, AltaGas reply argument, paragraph 101.
[468] Exhibit 279.01, AltaGas reply argument, paragraph 102.
[469] Decision 2012-237, paragraph 593.
[470] Decision 2012-237, paragraph 601.
[471] Exhibit 265.01, ATCO argument, paragraph 147.

403. At the same time, the Commission shares the UCA's view that, given the importance of project grouping, "the method of aggregating projects into a program-level will require close scrutiny."[472] This is because grouping of projects will have a direct impact on the results of the accounting test and the project assessment under Criterion 1, as well as the assessment of materiality under Criterion 3.[473]

404. Specifically, with respect to the accounting test under Criterion 1, it would be possible for a company to group projects together for the sole purpose of ensuring that the revenue from the I-X mechanism is insufficient to fund a portion of the revenue requirement associated with capital expenditures for the proposed projects, as grouped. The UCA reached a similar conclusion when it stated that "it would be possible for Utilities to group projects together in such a way as to artificially inflate the numbers in a single program to fall outside historic levels of spending."[474] Likewise, with respect to Criterion 3 dealing with materiality, the UCA noted that the companies may attempt "to roll projects together to meet the materiality criterion."[475] The Commission agrees and finds that this is a relevant consideration for the four basis point threshold under the first tier of the materiality test set out in Section 3.3.

405. While the above suggests that a uniform rule be employed in assessing how projects should be grouped for capital tracker consideration, the Commission is also cognisant of the need to consider the unique differences among the companies with respect to their historical project classifications in cost-of-service applications, limitations of the companies' accounting systems, and the nature and geographic location of the companies' facilities.

406. Accordingly, the Commission finds that the reasonableness of the grouping of capital projects is best assessed on a case-by-case basis for each individual company. The Commission will require the companies to provide a justification for their proposed grouping of projects for capital tracker treatment.

407. In sections 3.1 and 3.3 of this decision the Commission determined that the accounting test, project assessment and the 4 basis point materiality test are to be applied on a project-by-project basis. The Commission finds that, once a proposed grouping of projects into a program has been approved, these tests will generally be applied to the approved grouping of projects. While the project assessment set out in Section 3.1.4 will generally be applied at the level of an approved grouping of projects, the Commission will, where necessary, consider the individual component projects comprising the approved groupings in order to assess the need for the capital expenditures and the reasonableness of the forecast costs. In addition, as set out in Section 3.3, the second tier of the materiality test, the 40 basis point threshold, will be applied to the aggregate revenue requirement proposed to be recovered by way of all capital trackers.

408. The Commission's findings with respect to the companies' proposed grouping of capital projects are set out in sections 5 to 9 of this decision dealing with individual applications.

[472] Exhibit 268.02, UCA argument, paragraph 226.
[473] Exhibit 268.02, UCA argument, paragraphs 39, 226 and 230.
[474] Exhibit 268.02, UCA argument, paragraph 226.
[475] Exhibit 268.02, UCA argument, paragraph 230.

4 Calculation of the K factor

409. As explained in Section 1.3 above, the revenue requirement associated with approved capital tracker amounts will be collected from ratepayers by way of a K factor adjustment to the annual rate setting formula. In Decision 2012-237, the Commission provided the following direction for the K factor rate adjustment calculation:

> 977. The calculation of the K factor rate adjustments will be similar to revenue requirement calculations under cost of service, except that the calculation will be limited to the depreciation, taxes and return associated with the incremental rate base for the expenditures that form the capital tracker. The weighted average cost of capital rate to be used in calculating the revenue requirements associated with capital trackers will be based on current rates established in the most recent GCOC proceeding rather than using the rates that were in place at the start of the PBR term. The most recent forecast of billing determinant information along with the Phase II methodologies in place, as discussed in Section 15.1.5 below, will establish the K factor rate adjustments associated with revenue requirements by rate class.[476]

410. Further, in Decision 2012-237 the Commission found no compelling reason to depart from the use of the mid-year convention for the rate base calculations on which going-in rates were based. The mid-year rate base convention is the accepted method for approximating the cost of capital investments in the year, and for the purpose of calculating other capital related costs.[477]

411. Sections 4.1 to 4.4 that follow deal with these aspects of the K factor calculation set out in Decision 2012-237, as well as other implementation issues of the K factor calculation raised by the parties in this proceeding. Specifically, Section 4.1 deals with the use of the mid-year convention in calculating the K factor and issues related to 2013 capital trackers arising from capital additions made in 2012. Section 4.2 addresses the inclusion of working capital in the K factor calculations. Section 4.3 relates to the treatment of customer contributions and incremental revenue related to growth projects. Finally, Section 4.4 sets out the Commission-approved calculation methodology for the K factor.

4.1 Mid-year convention and issues related to capital additions made in 2012

412. During the PBR proceeding, the ATCO companies proposed a going-in rate adjustment to reflect the value of the 2012 end-of-year forecast rate base rather than the 2012 mid-year forecast rate base. In Decision 2012-237, the Commission considered that in implementing a PBR plan, there was no compelling reason to depart from the use of the mid-year convention for the purpose of approximating the cost of capital investments during a year which established the going-in rates for the companies, and thereby denied ATCO Electric's and ATCO Gas' proposals.[478]

413. In this proceeding, parties considered whether or not to use the mid-year convention in determining the respective K factor calculations for qualifying capital tracker projects. Despite variations in the K factor calculations, all five companies submitted applications that determined rate base, and the resultant K factor, based on the mid-year convention for all projects proposed

[476] Decision 2012-237, paragraph 977.
[477] Decision 2012-237, paragraphs 101-103.
[478] Decision 2012-237, paragraph 103.

for capital tracker treatment. While the method for determining the opening 2012 rate base was different among the companies, each company calculated its applied-for K factor using the difference between the 2012 forecast mid-year rate base associated with the capital tracker project and the 2013 forecast mid-year rate base associated with the capital tracker project. As a result, these calculations captured the additions from the 2012 mid-year rate base to the 2012 year-end rate base as part of the K factor calculation.

414. In this proceeding, AltaGas and EPCOR expressed concern that half the cost for certain 2012 capital projects were not included in the 2012 going-in rates due to the use of the mid-year convention.

415. AltaGas noted that its Natural Gas Settlement System Code (NGSSC) capital project commenced in 2012 and continues into 2013. In Decision 2012-237 the Commission denied a request by AltaGas for an adjustment to going-in rates to reflect costs in the second half of 2012.[479] In Decision 2013-072, the Commission directed that "the 2013 Y factor adjustment should include only the incremental amounts related to capital expenditures for phase two of the NGSSC project."[480]

416. AltaGas submitted that the treatment of the 2013 capital costs for the NGSSC project as a Y factor in 2013 caused a deviation from the mid-year convention since AltaGas was unable to recover the project costs for the second half of 2012. AltaGas submitted that to the extent capital investment is treated on a cost-of-service basis, it should conform to the mid-year convention regardless of whether it would be part of a capital tracker or a Y factor.[481] AltaGas requested recovery of the mid-year revenue requirement associated with this project.[482] AltaGas submitted that its cost-of-service approach to capital tracker cost recovery provides the only regulatory mechanism that recovers costs associated with the second half of AltaGas' 2012 capital additions, in 2013. AltaGas stated that any rate making approach that does not recognize cost recovery for the second half of 2012 capital tracker additions in 2013 would clearly result in a revenue deficiency in 2013.[483]

417. EPCOR applied for capital tracker treatment for what it termed Category 3 trackers which were described as "Trackers included for the primary purpose of recovering the capital funding shortfall due to the effect of the Mid-Year Rule on EDTI's 2012 going-in year rates."[484] This is because the projects were completed in 2012 and, if not allowed capital tracker treatment, EPCOR's capital cost recovery would be limited to half of the rate base additions approved by the Commission for EPCOR in 2012, for the PBR term. EPCOR stated that these projects would be underfunded by $1.2 million in 2013. EPCOR argued that denying capital tracker treatment for Category 3 projects would mean that it will not have a reasonable opportunity to recover the prudent costs, including a fair return, associated with the projects that were approved by the Commission in 2012.[485]

[479] Decision 2012-237, paragraph 116. See also paragraph 130 of Decision 2013-072.
[480] Decision 2013-072, paragraph 136.
[481] Exhibit 279.01, paragraph 118.
[482] Exhibit 267.01, paragraph 111 and 112.
[483] Exhibit 267.01, paragraph 141 to 143.
[484] Exhibit 38.01, EPCOR application, paragraph 2.
[485] Exhibit 263.02, paragraph 258.

418. The ATCO companies recommended that the "K factor calculations should be performed using the mid-year convention, starting with the 2012 closing rate base amounts approved in 2012-237 for the specific Capital Tracker programs."[486] Similarly, Fortis stated in argument that its method of calculation properly applied the mid-year convention and should be applied to the 2012 approved capital expenditures for which capital tracker treatment is sought in 2013.

419. The CCA provided no comment on capital trackers arising from 2012, or on the use of the mid-year convention in its argument or reply argument. Calgary submitted in argument that the Commission had already ruled that the mid-year convention should be used.[487] With respect to the issue of capital trackers arising from 2012, Calgary made no submission, stating its understanding that there were no such projects applied for by ATCO Gas to which this circumstance would apply.[488]

420. The UCA viewed EPCOR's Category 3 capital tracker projects as an adjustment to move to year-end balances, which was denied by the Commission in Decision 2012-237. In AUC-UCA-3, the UCA was asked to assume that a project met the capital tracker criteria except that it occurred in 2012 rather than in 2013. With respect to this project, the UCA expressed its view that the additional half of a project that is not included in going-in rates because of the mid-year convention should not require capital tracker treatment in 2013.[489]

421. Accordingly, with respect to AltaGas' NGSSC project and EPCOR's Category 3 capital tracker projects, the UCA stated that the Commission had rejected the idea of converting rate base calculations from 2012 mid-year to 2012 year-end, and the two requests should be denied.[490]

422. The UCA reiterated in reply argument that the K factor adjustment should continue to be based on mid-year capital in rate base, applying the approved deemed capital structure, authorized return on equity, and the last approved cost of debt to the mid-year rate base balances.[491]

Commission findings

423. The Commission, in assessing the companies' capital tracker applications and the associated K factor calculations, is satisfied that the mid-year convention has been followed by the companies.

424. The Commission considers that maintaining the mid-year convention in combination with the accounting test discussed in sections 3.1.2 and 3.1.3 of this decision, is sufficient to demonstrate whether the I-X mechanism provides sufficient revenue to recover the 2013 revenue requirement for capital projects with additions incurred in 2012 that were not fully recognized in the 2012 going-in rates due to the mid-year convention. This is because half of the costs for capital projects not accounted for under the mid-year convention in 2012 will be accounted for in the accounting test under the project net cost approach when the 2013 forecast revenue requirement is calculated using the mid-year convention.

[486] Exhibit 265.01, paragraph 163.
[487] Exhibit 269.01, paragraph 266.
[488] Exhibit 277.01, paragraph 216 and 217.
[489] Exhibit 177.02, AUC-UCA-3.
[490] Exhibit 274.02, paragraph 272 and 273.
[491] Exhibit 274.02, paragraph 308.

425. Therefore, any costs incurred for a capital project in 2012 will be considered for capital tracker treatment, if it can be demonstrated, using the mid-year convention in combination with the accounting test described in sections 3.1.2 and 3.1.3 of this decision, that the associated 2013 revenue requirement is not adequately funded under the I-X mechanism, and the project satisfies the balance of the Commission's three criteria.

426. The adjustments to going-in rates proposed by the ATCO companies in the PBR proceeding, and denied by the Commission in Decision 2012-237, differ from the circumstances presented in this proceeding. The original adjustments to going-in rates proposed by the ATCO companies encompassed all capital projects, including those that can reasonably be expected to be covered under the I-X mechanism, whereas the adjustments in this proceeding were specific to the capital tracker projects, which were determined to be underfunded by the I-X mechanism.

427. With respect to AltaGas' NGSSC project, the Commission notes that the issue was considered in Decision 2013-365,[492] wherein the Commission granted a Phase II review and variance of the treatment of AltaGas' 2012 NGSSC costs. While general guidance on mid-year to year-end adjustments related to capital trackers has been provided in this decision, the specific circumstances of AltaGas' 2012 NGSSC project costs will be ruled upon in the Phase II review and variance proceeding.

428. With respect to EPCOR's proposed Category 3 capital tracker projects, the Commission will consider their eligibility for capital tracker treatment in Section 8 of this decision, dealing with EPCOR's application.

4.2 Inclusion of working capital in the K factor

429. With the exception of AltaGas, no party proposed to include working capital as a component of rate base in the calculation of the K factor.

430. During the hearing, the Commission explored this aspect of AltaGas' approach to its K factor calculation, including whether or not the underlying lead-lag study supporting the cash working capital calculation would be updated during the course of the PBR term. AltaGas confirmed that the calculation of the cash working capital components of depreciation, interest on long-term debt, common equity and GST related to capital expenditures in this proceeding was completely consistent with how it had been determined traditionally and that any adjustments to its lead-lag study would be conducted if warranted. Working capital was only included in the K factor calculation to the extent the specific capital-related revenue requirements and underlying assets impact cash working capital.[493]

431. AltaGas stated in its reply argument that including working capital added no further complexity beyond that of a traditional cost-of-service approach and indicated that removing the working capital component may in fact create added complications related to attempts to isolate its effect from going-in rates. AltaGas added that to maintain consistency in the calculations and give credence to previous decisions made and fully tested under the traditional cost-of-service

[492] Decision 2013-365: AltaGas Utilities Inc., Decision on Preliminary Question Request for Review and Variance of AUC Decision 2013-072: 2012 Performance-Based Regulation Compliance Filings, Application No. 1609657, Proceeding ID No. 2586, September 26, 2013, Section 4.3.

[493] Transcript, Volume 5, pages 956-957 (Stock).

approach, it is appropriate to continue to calculate a working capital component for forecast capital tracker revenue requirement.[494]

432. The ATCO companies did not include working capital in their K factor calculations nor did they view the inclusion as a requirement, as it would unnecessarily complicate the calculation.[495] EPCOR submitted that working capital should not be incorporated in the K factor calculation since the undertaking would be complex and time consuming. Further, any benefit from the additional precision would be more than offset by the effort of doing so.[496] Fortis recommended that the cost of working capital need not be in the capital tracker calculations and that it would recover its working capital related needs under the I-X mechanism.[497]

433. The CCA did not offer an opinion on the topic of working capital in either argument or reply. Calgary, in its reply argument, indicated that the ATCO companies' position to exclude working capital from the K factor was consistent with Calgary's.[498]

434. Mr. Bell, representing the UCA, considered that including working capital in the K factor calculation was inconsistent with the intent of a PBR regime and represented an attempt to return to previously rejected cost-of-service principles. Mr. Bell stated that the inclusion of working capital would increase the complexity of the calculation and implementation of the K factor particularly with respect to any operating cost component.[499] In reply argument, the UCA confirmed its position that the inclusion of a working capital component within the K factor adjustment should be denied.[500]

Commission findings

435. If cash working capital in AltaGas' capital tracker schedules was eliminated,[501] AltaGas' K factor would be reduced by $5,614, or 0.5 per cent of the applied-for K factor, from $1,031,788 to $1,026,174.[502] The Commission agrees with parties, other than AltaGas, that including cash working capital in the K factor calculation has the potential to become onerous, and appears to have limited value. For these reasons, the Commission finds that working capital should not form part of the K factor calculations.

436. In Section 5.5 of this decision, the Commission directs AltaGas to exclude cash working capital from its K factor calculation at the time of its 2013 capital tracker true-up application.

4.3 Treatment of incremental revenue and customer contributions associated with growth-related projects

437. In Section 3.2.1 of this decision, the Commission explained that, in principle, a growth-related project will satisfy the requirements of Criterion 2 where it can be demonstrated that

494 Exhibit 279.01, AltaGas reply argument, paragraph 121.
495 Exhibit 265.01, ATCO Gas and ATCO Electric argument, paragraph 166.
496 Exhibit 263.02, EPCOR argument, paragraph 270.
497 Exhibit 262.01, Fortis argument, paragraph 136.
498 Exhibit 277.01, Calgary reply argument, paragraph 236.
499 Exhibit 268.02, UCA amended argument, paragraph 354.
500 Exhibit 274.02, UCA reply argument, paragraphs 328 and 355.
501 Exhibit 279.01, paragraph 120, identified as revenue and/or expense lags on capital tracker depreciation, interest on long term debt, common equity and GST on K factor capital expenditures.
502 Exhibit 223.04, AltaGas revised capital tracker schedules, July 12, 2013, found on tabs 4.1, 4.2, 4.3, lines 37, 38, 39 and 46.

customer contributions, together with the incremental revenue allocated to the project on some reasonable basis, when added to the revenue provided under the I-X mechanism, are insufficient to offset the revenue requirement associated with the project in a PBR year.

438. The following sections deal with the practical aspects of demonstrating that growth-related projects proposed for capital tracker treatment satisfy the requirements of Criterion 2 and ensuring that that incremental revenue and customer contributions are accounted for in the K factor calculation. Section 4.3.1 deals with accounting for customer contributions, and Section 4.3.2 deals with accounting for the effect of incremental revenue arising from growth-related projects.

4.3.1 Accounting for customer contributions

439. With respect to the need to account for customer contributions, ATCO Electric stated that it invests in projects related to new extensions using the Commission-approved MILs (maximum investment levels). As such, ATCO Electric indicated that capital additions net of customer contributions should be used as the portion of growth-related capital tracker projects to be included in the K factor calculation.[503]

440. AltaGas noted that, in general, it anticipated that its capital tracker projects would be primarily system-related, rather than customer-specific, investments. Therefore, it is unlikely that customer contributions would be a factor in these projects. In the event customer contributions were attributable to a project, AltaGas stated that it was not "currently aware of any reason why such contributions should not be factored into the calculation of any K Factor amounts."[504]

441. EPCOR indicated that the MILs and customer contribution policy are included in the company's forecasts for all growth-related capital tracker projects included in its application and are thus reflected in the associated K factor adjustments.[505] EPCOR further noted that if the company "incurs higher or lower capital additions for a growth driven capital tracker, the K factor adjustment will be increased or decreased as required based on the level of capital additions."[506]

442. In a similar vein, Fortis noted that by applying the Commission-approved MIL policy to each customer extension or customer growth project, the resulting amounts (customer extension costs net of customer contributions) will be reflected in the forecast and subsequent true up of actual capital expenditures for growth-related projects in each capital tracker filing. Fortis also noted that there is no ability for the company to generate new sources of revenue through contributions without the Commission revisiting and decreasing overall MILs prescribed in the tariff.[507]

Commission findings

443. ATCO Electric,[508] EPCOR[509] and Fortis[510] proposed that maximum investment levels and customer contributions be reflected in the forecast and actual expenditures for all growth-related

[503] Exhibit 81.01, AUC-AE-3(d).
[504] Exhibit 90.01, AUC-AUI-3(d).
[505] Exhibit 86.01, AUC-EDTI-3(d).
[506] Exhibit 86.01, AUC-EDTI-3(e).
[507] Exhibit 75.02, AUC-FAI-3(d).
[508] Exhibit 81.01, AUC-AE-3(d).
[509] Exhibit 86.01, AUC-EDTI-3(d).

projects proposed for capital tracker treatment. Specifically, ATCO Electric indicated that capital additions net of customer contributions should be used in determining the portion of growth-related projects qualifying for capital tracker treatment to be included in the K factor calculation.[511]

444. The Commission considers that the forecast cost of capital additions should be reduced by the forecast customer contributions for any project proposed for capital tracker treatment, including a growth-related project that has a customer contribution associated with it. This method of accounting for customer contributions is the same as under traditional cost-of-service regulation, when calculating the mid-year rate base and associated return. Consistent with the findings in Decision 2012-237, if the actual cost of capital additions, net of customer contributions, differs from the forecast cost, this difference will be reconciled in the capital tracker true-up proceeding.

4.3.2 Accounting for incremental revenue arising from growth-related projects

445. Parties proposed several methods to account for the effect of incremental revenue arising from growth-related projects in calculating the portion of a growth-related project qualifying for capital tracker treatment to be included in the K factor calculation.

446. The ATCO companies incorporated the effect of incremental revenue related to growth in their "Reasoned Demonstration" model. In particular, in calculating the revenue provided under the I-X mechanism in 2013, ATCO Electric included the incremental capital-related revenue arising from growth in megawatt hours (MWh) delivered,[512] one possible measure of output for a company under the price cap PBR plan. ATCO Electric noted that any difference between the actual growth in MWh and the forecast included in the "Reasoned Demonstration" would be incorporated into future "Reasoned Demonstration" calculations.[513] ATCO Gas, in calculating the revenue provided under the I-X mechanism in 2013, included the incremental capital-related revenue arising from growth in the number of customers,[514] a measure of output for a company under the revenue-per-customer cap PBR plan. Accounting for the incremental revenue associated with the increase in billing determinants in 2013 has the effect of reducing the difference between the forecast capital-related revenue requirement and the revenue provided under the I-X mechanism, thus reducing the aggregate investment shortfalls of ATCO Electric and ATCO Gas.

447. The ATCO companies argued that the "inclusion of the effects of growth related revenue in the reasoned demonstration is the appropriate place because this is a total capital-related funding analysis."[515] The ATCO companies pointed out that this approach to accounting for incremental revenue arising from growth "eliminates the requirement to determine some allocation of that incremental revenue between different capital trackers that may be generating that incremental revenue to some indeterminable extent."[516] The ATCO companies further explained that accounting for the incremental revenue associated with growth projects both in the aggregate investment shortfall analysis and in the K factor calculations would lead to double-

[510] Exhibit 75.02, AUC-FAI-3(d).
[511] Exhibit 81.01, AUC-AE-3(d).
[512] Exhibit 37.02, ATCO Electric application, Appendix E – ATCO Electric reasoned demonstration.
[513] Exhibit 81.01, AUC-AE-3(e).
[514] Exhibit 36.04, ATCO Gas application, Appendix E – ATCO Gas reasoned demonstration.
[515] Exhibit 265.01, ATCO argument, paragraph 161.
[516] Exhibit 265.01, ATCO argument, paragraph 161.

counting of the benefit of that incremental revenue, reducing the amount of available funding for capital projects.

448. Fortis proposed to recognize the incremental revenue associated with growth-related projects, while noting that incremental revenue may not have any direct relation to the capital investment in customer growth that is required to be made in 2013:

> When customer growth occurs, additional investment is required to connect customers to the system, and through billing determinant growth, additional revenue is recovered. However, that incremental revenue does not have any direct relation to the capital investment in Customer Growth that is required to be made in 2013, recognizing that the 2012 Going-In Rates only include the average embedded capital costs associated with historical (pre-2013) capital expenditures. Recognizing that growth in billing determinants over and above 2012 levels does occur, there is a portion of incremental revenue associated with that growth, albeit at the level of Going-in Rates escalated by I-X in each year of the PBR term. Further, that incremental revenue is not double-counted given that the capital costs associated with Customer Growth in each year of the PBR term are not in the Going-in Rates, and the I-X escalation does not adequately fund the required incremental capital expenditures required due to growth.[517]

449. Fortis did not allocate the identified incremental revenue related to growth to all of its capital tracker projects. Rather, Fortis applied this revenue offset exclusively to its growth-related projects proposed for capital tracker treatment. Specifically, Fortis estimated that the growth in billing determinants between 2012 and 2013 will result in $5.1 million in additional revenue, both capital-related and O&M-related, for the company in 2013. Of this amount, $3.8 million (73 per cent) relates to capital investment, based on the proportion of capital components in Fortis' 2012 approved revenue requirement. Fortis applied the $3.8 million revenue offset to the 2013 revenue requirement of $13.1 million associated with growth-related capital tracker projects, resulting in a revenue offset of 29 per cent for these capital tracker projects.[518]

450. Fortis proposed that the 29 per cent offset, derived from the approved 2012 revenue requirement upon which the going-in rates were set, be applied to growth projects throughout the PBR term. According to Fortis, reassessing "the percentage amount each year would require in-depth, annual forecasts, which are not part of the PBR paradigm approved by the Commission."[519] Further, Fortis proposed that the same 29 per cent offset be applied to the actual revenue requirement amount for growth-related projects to be recovered by way of a K factor, at the true-up stage. According to Fortis, "this method avoids any double-counting and maintains the formulaic streamlining and efficiency incentives envisioned under PBR."[520]

451. Consistent with their project net cost approaches to capital trackers, AltaGas and EPCOR applied the incremental revenue offset arising from growth to each of their projects or programs proposed for capital tracker treatment.

452. To account for incremental revenue arising from the increase in billing determinants, AltaGas reduced the revenue requirement for each of its three capital tracker programs by the

[517] Exhibit 35.07, Fortis application, paragraph 90.
[518] Exhibit 35.07, Fortis application, paragraph 92 and Table 6.
[519] Exhibit 35.07, Fortis application, paragraph 92.
[520] Exhibit 75.02, AUC-FAI-3(e).

incremental revenue arising from growth in the number of customers; a measure of output for a company under the revenue-per-customer cap PBR plan. Specifically, to calculate the amount of revenue provided under the I-X mechanism in 2013, AltaGas escalated the going-in revenue for each program by I-X multiplied by the forecast 0.92 per cent weighted average increase in the number of customers between 2012 and 2013.[521] In doing so, AltaGas effectively proposed to allocate the portion of the incremental revenue offset to each of its three capital tracker programs in proportion to the revenue requirement for these or similar capital expenditures compared to the total going-in capital-related revenue requirement.

453. In a similar vein, EPCOR noted that its project net cost analysis model accounted for "the effects of load and customer growth which increases revenue available to EDTI over time to fund new capital investment."[522] EPCOR offset the K factor amount for each of its proposed capital tracker projects or programs by the incremental revenue associated with the projected 0.54 per cent increase in all billing determinants (energy delivered, demand and number of customers) between 2012 and 2013. Specifically, to calculate the amount of revenue provided under the I-X mechanism in 2013, EPCOR increased the going-in revenue for each capital category by I-X plus a 0.54 per cent "G factor," which represented the impact on revenue arising from the change in billing determinants.[523] In doing so, EPCOR effectively proposed distributing the incremental revenue offset among all of its proposed capital tracker projects, whether asset replacement, third-party driven or growth-related, in proportion to the revenue requirement for these or similar capital expenditures in the total going-in capital-related revenue requirement.

454. EPCOR stated that its method accounts for the "total impact of customer/load growth on EDTI's revenue under PBR" in calculating the K factor adjustment, "thus ensuring that EDTI's K factor adjustment holds customers whole in terms of the positive impacts of customer/load growth on PBR Rates."[524] Further, EPCOR expressed its view that there is no need "to incorporate the increase in customers and additional load when evaluating the true-up to the actual amount of a growth related capital tracker,"[525] because:

> Directionally, if EDTI has incurred higher than forecast capital costs because it has experienced higher than forecast customer growth, then EDTI will have recovered more revenue via the PBR formula. [...] Conversely, EDTI is also at risk for under recovery due to the same potential mismatch. Given that the G factor itself is expected to have an impact of 1 to 2 percent on the overall level of recoveries through the PBR Plan, the impacts of any changes are likely to be minor.[526]

455. The UCA submitted that failure to track and account for incremental revenue resulting from growth projects would be inequitable. According to the UCA, to ignore incremental revenue associated with growth projects is contrary to PBR Principle 5, that customers and regulated companies must share in the benefits of a PBR regime. Mr. Bell commented upon this, stating:

> If the cost of the new asset [added to serve new customers or increased demand] is afforded capital tracker treatment, customers will bear the cost of the new asset. If the

[521] Exhibit 223.04, AltaGas revised capital tracker schedules, Schedule 1.1 and schedules 4.1 to 4.3.
[522] Exhibit 263.02, EPCOR argument, paragraph 265.
[523] Exhibit 38.39, EPCOR application, Schedule 2, tab 3 and Exhibit 38.43, Schedule 6, tab 3.1.
[524] Exhibit 86.01, AUC-EDTI-3(c).
[525] Exhibit 86.01, AUC-EDTI-3(e).
[526] Exhibit 86.01, AUC-EDTI-3(e).

> associated revenue is not credited to customers, then there will be an unfair distribution of risk and reward, customers will pay the cost and the shareholder will reap the benefit.[527]

456. Based on the evidence of its witness, Mr. Bell, the UCA submitted that any incremental revenue associated with a growth project that has been approved for capital tracker treatment must be tracked and credited against that capital tracker. Further, in the UCA's view, it will be necessary to track this incremental revenue related to growth over a number of years because incremental load increases may occur each year.[528] Mr. Bell further elaborated on this proposal:

> As new infrastructure is brought on to serve new load, the new load may not Track new customers and revenue related to new assets for each year. As an example, if there is a capital expenditure in 2013 that allows new customers to come onto the system, this may allow new customers to come on to the system in 2013, 23 2014, 2015, 2016, and 2017. The incremental revenue for each year that relates to the 2013 expenditure must be tracked and credited to the tracker account for 2013 expenditures.[529]

457. The UCA recognized that both EPCOR and Fortis discuss the use of a revenue offset approach to account for revenue related to growth. The UCA conceded that the methods proposed by these companies may be reasonable in the first year of a PBR term. However, these approaches do not account for any incremental revenue related to a new asset in subsequent years. The UCA recommended that EPCOR's and Fortis' approaches be modified in future applications to ensure that incremental revenue in the remaining years of the PBR term related to an asset installed in a previous year is credited to customers.[530]

458. Fortis took issue with the UCA's proposed approach to track specific dollars of new revenue to specific assets and to carry on such asset-specific tracking on an asset-by-asset basis into future years of the PBR plan. Fortis expressed its doubts as to whether such tracking could be reasonably done and noted that "the resources needed to attempt such an exercise would be considerable. Presumably, cost/revenue allocation matters in Phase II proceedings would likewise become yet more complicated."[531]

459. In contrast, Fortis noted that under its approach the revenue offset is calculated as the total forecast increase in capital-related revenue that arises from the increase in billing determinants. Fortis argued that this was "a wholly comprehensive approach, and one that can be reasonably administered."[532] In a similar vein, AltaGas submitted that under its proposed approach to dealing with incremental revenue arising from the increase in billing determinants, there was no need to separately track and credit any revenue related to growth projects against the capital tracker.[533]

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527 Exhibit 176.03, UCA supplemental evidence of R. Bell, A6 on page 5.
528 Exhibit 268.02, UCA argument, paragraph 348.
529 Exhibit 176.03, UCA supplemental evidence of R. Bell, A7 on page 5.
530 Exhibit 274.02, UCA reply argument, paragraph 317.
531 Exhibit 276.01, Fortis reply argument, paragraph 77.
532 Exhibit 276.01, Fortis reply argument, paragraph 78.
533 Exhibit 279.01, AltaGas reply argument, paragraph 115.

460. Calgary's views on the issue of the treatment of incremental revenue related to growth projects were mainly a critique of the ATCO companies' aggregate investment shortfall analysis,[534] discussed in Section 3.1.2.1 above.

461. The CCA did not comment on the issue of the treatment of incremental revenue related to revenue offsets for growth projects in its argument and reply argument.

Commission findings

462. Parties to this proceeding proposed several possible methods to account for incremental revenue associated with growth-related projects.

463. Based on the evidence of its witness, Mr. Bell, the UCA proposed that any incremental revenue associated with a growth project approved for capital tracker treatment must be tracked and credited against that project. Further, in the UCA's view, it will be necessary to track the incremental revenue related to growth over a number of years, because incremental load increases may occur each year.[535] The Commission agrees with Fortis when it commented that the UCA's proposal requires the company to "track specific dollars of new revenue to specific assets, and to carry on such asset-specific tracking on an asset by asset basis into future years of the PBR plan."[536]

464. The Commission generally agrees that tracking incremental revenue to a specific revenue generating project, as proposed by the UCA, is the most precise way of accounting for the incremental revenue associated with growth-related projects. However, the Commission recognizes that in many instances, it is not feasible or practicable to track revenue to a particular project. The ATCO companies,[537] EPCOR,[538] and Fortis[539] expressed doubts as to whether such tracking could be reasonably undertaken, since it would be very difficult to assess how much of the growth in billing determinants relates to capacity additions, such as new extensions. Additionally, Fortis noted that "the resources needed to attempt such an exercise would be considerable."[540] The UCA acknowledged that a "proper matching of revenues and costs,"[541] as required under its approach, "will undoubtedly increase the regulatory and administrative burden for all parties involved."[542] In light of these considerations, the Commission finds that, although desirable, the UCA's approach may result in an unacceptable increase in regulatory and administrative burden and would be difficult to implement.

465. The companies proposed simpler methods to account for incremental revenue arising from growth. Rather than tracking incremental revenue to offset the cost of a specific growth-related project that gave rise to that revenue, the companies proposed to allocate incremental capital-related revenue arising from the overall increase in billing determinants to offset the cost of projects proposed for capital tracker treatment. The companies proposed different methods for this allocation.

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534 Exhibit 269.01, Calgary argument, paragraphs 254-265.
535 Exhibit 268.02, UCA argument, paragraph 348.
536 Exhibit 276.01, Fortis reply argument, paragraph 77.
537 Transcript, Volume 2, page 337, lines 2-23 (Wilson).
538 Transcript, Volume 6, page 1077, line 3 to page 1078, line 4 (Baraniecki and Elford).
539 Transcript, Volume 7, page 1386, lines 18-25 (Lorimer).
540 Exhibit 276.01, Fortis reply argument, paragraph 77.
541 Exhibit 176.03, UCA supplemental evidence of R. Bell, page 7, lines 8.
542 Exhibit 274.02, UCA reply argument, paragraph 158.

466. Consistent with their overall approach to capital trackers, ATCO Electric and ATCO Gas reduced their identified aggregate investment shortfalls, the difference between the forecast capital revenue requirement and the revenue provided under the I-X mechanism, by all of the capital-related incremental revenue arising from the increase in billing determinants. This reduced the aggregate investment shortfall and decreased the K factor. The ATCO companies pointed out that this approach to accounting for incremental revenue arising from growth "eliminates the requirement to determine some allocation of that incremental revenue between different capital trackers that may be generating that incremental revenue to some indeterminable extent."[543]

467. In sections 3.1.2 and 3.1.3 of this decision, the Commission determined that the aggregate investment shortfall approach utilized by the ATCO companies should not be used to demonstrate the absence of double counting or to determine whether all of the forecast or actual expenditures for a capital project are, or a portion is, outside of the normal course of the company's ongoing operations, as required to satisfy Criterion 1. Accordingly, the Commission does not accept the ATCO companies' approach to account for incremental revenue associated with growth-related projects by reducing the aggregate investment shortfall and decreasing the K factor.

468. While Fortis also used the aggregate investment shortfall approach, Fortis proposed a different method for allocating incremental revenue arising from the increase in billing determinants to projects proposed for capital tracker treatment. Rather than reducing its identified aggregate investment shortfall by the capital-related revenue arising from growth in billing determinants, Fortis proposed to use that incremental revenue to offset only the revenue requirement associated with its growth-related projects proposed for capital tracker treatment.

469. Although the approach proposed by Fortis is implementable and does not result in increased regulatory burden, the Commission considers that this approach to account for incremental growth-related revenue suffers from two shortcomings. By allocating all of its capital-related incremental revenue arising from the growth in billing determinants to growth-related projects, Fortis' approach implies that the entire increase in billing determinants is driven by growth-related projects. However, during the hearing, Fortis acknowledged that some growth may come from existing assets.[544] Further, Fortis' approach implies that the entire increase in billing determinants is driven by projects proposed for capital tracker treatment and, thus, all of the capital-related incremental revenue arising from the increase in billing determinants must be deducted from the K factor. However, if some of the increase in billing determinants derives from existing assets not subject to capital tracker treatment (which Fortis referred to as "sustainment capital"), then not all of the capital-related incremental revenue should be deducted from the K factor amount.

470. AltaGas and EPCOR proposed allocating the incremental revenue arising from the increase in billing determinants to all of their capital projects. As explained earlier in this section, AltaGas and EPCOR in effect offset the revenue requirement for each of the projects proposed for capital tracker treatment in a PBR year by the incremental revenue arising from the change in billing determinants in a manner that results in the incremental revenue being allocated by the

[543] Exhibit 265.01, ATCO argument, paragraph 161.
[544] Transcript, Volume 7, page 1386, lines 16-25 (Lorimer).

ratio of the 2012 revenue requirement for similar capital expenditures to the 2012 total capital-related revenue requirement.

471. Unlike the approach proposed by the ATCO companies and Fortis, the method of accounting for incremental revenue proposed by AltaGas and EPCOR does not deduct all of the capital-related incremental revenue arising from the increase in billing determinants from the K factor. Under the method proposed by AltaGas and EPCOR, only a portion of the capital-related incremental revenue is used to offset the revenue requirement for projects proposed for capital tracker treatment. That portion is proportional to the revenue requirement for these or similar capital expenditures compared to the total going-in capital-related revenue requirement.

472. The Commission agrees that this method reasonably accounts for the incremental revenue associated with growth-related projects proposed for capital tracker treatment. Consistent with a project net cost approach to capital trackers, under the method proposed by AltaGas and EPCOR, incremental revenue arising from the increase in billing determinants is allocated on a project or program basis, consistent with the Commission's findings in Section 3 on the application of the capital tracker criteria.

473. Further, the method proposed by AltaGas and EPCOR allocates the impact on revenue of any changes in billing determinants, including the increase in billing determinants that may be driven by incremental capacity, to projects that are proposed for capital tracker treatment, without the need to identify those projects or portions of projects that result in incremental capacity and revenue in a PBR year. As such, this method also accounts for the increase in billing determinants that may be driven by asset replacement projects or externally driven projects that result in incremental capacity.

474. Additionally, because this method allocates the impact on revenue of any changes in billing determinants across the company's distribution system, applying this method in each year of the PBR term captures the increase in revenue in years subsequent to the investment for those projects resulting in future growth or incremental capacity. Therefore, this approach reasonably addresses the UCA's and the CCA's concern that incremental revenue related to growth be tracked over a number of years because incremental load increases may occur each year.[545]

475. However, the Commission observes that the AltaGas and EPCOR methods of accounting for the impact on revenue of any changes in billing determinants differ in certain technical aspects. EPCOR calculated the percentage increase in distribution revenue arising from the forecast increase in all billing determinants, including energy, demand, and the number of customers.[546] The Commission finds that this is a reasonable calculation for a company under the price cap PBR plan. AltaGas estimated the increase in billing determinants by calculating the weighted average change in the number of customers among its rate classes in 2013. The Commission finds that this is a reasonable calculation for a company under the revenue-per-customer cap PBR plan.[547]

476. In addition, AltaGas and EPCOR differ in the way they applied the incremental revenue offset in their respective K factor calculations. While AltaGas increased the going-in revenue

[545] Exhibit 268.02, UCA argument, paragraph 348.
[546] Exhibit 38.43, EPCOR application, Schedule 6, tabs 3.1 and 3.2.
[547] Exhibit 223.04, AltaGas revised capital tracker schedules, Schedule 1.1.

associated with each program by I-X *times* the percentage increase in billing determinants,[548] EPCOR increased the going-in revenue associated with each program by I-X *plus* the percentage increase in billing determinants.[549] The Commission considers that multiplying the I-X index by the percentage change in billing determinants, as performed by AltaGas, is a more accurate approach, since it reflects the combined impact of the percentage change in prices (measured by I-X) and the percentage change in quantities (measured by the relevant billing determinants). In Section 8.7 of this decision, the Commission directs EPCOR to use this method in its K factor calculation at the time of its 2013 capital tracker true-up application. Multiplying the 2012 going-in revenue requirement for similar capital expenditures by I-X and by the percentage change in billing determinants results in a proportional allocation of incremental revenue, as discussed earlier in this section.

477. Finally, the Commission agrees with EPCOR's view that, given the relatively small expected impact of the annual change in billing determinants on a company's revenue, the revenue offset should be performed on the basis of the forecast, rather than the actual, change in billing determinants.[550] In Decision 2013-270,[551] the Commission determined that "any future true-up of base PBR rates and any K, Y and Z factors that do not have a separate collection rider or mechanism should be dealt with on the basis of forecast rather than actual usage-per-customer and billing determinants."[552] As EPCOR pointed out, using forecast billing determinants will simplify the capital tracker true-up applications.[553]

4.4 K factor calculation methodology

478. At paragraph 977 of Decision 2012-237, the Commission provided the following direction for the K factor rate adjustment calculation:

> 977 The calculation of the K factor rate adjustments will be similar to revenue requirement calculations under cost of service, except that the calculation will be limited to the depreciation, taxes and return associated with the incremental rate base for the expenditures that form the capital tracker. The weighted average cost of capital rate to be used in calculating the revenue requirements associated with capital trackers will be based on current rates established in the most recent GCOC proceeding rather than using the rates that were in place at the start of the PBR term. The most recent forecast of billing determinant information along with the Phase II methodologies in place, as discussed in Section 15.1.5 below, will establish the K factor rate adjustments associated with revenue requirements by rate class.[554]

479. The companies maintained that their respective K factor calculations are in accordance with these requirements of Decision 2012-237.

[548] Exhibit 223.04, AltaGas revised capital tracker schedules, Schedule 1.1 and schedules 4.1 to 4.3.
[549] Exhibit 38.39, EPCOR application, Schedule 2, tab 3, and Exhibit 38.43, EPCOR application, Schedule 6, tab 2.
[550] Exhibit 86.01, AUC-EDTI-3(e).
[551] Decision 2013-270: 2012 Performance-Based Regulation Second Compliance Filings, AltaGas Utilities Inc., ATCO Electric Ltd., ATCO Gas and Pipelines Ltd., EPCOR Distribution & Transmission Inc. and FortisAlberta Inc., Application No. 1609367, Proceeding ID No. 2477, July 19, 2013.
[552] Decision 2013-270, paragraph 19.
[553] Exhibit 86.01, AUC-EDTI-3(e).
[554] Decision 2012-237, paragraph 977.

480. The ATCO companies stated that their K factor calculations[555] are consistent with the revenue requirement methodology set out in Decision 2012-237 at paragraph 977. The ATCO companies explained that their K factor calculations are based on a cost-of-service revenue requirement calculation which includes the use of the mid-year convention to determine the rate base, calculation of depreciation expense consistent with approved depreciation rates as well as application of the half-year rule for first year depreciation expense, and the calculation of income taxes, which takes into account the timing difference between depreciation expense and capital cost allowance. The ATCO companies claimed these calculations are readily repeatable from year to year.[556] The ATCO companies argued that "it would not be appropriate to reduce the 2013 Capital Tracker expenditures based on some historical investment levels."[557]

481. Fortis noted that no party challenged the "application by FortisAlberta of the cost of service parameters articulated as appropriate in paragraph 977 of Decision 2012-237." To calculate the K factor amount associated with its customer growth, externally driven and DCC/SCADA projects proposed for capital tracker treatment, Fortis isolated these assets, and the related revenue requirement impact of these investments, as shown in Appendix 1 of Fortis' application.[558] Fortis calculated the necessary revenue required to fund its capital tracker projects and to be collected by way of a K factor as the sum of:

i. return and depreciation associated with required 2013 capital additions, calculated using the mid-year convention;
ii. return and depreciation associated with approved 2012 forecast capital additions, calculated using the mid-year convention; and
iii. in subsequent filings, the full-year costs associated with the prior year's capital additions.[559]

482. Fortis further noted that in subsequent capital tracker filings, it will true up the previous year's forecast of capital tracker expenditures to actual expenditures, including the related depreciation, return and carrying costs calculated using the weighted average cost of capital.

483. To calculate its K factor, AltaGas isolated the capital-related revenue requirement impact of the proposed capital tracker assets, including depreciation, return on equity, cost of debt and income tax. The revenue requirement components and calculations were the same as under a traditional cost-of-service framework. The 2013 revenue requirements related to the proposed capital tracker assets were forecast for each capital tracker project. From these forecast revenue requirement amounts, AltaGas deducted amounts already recoverable through the going-in rates and the I-X mechanism in order to eliminate any double counting. The resulting project-by-project revenue requirement deficiencies were summed to calculate AltaGas' K factor.[560]

484. For each project proposed for capital tracker treatment, AltaGas determined the revenue requirement embedded in going-in rates, by reviewing its historical book and regulatory records, including amounts approved in the 2010-2012 GRA, to identify and isolate capital expenditures related to each project. To calculate the revenue provided under the I-X mechanism in 2013, AltaGas escalated the associated going-in revenue requirement for each project by the

[555] Exhibit 220.02 for ATCO Gas and Exhibit 220.03 for ATCO Electric.
[556] Exhibit 265.01, ATCO argument, paragraph 158.
[557] Exhibit 265.01, ATCO argument, paragraph 159.
[558] Exhibit 35.01, Fortis application, Appendix 1.
[559] Exhibit 262.01, Fortis argument, paragraph 124 referring to Exhibit 84.02, UCA-FAI-2(d).
[560] Exhibit 39.01, AltaGas application, Section 5.0.

2013 I-X index and adjusted for the forecast increase in the number of customers.[561] During the hearing, AltaGas explained that in order to calculate the revenue provided under the I-X mechanism in subsequent PBR years, it will continue to escalate the project-by-project revenue requirement embedded in going-in rates by I-X multiplied by customer growth for the previous PBR years and the current PBR year. These amounts will then be deducted from the revenue requirement forecast for the projects proposed for capital tracker treatment in that year. During the hearing, AltaGas explained this calculation as follows:

> Q. For the purposes of calculating your K factor amount in subsequent years, would you continue to escalate the 2012 going-in rates by I minus X for 2013 and customer growth? How would you do that calculation going forward?
> A. MR. STOCK: Yes. That's what we would do, at least based on my understanding. 2012 will serve as the base for each of the years within the PBR term. So we would take that base amount and escalate it for I minus X, and then each and every year, you'd build upon that with the additional funding that would be available under I minus X. So essentially I minus X to the power of 2.
> Q. Okay.
> A. MR. STOCK: I'd just like to mention further to that that -- so that calculation around how much is available through base-rate funding, after subjecting them to the I minus X exploit -- the escalation, I guess, of that base amount by I minus X reached in each year of the PBR term, we would continue to deduct that entire amount from the new forecast that we would do for our total revenue requirements related to these programs. So you would always back out to ensure that there's no double-counting going on, anything that's available through going-in rates and the I minus X portions of the PBR formula.
> Q. Great. So I'm just going to take you back, Mr. Stock. You said so for the next year it would be to the power of 2. So the following year would be to the power of 3; correct?
> A. MR. STOCK: Right.[562]

485. EPCOR's K factor calculations were similar to those of AltaGas. Based on cost-of-service principles, EPCOR calculated the revenue requirement associated with the 2013 forecast capital additions for each of its projects or programs proposed for capital tracker treatment. EPCOR then calculated the revenue it will receive under the I-X mechanism for each project in 2013. The 2013 forecast revenue requirement for each project or program was compared to the amount of revenue provided under the I-X mechanism. Any difference (which EPCOR referred to as "the capital funding shortfall on a project category-by-project category basis") larger than $100,000[563] was proposed to be recovered by way of capital trackers. EPCOR's proposed 2013 K factor is equal to the sum of these project category-by-project category revenue deficiencies.

486. To determine the amount of revenue that the I-X mechanism would provide in 2013 for each of its projects or programs proposed for capital tracker treatment, EPCOR first identified the portion of the going-in rate base and associated revenue requirement for each of its capital project categories by reviewing its historical records of capital investments for similar categories of capital expenditures. EPCOR explained that for the period from 2004 to 2012, it has detailed records of its capital investments for categories similar to projects proposed for capital tracker treatment. However, prior to 2004, EPCOR does not have this information by project category.

[561] Exhibit 39.01, AltaGas application, paragraph 67.
[562] Transcript, Volume 5, page 799, line 15 to page 800, line 17 (Stock).
[563] As explained in Section 3.3 of this decision, EPCOR proposed that a materiality threshold should apply to its Category 1 projects over the PBR term in aggregate, rather than in a given year.

Given this fact, EPCOR estimated its capital additions for each project category prior to 2004.[564] During the hearing, EPCOR provided a general overview of this step in its K factor calculation:

> A. MR. BARANIECKI: […] our first step was to determine how much capital costs were applicable to each project for 2012. So we did that through a number of ways, but it was really identifying capital additions that we'd known had occurred in the past number of years, and then making some estimates of what had occurred in the past based on the average service life of each one of these projects. So we were able to essentially add up what the capital costs would be related on a project-by-project basis for 2012, and that allowed us to establish how much of the capital costs of the going-in year rates were related to each project for the purposes of finding out how much the costs would be funded through the I minus X formula. So there is one additional step in there from -- in the perspective of 2012, and that is that we had to allocate other sort of minor changes amongst all those known projects because we couldn't get it perfect. We add up all that capital additions and the costs related to them throughout time through the formulas and the model we built, and it didn't quite add up, so we did an allocation of adjustment to get it to balance to what our 2012 revenue requirement capital costs was. So that was the first step.[565]

487. EPCOR then escalated the identified going-in revenue requirement for each project or program by the 2013 I-X index and included the impact on revenue from growth in billing determinants including energy, demand, and the number of customers.[566] During the hearing, EPCOR confirmed that, to determine the amount of revenue that the I-X mechanism would provide in subsequent PBR years, it will continue to escalate the going-in revenue associated with a project by I-X and include the percentage change in billing determinants for previous PBR years and the current PBR year.[567]

488. The UCA agreed that the methodology for calculating a K factor will borrow from, and be similar to, revenue requirement calculations under cost-of-service regulation, as recognized by the Commission in Decision 2012-237. However, the UCA took issue with "the use by the Utilities of a [cost-of-service] revenue requirement calculation to determine what projects they will apply to have treated as a capital tracker." According to the UCA, such an approach represents an attempt by the companies "to bridge back to [cost-of-service] regulation in a manner inconsistent with the overall goals and objectives of PBR."[568]

489. Calgary noted that the calculation methodology of the K factor was dealt with in Decision 2012-237 and proposed there are "no further refinements that are necessary."[569] However, similar to the UCA's view, Calgary argued that "ATCO Gas has used the Commission's prescribed methodology to calculate the K Factor as the calculation to determine whether a capital tracker is required." In this regard, Calgary submitted that the K factor calculation should not be used to determine the amount that has to be funded by way of capital trackers.[570]

490. The CCA did not comment on this issue in its argument or reply argument.

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564 Exhibit 38.01, EPCOR application, paragraphs 85-88.
565 Transcript, Volume 6, page 1152, line 9 to page 1153, line 8 (Baraniecki).
566 Exhibit 38.01, EPCOR application, paragraph 93.
567 Transcript, Volume 6, page 1155, lines 3-7 (Baraniecki).
568 Exhibit 274.02, UCA reply argument, paragraph 309.
569 Exhibit 269.01, Calgary argument, paragraph 252.
570 Exhibit 269.01, Calgary argument, paragraph 251.

Commission findings

491. The companies' approaches to the K factor calculation were generally reflective of their overall approaches to the identification of projects that qualify for capital tracker treatment. As observed in Section 3.1.2.1, under the project net cost approach used by EPCOR and AltaGas, only the portion of the revenue requirement for a project in a PBR year that is not funded under the I-X mechanism is included in the K factor calculation.[571] EPCOR stated that its K factor calculation methodology ensures that the "applied-for K factor adjustment for each Capital Tracker would only recover that portion of EDTI's 2013 Forecast capital-related cost that is not funded under the I-X mechanism on a project-by-project basis."[572] In a similar vein, AltaGas pointed out that its K factor seeks recovery "only of amounts over and above those included in going in rates and recoverable through the formula; rather than the entire 2013 expenditure."[573] In contrast, under the aggregate investment shortfall approach used by the ATCO companies and Fortis, the entire revenue requirement associated with capital additions for a project in a PBR year is included in the K factor calculation, but with the sum of the revenue requirements for all projects proposed for capital tracker treatment not exceeding the identified aggregate investment shortfall.[574]

492. The UCA[575] and Calgary[576] argued that the companies used a cost-of-service revenue requirement calculation to determine which projects qualify for capital tracker treatment. In this regard, in Section 3.1.3, the Commission accepted that, because a utility's rate base is reflective of all the historical investments to date (since it reflects the vintage of assets and accounts for the effects of depreciation over time), comparing the forecast or actual revenue requirement for that project to the going-in revenue historically associated with a similar type of capital expenditure escalated by I-X and including the impact on revenue of any changes in billing determinants, is a reasonable method of calculating the extent to which a project is underfunded by the I-X mechanism. In addition, the Commission agreed with AltaGas[577] and EPCOR[578] that comparing the forecast revenue requirement to the going-in revenue requirement has an added benefit of assisting in the calculation of specific K factor adjustments.

493. In sections 3.1.2 and 3.1.3 of this decision, the Commission determined that the aggregate investment shortfall approach utilized by the ATCO companies and Fortis, should not be used for the purposes of demonstrating the absence of double counting and identifying the investments outside the normal course of the company's ongoing operations, as required to satisfy Criterion 1. In these sections, the Commission also determined that the project net cost approach utilized by AltaGas and EPCOR is sufficient to satisfy the Commission that all of the forecast or actual expenditures for a capital project are, or a portion is, outside the normal course of the company's ongoing operations, as required to satisfy Criterion 1.

[571] Exhibit 38.39, EPCOR application, Schedule 2; Exhibit 223.04, AltaGas revised capital tracker schedules, schedules 4.1 to 4.3.
[572] Exhibit 263.02, EPCOR argument, paragraph 265.
[573] Exhibit 90.01, AUC-AUI-1(d).
[574] Exhibit 37.02, Appendix E – ATCO Electric reasoned demonstration and Exhibit 220.03; Exhibit 36.04, Appendix E – ATCO Gas reasoned demonstration and Exhibit 220.02; Exhibit 196.01, Fortis rebuttal evidence, pages 4-5 and Exhibit 35.01, Fortis application, Appendix 1.
[575] Exhibit 274.02, UCA reply argument, paragraph 309.
[576] Exhibit 269.01, Calgary argument, paragraph 251.
[577] Exhibit 90.01, AUC-AUI-1(c).
[578] Exhibit 86.01, AUC-EDTI-1(a).

494. In Section 3.1.1 of this decision, the Commission determined that in order for capital projects to be considered outside the normal course of the company's ongoing operations, the increase in associated revenue provided under the I-X mechanism would not be sufficient to recover the entire revenue requirement associated with the prudent capital expenditures for these projects. The Commission finds that basing the K factor calculations on the incremental revenue requirement amounts (i.e., above the amounts provided under the I-X mechanism) for each project or program proposed for capital tracker treatment, as is done under the project net cost approach, is commensurate with the Commission's definition of outside the normal course of the company's ongoing operations.

495. For these reasons, the Commission does not accept the K factor calculation methodology under the aggregate investment shortfall approach utilized by the ATCO companies and Fortis. The Commission finds that the K factor calculation methodology under a project net cost approach, as utilzed by AltaGas and EPCOR, is reasonable.

496. Based on the submissions of AltaGas and EPCOR, and considering the findings in this decision, as well as the findings in Decision 2012-237, the Commission finds that the K factor calculation methodology must align with the project net cost approach, and should incorporate the following elements (but not necessarily in the following order).

497. The revenue requirement associated with the forecast capital additions net of customer contributions for each project or program proposed for capital tracker treatment in the coming PBR year is to be calculated. The revenue requirement calculations shall use the mid-year convention and include the cost-of-service components set out in paragraph 977 of Decision 2012-237. The Commission observes that all of the companies generally followed the direction in paragraph 977 of Decision 2012-237 with respect to their forecast revenue requirement calculations. In Section 4.2 of this decision, the Commission determined that cash working capital should not form part of the K factor calculation and directed AltaGas to exclude cash working capital from its K factor calculation at the time of its 2013 capital tracker true-up application.

498. For the purpose of the K factor calculation under the project net cost approach, the company shall identify the portion of rate base associated with the going-in rates, for each capital expenditure category that is similar to a project or program proposed for capital tracker treatment based on the company's proposed grouping of projects. The company shall then calculate the amount of the going-in revenue requirement associated with each capital expenditure category. These amounts may be obtained either directly from a company's accounting records, if they support the level of detail given the proposed grouping, or by reviewing a company's historical records of investments for these capital expenditure categories and performing calculations in a manner similar to EPCOR[579] and AltaGas.[580] The Commission accepts that if a company does not have detailed historical records of its capital investments, given the proposed grouping, for all the years in which assets have been in place, a reasonable approximation can be developed for capital additions in earlier years. In this proceeding, EPCOR's application provided an example of how to approximate capital additions in years for which the company did not have records.[581]

[579] Exhibit 38.39, EPCOR application, schedules 2 and 3.
[580] Exhibit 223.04, AltaGas revised capital tracker schedules, Schedules 5.0 to 6.2.
[581] Exhibit 38.01, EPCOR application, paragraphs 85-88. EPCOR's estimation method was further explained by Mr. Baraniecki in Transcript, Volume 6, page 1152, line 9 to page 1153, line 8.

499. To determine the amount of revenue the I-X mechanism will provide in a PBR year for a project or program proposed for capital tracker treatment, the calculated going-in revenue requirement associated with the capital expenditure category similar to that project or program, shall be escalated by the I-X index and adjusted by the forecast percentage change in billing determinants. In the formulas below, the Commission will designate the forecast percentage change in billing determinants in any given PBR year as "*Q."* As the Commission explained in Section 4.3.2 of this decision, multiplying the going-in revenue requirement for similar capital expenditures by the I-X index and adjusting for the percentage change in billing determinants results in a proportional allocation of the impact on revenue of any changes in billing determinants. As set out in Section 4.3.2, for the companies under the price cap PBR plan, this percentage change will be calculated across all billing determinants, including energy, demand, and the number of customers.[582] For the companies under the revenue-per-customer cap PBR plan, the percentage change will be calculated as a forecast weighted average change in the number of customers among rate classes.[583] By way of example, the amount of revenue that would be provided under the I-X mechanism in 2013 for project *i* proposed for capital tracker treatment shall be determined as follows:

$$(\text{Revenue from the I-X mechanism})_{2013i} =$$

$$(\text{Going-in revenue requirement})_i \times (1+\text{I-X})_{2013} \times (1+Q)_{2013}.$$

500. AltaGas[584] and EPCOR[585] explained that, in subsequent years of the PBR plan, the amount of revenue that the I-X mechanism would provide for a project or program proposed for capital tracker treatment would be determined by escalating the going-in revenue requirement amounts associated with a project by the I-X index and adjusting the result by the forecast percentage change in billing determinants for all previous PBR years and the current PBR year. The Commission agrees with this approach. As the Commission determined in Section 4.3, the percentage change in billing determinants, *Q*, for the current year and previous PBR years should be based on an approved forecast, rather than actual billing determinants. By way of example, the amount of revenue that the I-X mechanism would provide in 2014 for project *i* proposed for capital tracker treatment shall be determined as follows:

$$(\text{Revenue from the I-X mechanism})_{2014i} =$$

$$(\text{Going-in revenue requirement})_i \times [(1+\text{I-X})_{2013} \times (1+Q)_{2013}] \times [(1+\text{I-X})_{2014} \times (1+Q)_{2014}].$$

501. The portion of the revenue requirement for a project or program proposed for capital tracker treatment that is not funded under the I-X mechanism in a PBR year shall be calculated by subtracting the amount provided under the I-X mechanism for that project or program as calculated pursuant to the formulas above, from the forecast revenue requirement for that project or program for the PBR year. In Section 3.3, the Commission determined that the first tier of the materiality threshold will be applied to this difference. Under the first tier of the materiality threshold, if the portion of the revenue requirement for a project or program that is not funded under the I-X mechanism exceeds the four basis point threshold for that year, it shall be included in the K factor calculation.

[582] Exhibit 38.43, EPCOR application, Schedule 6, tabs 3.1 and 3.2.
[583] Exhibit 223.04, AltaGas revised capital tracker schedules, Schedule 1.1.
[584] Transcript, Volume 5, page 799, line 15 to page 800, line 17 (Stock).
[585] Transcript, Volume 6, page 1155, lines 3-7 (Baraniecki).

502. All portions of the revenue requirement for projects or programs not funded under the I-X mechanism shall be summed and the total shall be compared to the second tier of the materiality threshold, as set out in Section 3.3. Under the second tier of the materiality threshold, if that sum exceeds the 40 basis point threshold for the PBR year, the sum will be the K factor amount for that PBR year. As set out in paragraph 977 of Decision 2012-237, to calculate the K factor rate adjustments by rate class, the approved K factor amount will be translated into rates by using the most recent forecast of billing determinants along with the Phase II methodologies currently in place.

503. At the time of the true-up applications, the above calculations will be repeated using the actual, rather than the forecast, capital additions for the previous PBR year. If the actual capital additions for a project or program approved for capital tracker treatment in the previous year are lower than the forecast, but still exceed the four basis point threshold, that project will continue to receive capital tracker treatment. This means that in subsequent years a revised, lower portion of the revenue requirement not funded under the I-X mechanism in the previous year shall be included in the K factor calculation. The difference between the lower portion of the revenue requirement not funded under the I-X mechanism in the previous year and the amounts collected by way of a capital tracker in the previous year for that project, or program, will be refunded to customers.

504. If the actual capital additions for a project or program approved for capital tracker treatment in a previous year are lower than forecast and do not exceed the four basis point threshold, on true-up, the K factor will be adjusted in respect of the previous year based on the actual dollars spent on that project or program. The difference between the forecast portion of the revenue requirement not funded under the I-X mechanism and the actual portion not funded under the I-X mechanism for that project, or program, will be refunded to customers. However, capital tracker treatment for the previous year's project or program will be discontinued for subsequent PBR years. This means that in subsequent years none of the revenue requirement for this project or program shall be included in the K factor calculation. If the project or program extends into a subsequent PBR year, in order to receive capital tracker treatment for that project or program in the subsequent PBR year, the company will be required to reapply for capital tracker treatment.

505. Consistent with this approach, in the event that the actual K factor (i.e., the sum of all portions of the revenue requirements not funded under the I-X mechanism for all capital trackers), based on the company's actual additions in the previous year, does not satisfy the 40 basis point threshold, on true-up, the findings in the preceding paragraph will apply to all of the projects approved for capital tracker treatment in the previous year.

506. Finally, if the actual capital additions for a project or program approved for capital tracker treatment in a previous PBR year are lower than forecast to the extent that a project or a program was, in effect, fully funded under the I-X mechanism in the previous year, the K factor will be adjusted in respect of the previous year so that no portion of the revenue requirement for that project will be included in the K factor calculation in that year. The portion of the revenue requirement collected by way of a capital tracker on a forecast basis, in the previous year, will be refunded to customers. Capital tracker treatment for the previous year's project or program will be discontinued for subsequent PBR years. If the project or program extends into a subsequent PBR year, in order to receive capital tracker treatment for that project or program in the subsequent PBR year, the company will be required to reapply for capital tracker treatment.

5 AltaGas

507. An overview of AltaGas' proposal was provided in Section 2.1. To summarize, AltaGas applied for three capital tracker programs in 2013 totalling $11.650 million in forecast capital additions, with an aggregate K factor amount of $1.031 million. In this section, the Commission sets out its analysis of the projects proposed by AltaGas and its findings on the eligibility of these projects for capital tracker treatment and the resulting K factor.

5.1 Grouping of projects proposed for capital tracker treatment

508. The following table summarizes the grouping of 2013 capital tracker projects into programs and the associated K factor amount, as applied for by AltaGas:

Table 9. AltaGas' proposed capital trackers ($000)[586]

Capital tracker	Capital expenditure	K factor*
Pipe replacement program	9,027	679
Station refurbishment program	1,289	141
Gas supply program	1,334	211
Total	**11,650**	**1,031**

*Note: Includes an allowance for cash working capital.

509. AltaGas indicated that the projects for which capital tracker treatment are sought, were "modelled… after the system safety and system reliability programs" that were proposed in its 2010 to 2012 GRA.[587] Each program was supported by one or more individual business cases. The pipe replacement program, which is composed of three subcategories based on material type, reflected the continuation of a program commenced in 2010. Collectively, the pipeline replacement program is composed of 24 individual projects. The station refurbishment program is composed of 15 projects to be completed in 2013. The gas supply program consists of two projects with respect to supply stations located at Wandering River and Westlock.

510. The UCA indicated that AltaGas' grouping of individual gas supply projects is not appropriate, and suggested that "the use of a common driver serves to expand the grouping to projects which are not sufficiently similar and should not be aggregated together."[588]

Commission findings

511. In Section 3.4 of this decision, the Commission determined that, once a proposed grouping of projects into a program has been approved, the accounting test and the first tier of the materiality test will be applied at the program level. The project assessment will be done on either a program or on a project basis, depending on the particular circumstances. The second tier of the materiality test will be applied at the level of all capital tracker projects, in aggregate. The Commission also determined that the reasonableness of the grouping of capital projects is best assessed on a case-by-case basis for each individual company.

512. The Commission has reviewed the grouping of the components of certain projects into individual projects and the grouping of projects into programs, as proposed by AltaGas for

[586] Exhibit 223.04, AltaGas capital tracker schedules, revised July 12, 2013, schedules 4.0 K factors, 5.0 K expenditures and 5.1 K plant.
[587] Transcript, Volume 5, page 778, lines 11-13.
[588] Exhibit 274.02, UCA reply argument, paragraph 270.

capital tracker treatment. In the Commission's view, the projects, as grouped, are consistent with AltaGas' past practice in general rate applications. The Commission also notes that AltaGas has grouped its pipe replacement projects into three like categories under a single program. Each of the three categories includes projects for the replacement of pipe of a similar asset type with a relatively common vintage. It is the asset type and vintage characteristics of each type of pipe that give rise to the requirement for replacement. With respect to the station refurbishment program, the Commission notes that the projects in this program are for a common facility type of a similar vintage and again it is the asset type and vintage that gives rise to the requirement for replacement. Finally, with respect to the gas supply program, AltaGas has included two projects of a like nature in a single program. The Commission finds this grouping of projects by asset type, facility type and vintage characteristics, to be reasonable. For these reasons, the Commission does not share the concerns of the UCA with respect to the grouping proposed by AltaGas. The grouping of projects into programs for capital tracker treatment is approved as filed.

513. Accordingly, the Commission's accounting test and the first tier of its materiality test will be applied to AltaGas' programs proposed for capital tracker treatment as filed. For the purpose of the project assessment, the Commission will assess individually each of the three categories of pipe replacement projects in AltaGas' pipe replacement program. With respect to station refurbishment, the Commission will assess the program in its entirety. Finally, the Commission will assess each of the gas supply projects individually.

5.2 Criterion 1 – The project must be outside of the normal course of the company's ongoing operations

514. In Section 3.1.1, the Commission found that, in order to determine if a project or program (depending on the accepted level of grouping) proposed for capital tracker treatment satisfies the requirements of Criterion 1, both a project assessment and an accounting test are necessary.

515. The purpose of the project assessment is to determine whether a project proposed for capital tracker treatment is (i) required to provide utility service at adequate levels and, if so, (ii) that the scope, level and timing of the project are prudent, and the forecast or actual costs of the project are reasonable.

516. The purpose of the accounting test is to determine whether a project or program is outside of the normal course of the company's ongoing operations. As discussed in Section 3.1.1, in order for a capital project or program to be considered outside of the normal course of the company's ongoing operations, the associated revenue provided under the I-X mechanism would not be sufficient to recover the entire revenue requirement associated with the prudent capital expenditures for the project or program.

517. Sections 5.2.1 to 5.2.2 below, apply the project assessment and accounting test to AltaGas' three programs proposed for capital tracker treatment.

5.2.1 Project assessments

5.2.1.1 Adequacy of information provided in support of AltaGas' projects

518. AltaGas submitted in its application that the programs for which it applied for capital tracker treatment are necessary to maintain system reliability and to provide adequate service to existing customers. AltaGas also submitted that none of its programs are required to

accommodate customer or demand growth. AltaGas also stated that the associated costs of the programs are significantly higher than historical levels and, therefore, represent a material cost to the company.[589]

519. AltaGas stated that its proposed capital tracker programs could not have been undertaken previously, citing in the case of pipe replacements that the pipes has now reached "useful life cliffs."[590] Similarly for station refurbishments, the level of obsolescence, increasing safety risks and compromised reliability, which are now at issue, are a function of the passage of time. The proposed refurbishments could not have been undertaken prudently prior to this time.[591] The current gas supply project requirements are driven by third party actions or supply-related issues that are outside the control of AltaGas.[592] Throughout its application, AltaGas indicated that each of its capital tracker programs sought to address increasing risks posed to customers, the public and its workers as a result of the necessity respecting asset replacement, refurbishment or requirements of third parties.[593]

520. In general, the UCA refuted AltaGas' claim that employees, customers and the public will be unnecessarily and inappropriately exposed to serious safety and reliability risks, without approval of its pipe replacement projects.[594]

521. SMi disagreed that the business cases provided by AltaGas represented proper engineering support for its projects. SMi stated that an engineering study should be prepared separately from a business case, and that an engineering study must be "properly formatted to meet with the prevailing code requirements and needs to be certified by a professional engineer."[595]

522. The UCA pointed out that, although the Commission approved AltaGas' pipe replacement program for 2010 through 2012 in Decision 2012-091,[596] the decision suggested that AltaGas would need to justify any further increase in spending.[597] The UCA stated that AltaGas has not provided the required support for its pipeline related capital tracker projects and, accordingly, these AltaGas pipeline related capital tracker projects should be denied.[598]

523. AltaGas responded to SMi's assertion that its business cases and engineering justifications were lacking. AltaGas stated that the business cases bring together key information from AltaGas' internal engineering systems and processes, including:

- detailed project specifications and maps from AUI's geospatial infrastructure database
- quantitative and qualitative analysis of key risk factors from AUI's risk assessment system

589 Exhibit 39.01, AltaGas application, paragraphs 7, 19, 20, 35, 40, 46, 50 and 58.
590 Exhibit 39.01, AltaGas application, paragraph 38.
591 Exhibit 39.01, AltaGas application, paragraph 48.
592 Exhibit 39.01, AltaGas application, paragraph 60.
593 Exhibit 39.01, AltaGas application, PDF pages 5, 32, 48, 71, 90, 139, 163 of 172.
594 Exhibit 274.02, UCA reply argument, paragraph 285.
595 Transcript, Volume 10, page 1934, lines 16-18.
596 Decision 2012-091: AltaGas Utilities Inc., 2010-2012 General Rate Application - Phase I, Application No. 1606694, Proceeding ID No. 904, April 9, 2012.
597 Decision 2012-091, paragraph 110.
598 Exhibit 274.02, UCA reply argument, paragraph 288.

- detailed cost estimates from AUI's project management system
- analysis of historical cost information from AUI's financial management system[599]

524. AltaGas stated the fact its business cases had not been stamped and sealed by its engineers did nothing to reduce the accuracy, completeness, or credibility of the information contained therein. AltaGas submitted that "the need, potential alternatives and timing for these programs have not changed, nor have the risks the subject programs are intended to address. No new technologies or industry practices have emerged in the year and a half since these programs were first tested to alter the need for these essential replacements."[600]

525. The CCA did not comment on the engineering support or business cases provided by AltaGas.

Commission findings

526. In Section 3.1.4 of this decision, the Commission found that it is not necessary for the companies to engage external engineers to provide an assessment in support of their capital tracker projects. The companies may rely on internal engineers and resources. The Commission also determined that there is no requirement for an engineering study to be stamped and sealed when assessing the eligibility of projects for capital tracker treatment. Accordingly, the Commission accepts the format of the business cases and engineering support provided by AltaGas and the Commission will make its assessment of the eligibility of the company's projects on that basis.

527. The Commission's project assessment of the programs proposed for capital tracker treatment by AltaGas is set out below.

5.2.1.2 AltaGas' pipe replacement program

528. In Decision 2012-091, the Commission approved three pipe replacement projects; polyvinylchloride (PVC) replacement, non-certified and interim-certified polyethylene (PE) pipe replacement, and pre-1957 steel pipe replacement. Each pipe replacement project was presented as part of an integrated overall pipe replacement program to improve safety and service quality.

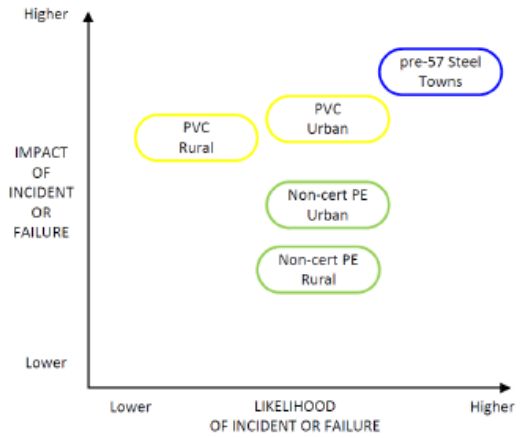
529. AltaGas indicated that all pre-1957 steel, non-certified and interim-certified PE, and PVC pipe referenced in its business cases needs to be replaced. This is because these pipe segments are at, or past the end of their useful lives, have high leak frequencies and/or exceed AltaGas' risk tolerance threshold with respect to the likelihood of, and potential impact from, failures.[601]

530. AltaGas described the key steps in its multi-stage project prioritization and staging process for its pipe replacement program as including risk assessment, surveillance, pre-engineering and design, contractor selection and construction.[602] AltaGas provided a risk assessment matrix to give a more tangible analysis of the levels of risk associated with the three types of pipe that are proposed to be replaced, based on the probability of an incident and the

[599] Exhibit 279.01, AltaGas reply argument, paragraph 58.
[600] Exhibit 279.01, AltaGas reply argument, paragraphs 3 and 59.
[601] Exhibit 90.01, AUC-AUI-13(a).
[602] Exhibit 39.01, AltaGas application, paragraph 33.

severity of an incident, if it occurs.[603] The quantification of pipeline risk provided by AltaGas considered factors such as the type and age of pipe, leak history and location; and other characteristics that are directly related to the likelihood and severity of injury or property damage. This matrix also considered the differing risk attributes associated with urban and rural pipe. AltaGas' risk assessment matrix is set out below:

Table 10. AltaGas risk assessment matrix[604]



531. AltaGas noted, in its reply argument, that the safety and reliability issues associated with its pre-1957 steel, PVC and non-certified and interim-certified PE pipe replacement are the same in 2013 as they were in 2010 through 2012, although the magnitude of these issue increases over time as the assets continue to deteriorate.

532. Each of the pipe replacement projects is discussed in the following sections.

5.2.1.2.1 Replacement of PVC pipe

533. As of October 2012, AltaGas had approximately 540 kilometres (km) of PVC pipe in use in its 20,000 km natural gas distribution system, representing about 2.7 per cent of the system. This pipe, which was installed in the late 1960s, has developed a history of brittleness causing instability and a tendency towards sudden fracturing during excavation. AltaGas considers that the difficulties with repairs and tie-ins to the pipe, combined with a lack of tracer wire, pose an unacceptable safety risk to the public and AltaGas employees.

534. AltaGas' risk assessment matrix for PVC pipe established a "high/medium impact and high/medium probability" for urban areas and a "high/medium impact and medium/low probability" for rural areas.[605]

535. During 2010 to 2012, AltaGas replaced approximately 114 km of PVC pipe, at a total cost of $6.9 million. AltaGas submitted a business case in support of its proposal to replace approximately 44 km of PVC pipe in 2013, at a total cost of $3 million. With the expected continuation of the project throughout the 2013 to 2017 PBR term, 276 km of PVC pipe is

[603] Exhibit 39.01, AltaGas application, paragraph 27.
[604] Exhibit 39.01, AltaGas application, paragraph 27.
[605] Exhibit 39.01, AltaGas application, business case, replacement of PVC pipe, page 9.

expected to be replaced during that time, with complete replacement of PVC pipe expected by 2021.[606]

536. AltaGas provided in its business case, a breakdown for each of the six projects planned for 2013 that included the km of PVC pipe to be replaced, the estimated cost and the estimated overhead applicable to each project.[607]

537. AltaGas also included estimations of the direct costs per km, km to be replaced, and overhead on a year-by-year forecast over the PBR term. AltaGas estimated that its PVC pipe replacements would increase by 15 per cent annually, and for forecasting purposes, unit costs were forecast to increase by the 2013 I factor of 2.87 per cent. Total annual costs are equal to unit costs multiplied by the lengths to be replaced, plus 6.7 per cent overhead.

538. In Appendix II of its PVC pipe replacement business case, AltaGas provided a detailed work order cost estimate for its 2012 Morinville rural project, to demonstrate its forecasting process.

539. SMi indicated that not all reasonable alternatives have been considered to minimize costs, such as the integration of similar sub-projects in a given geographic area. SMi concluded the project is not required to prevent impairment to quality of service.[608] SMi acknowledged during the hearing that there was no objection [by SMi] to the forecast cost of the project.[609]

540. In reply argument, the UCA clarified that SMi's conclusion that AltaGas' cost estimates respecting certain projects were reasonable does not support a finding that those particular projects should necessarily qualify as capital trackers.[610] This is because a proposed project must satisfy all three criteria to be eligible for capital tracker treatment.

5.2.1.2.2 Replacement of pre-1957 steel pipe

541. As of December 2012, AltaGas had approximately 241 km of pre-1957 steel pipe in use in its natural gas distribution system, representing about 1.2 per cent of the system. AltaGas identified certain unacceptable hazards with this pipe related to increasing failures from corrosion damage, weld failures and compression fitting failures. AltaGas indicated that each hazard alone is sufficient reason to replace the pre-1957 steel pipe that has a much higher failure rate than AltaGas' other steel pipe.

542. During 2010 to 2012, AltaGas replaced approximately 37 km of pre-1957 steel pipe, at a total cost of $6.1 million. AltaGas submitted a business case to support its proposal to replace approximately 19 km of pre-1957 steel pipe in 2013, at a total cost of $3.1 million. The project is expected to continue throughout the 2013 to 2017 PBR term with all pre-1957 steel pipe expected to be replaced by 2021. AltaGas estimated that, by the time the program is completed, some of the pipe being replaced will have been in service for more than 70 years.[611]

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606 Exhibit 39.01, AltaGas application, business case, replacement of PVC pipe, pages 1 and 2.
607 Exhibit 39.01, AltaGas application, Business case, replacement of PVC pipe, page 2.
608 Exhibit 109.02, UCA evidence of J. Shah and N. Tehsin, pages 9 to 11.
609 Transcript, Volume 10, page 1927, lines 3-5.
610 Exhibit 274.02, UCA reply argument, paragraph 287.
611 Exhibit 95.03, AUC-AUI-15, Business case, replacement of pre-1957 steel pipe, revised March 22, 2013, page 2.

543. AltaGas' risk assessment ranks pre-1957 steel pipe as the highest risk segment in its distribution system with respect to both impact and probability. AltaGas proposed to continue with the program using a risk assessment process to prioritize system segments for replacement. Factors for consideration include: the risks related to the leak rates per meter of pipe, number of customers per meter of pipe, extent of ground coverage over the pipe, population density in proximity to the pipe, planned construction in the area, volume flow in meters cubed of gas flowing and capacity measured in pressure drop per length of pipe.

544. AltaGas provided in its business case, a breakdown for each of the four projects planned for 2013 that included the km of pre-1957 steel pipe to be replaced, the estimated cost and the estimated overhead applicable to each project.[612]

545. AltaGas also included estimations of the direct costs per km, km to be replaced, and overhead on a year-by-year forecast over the PBR term. AltaGas estimated that its pre-1957 steel pipe replacements would increase by 15 per cent annually, and for forecasting purposes, unit costs were forecast to increase by the 2013 I factor of 2.87 per cent. Total annual costs are equal to unit costs multiplied by the lengths to be replaced, plus 6.7 per cent overhead.

546. In Appendix I of its pre-1957 steel pipe replacement business case, AltaGas provided a detailed project cost estimate for its Calmar project as an example of the level of its forecasting process.

547. SMi agreed with the executive summary and cost estimates provided in AltaGas' business case but stated that not all reasonable alternatives have been considered to minimize cost, such as integration of similar projects in a given geographic area.[613] SMi indicated its preference for an alternative phased approach which could entail replacement of high risk pipe with no cathodic protection in combination with an inspection program for low and mid risk pipes, fittings and welds that have cathodic protection.[614]

548. Further, SMi concluded there is no compelling or urgent need to commence the project in 2013 based on "quantified drivers for safety, reliability and service quality impacts."[615]

549. AltaGas rejected the UCA's suggestion, which resulted from its adoption of the position of SMi, to replace only portions of this pipe, stating that the UCA "clearly overlooks the fundamental issues and safety concerns driving the need for these pipe replacements."[616]

5.2.1.2.3 Replacement of non-certified and interim-certified PE pipe

550. As of December 2012, AltaGas' non-certified and interim-certified PE pipe comprises approximately 3,240 km of the total natural gas distribution system of 20,000 km, or about 16.4 per cent. AltaGas identified certain unacceptable hazards with this pipe related to the increasing frequency of leaks resulting from impinging or squeezing the pipe during repair.

[612] Exhibit 95.03, AUC-AUI-15, Business case, replacement of pre-1957 steel pipe, revised March 22, 2013, page 2.
[613] Exhibit 109.02, UCA evidence of J. Shah and N. Tehsin, pages 5-8.
[614] Exhibit 109.02, UCA evidence of J. Shah and N. Tehsin, page 6.
[615] Transcript, Volume 10, page 1921, lines 13-16.
[616] Exhibit 279.01, AltaGas reply argument, paragraph 9.

551. During 2010 to 2012, AltaGas replaced approximately 32 km of non-certified and interim-certified PE pipe, at a total cost of $3.8 million. AltaGas submitted a business case to support its proposal to replace approximately 30 km of PE pipe in 2013, at a total cost of $2.9 million.[617] With the expected continuation of this project throughout the 2013 to 2017 PBR term, 189.2 km of PE pipe is expected to be replaced during that time. AltaGas now estimates that, given the volume of pipe involved, total replacement of PE pipe will extend beyond the 10-year timeframe originally proposed in the 2010 to 2012 GRA and "may take up to 25 years to complete."[618] AltaGas estimated that, by the time the overall project is completed, some of the pipe being replaced will have been in service for more than 60 years.

552. AltaGas' risk assessment matrix for PE pipe established a "high/medium impact and high/medium probability" for urban areas and a "medium/low impact and high/medium probability" for rural areas.[619]

553. AltaGas proposed to continue with the project on a risk-focused basis throughout the PBR term and beyond, replacing the segments of PE pipe at greatest risk for failure.

554. AltaGas provided in its business case, a breakdown for each of the 14 projects planned for 2013 that included the km of non-certified and interim-certified PE pipe to be replaced, the estimated cost and the estimated overhead applicable to each project.[620]

555. AltaGas also included estimations of the direct costs per km, km to be replaced, and overhead on a year-by-year forecast over the PBR term. AltaGas estimated that its PE pipe replacements would increase by 15 per cent annually and, for forecasting purposes, unit costs were forecast to increase by the 2013 I factor of 2.87 per cent. Total annual costs are equal to unit costs multiplied by the lengths to be replaced, plus 6.7 per cent overhead.

556. In Appendix III of its PE pipe replacement business case, AltaGas provided a detailed project cost estimate for its 2013 Red Willow non-certified PE pipe replacement project as an example of the level of its forecasting process.

557. SMi identified several alleged shortcomings in the business case provided by AltaGas with respect to PE pipe replacement. SMi stated that it agreed "with the basic principle of AUI's risk assessment but believe it needs to be qualified by detailed engineering assessments, technical analysis, including laboratory results showing the end of life cycle of the installed pipe by geographic segment."[621]

558. SMi stated its view that, while the project is reasonable from a cost perspective, the driver of the project is not safety, but growth, due to the new pipe being able to operate at higher pressures, which would optimize hydraulic capability and load growth,[622] and that "not all

[617] Exhibit 95.02, AUC-AUI-15, Business case, replacement of non-certified and interim-certified PE pipe, revised March 22, 2013, pages 1-2.
[618] Exhibit 95.02, AUC-AUI-15, Business case, replacement of non-certified and interim-certified PE pipe, revised March 22, 2013, page 1.
[619] Exhibit 95.02, AUC-AUI-15, Business case, replacement of non-certified and interim-certified PE pipe, revised March 22, 2013, page 9.
[620] Exhibit 95.02, AUC-AUI015, Business case, replacement of non-certified and interim-certified PE pipe, revised March 22, 2013, pages 2.
[621] Exhibit 109.02, UCA evidence of J. Shah and N. Tehsin, page 12.
[622] Exhibit 109.02, UCA evidence of J. Shah and N. Tehsin, page 12, page 13.

reasonable alternatives have been considered to minimize cost, such as integration of similar projects in a given geographic area."[623]

Commission findings

559. Each of AltaGas' pipe replacement programs proposed for capital tracker treatment in 2013 was supported by an individual business case. The Commission has reviewed the business cases and the evidence of the UCA with respect to each of AltaGas' pipe replacement programs and finds the information provided by AltaGas supports a finding that these projects are required to maintain service reliability and safety at adequate levels.

560. With respect to the scope and forecast costs of the pipe replacement projects, the Commission has reviewed AltaGas' detailed data provided for each component of its actual pipe replacement program scope and costs on a component basis for the years 2010 to 2012 as well as the detailed forecast data on program scope and costs for 2013 and beyond.[624] AltaGas included detailed estimates on a component basis of the direct costs per km, km to be replaced, and overhead on a year-by-year forecast over the PBR term.[625] SMi acknowledged that it has no objection to the forecast costs for each of AltaGas' PVC pipe, pre-1957 steel pipe, and PE pipe programs.[626] In addition, the Commission observes that the forecast scope and costs for the three pipe replacement projects proposed by AltaGas for 2013 are comparable to the scope of work completed and the actual costs for these programs in the years 2010 to 2012.[627]

561. The Commission disagrees with SMi that AltaGas has not considered cost savings through project integration, wherever possible. AltaGas described how project planning was assessed continuously and has resulted in alignment with municipalities and other utilities' construction schedules in various centres to achieve project integration and efficiencies.[628] For example, during an exchange with the Commission at the hearing, AltaGas' witness, Mr. Lesage, identified that a project in Leduc had been reassessed to allow for earlier completion of a Calmar project, and described this as "a prime example of a reassessment of our criticality…"[629]

562. In Decision 2012-091, the Commission approved the AltaGas pipe replacement programs for which AltaGas continues to seek cost recovery by way of a capital tracker. In that decision, the Commission found that AltaGas demonstrated it is taking a methodical approach to replacing the areas of its system that represent the greatest risk to customers and employees.[630]

563. Given the evidence in this proceeding, the Commission remains of the view that the circumstances at the time of Decision 2012-091, with respect to the need for pipe replacements, are essentially unchanged and cannot be mitigated satisfactorily by any alternative other than the continuation of the targeted replacement program, as proposed by AltaGas.

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[623] Exhibit 268.02, UCA amended argument, paragraph 300.

[624] Exhibit 39.01, AltaGas application, Business case, replacement of PVC pipe; Exhibit 95.03, AUC-AUI-15, business case, replacement of pre-1957 steel pipe, revised March 22, 2013; Exhibit 95.02, AUC-AUI-15, Business case, replacement of non-certified and interim-certified PE pipe, revised March 22, 2013; Exhibit 90.01, AUC-AUI-15 (pre-1957 steel), AUC-AUI-16 (PVC) and AUC-AUI-17 (PE pipe).

[625] Ibid.

[626] Transcript, Volume 10, page 1927, lines 3-5; Exhibit 109.02, UCA evidence of J. Shah and N. Tehsin, pages 5 to 8; Exhibit 109.02, UCA evidence of J. Shah and N. Tehsin, page 12, page 13.

[627] Exhibit 90.01, information responses, AUC-AUI-15, AUC-AUI-16, AUC-AUI-17.

[628] Exhibit 90.01, AltaGas information responses, AUC-AUI-1(e).

[629] Transcript, Volume 5, page 877, lines 5-6.

[630] Decision 2012-091, paragraph 107.

564. For the above reasons, the Commission finds that the information provided by AltaGas supports a finding that scope, level, timing and forecast costs of each pipeline replacement project, as proposed for 2013, are reasonable, thereby satisfying the project assessment requirement of Criterion 1.

5.2.1.3 AltaGas' station refurbishment program

565. In its application, AltaGas indicated that in Decision 2012-091, the Commission approved its station refurbishment program. This program is required due to stations, many of which were installed throughout the 1950s to 1970s, being now both undersized and obsolete. The station refurbishment program will upgrade approximately 240 stations to provide greater service reliability and safety to the customers they supply.

566. Out of the approximately 700 stations it currently maintains and operates, AltaGas has completed 108 station refurbishments or replacements, at a total cost of $4.7 million since the program's inception in 2010. AltaGas submitted a business case to support its 15 projects for the refurbishment of four purchase meter stations, five town border stations, and six post regulator stations in 2013, at a total cost of $1.2 million.[631] The program is expected to continue throughout the 2013 to 2017 PBR term, and 134 stations are expected to be refurbished or replaced at a cost of $13.3 million during that time. This will represent most of the work necessary to substantially complete AltaGas' required station refurbishments.[632]

567. In its application, AltaGas stated that the necessity for these large scale station refurbishments is the result of the passage of time and incurring these costs would not have been prudent prior to 2010.[633]

568. SMi did not provide a technical opinion respecting the proposed station refurbishments, indicating in its evidence that "there are no industry standards for end of life or design life for such stations, which required urgent need for mass replacement."[634] SMi indicated that no alternatives were considered in the business case provided by AltaGas. They also proposed that, despite the fact the cost estimates are in accordance with normal practice in the industry, they nonetheless appear to be "spiraling out of control," and the only viable option is to refurbish or replace the aging stations.[635]

Commission findings

569. The Commission has reviewed the business cases and the evidence of the UCA with respect to each of AltaGas' station refurbishment projects and accepts the evidence of AltaGas that station refurbishment activities are required in 2013 to maintain service reliability and safety at adequate levels.

570. With respect to the scope and forecast costs of the station refurbishment projects, the Commission has reviewed AltaGas' data provided for each of its actual station refurbishment program scope and costs for the years 2010 to 2012 as well as the forecast data on program scope and costs for 2013.[636] Specifically, AltaGas included estimates for each of the 15 stations to be

[631] Exhibit 95.04, AUC-AUI-15, Business case, station refurbishment program, revised March 22, 2013.
[632] Including the 15 refurbishments proposed for 2013.
[633] Exhibit 39.01, AltaGas application, paragraph 48.
[634] Exhibit 109.02, UCA evidence of J. Shah and N. Tehsin, page 17.
[635] Ibid.
[636] Exhibit 95.04, AUC-AUI-15, Business case, station refurbishment program, revised March 22, 2013.

replaced or refurbished in 2013.[637] Although SMi had reservations with respect to the cost management for this program, it stated that AltaGas' cost estimates are in accordance with normal practice in the industry.[638] In addition, the Commission observes that the forecast scope and costs for the three station refurbishment projects proposed by AltaGas for 2013 are comparable to the scope of work completed and the actual costs for these projects in the years 2010 to 2012.[639]

571. Given the evidence in this proceeding, the Commission remains of the view that the circumstances at the time of Decision 2012-091 with respect to the need for station refurbishments are essentially unchanged, and cannot be mitigated satisfactorily by any alternative other than the continuation of the targeted refurbishment program, as proposed by AltaGas. Also, given that many of the stations contain obsolete equipment and are now undersized for current requirements, the Commission agrees that AltaGas' proposal to proceed with the 15 individual station refurbishment projects in 2013 is reasonable.

572. For the above reasons, the Commission finds that information provided by AltaGas supports a finding that the scope, level, timing and forecast costs of the station refurbishment program, as proposed for 2013, are reasonable, thereby satisfying the project assessment requirement of Criterion 1.

5.2.1.4 AltaGas' gas supply programs

573. AltaGas provided two business cases supporting each of its proposed gas supply projects.[640] These projects are part of the overall system betterment program started in 2010, which was intended to identify and address any significant risks to service quality and safety. Additionally, AltaGas anticipated the projects would address other gas supply constraints or issues, such as deteriorating supply or quality issues resulting from the termination of third party suppliers.

574. Since the program's inception in 2010, AltaGas has completed 12 major gas supply projects. Gas supply stations located at Wandering River and Westlock were proposed for completion in 2013.

5.2.1.4.1 Suncor Athabasca gas supply

575. The segment of AltaGas' gas distribution network which serves customers around the community of Wandering River has historically been supplied by Suncor Energy Marketing Inc. (Suncor). In late 2012, Suncor notified AltaGas that the terms of its gas supply would change significantly, effective November 1, 2012; moving from an annual to a month-to-month term and would no longer be uninterruptible.

576. Because the reliability of the gas supply source for the more than 100 customers AltaGas serves from the station will change, AltaGas proposed to obtain a new source of gas supply from a TransCanada Pipelines Ltd. (TCPL) pipeline located east of the existing station. The solution

[637] Exhibit 95.04, AUC-AUI-15, Business case, station refurbishment program, revised March 22, 2013.
[638] Ibid.
[639] Exhibit 90.01, information responses, AUC-AUI-5.
[640] Exhibit 39.01, AltaGas application, Business cases, Suncor Athabasca gas supply (AT-078) and Westlock gas supply (WS-040).

involves constructing a new regulating, metering and odorizing (RMO) station and a suitable connection to the existing AltaGas distribution system, at a cost of $738,300.

577. SMi did not provide a technical opinion on the proposed Suncor Athabasca gas supply project, only indicating that service quality could be impaired if the proposed work is not performed. SMi concluded that the cost estimate is "in accordance with normal practice".[641]

5.2.1.4.2 Westlock gas supply

578. AltaGas indicated in its application that its Westlock gas system is supplied from a gas gathering system operated by ATCO Midstream. The gas supply serves approximately 425 rural customers.

579. Due to numerous issues over the past several years related to the industrial quality of the gas supply from ATCO Midstream, AltaGas raised concerns over increased risks of customer outages, and the potential for fires or explosions related to flammable liquids entering customer premises due to poor gas quality.

580. The business case identified a solution to provide customers with a safe, reliable and clean (dry) supply of gas without the unpredictable and dangerous incidents that have arisen over the past several years. AltaGas determined that the most feasible alternative, which has an estimated cost of $515,000, is to source a new gas supply from an ATCO Pipelines pipeline (through TCPL) that intersects the existing AltaGas high-pressure pipeline in the area. AltaGas submitted that the construction of a new RMO station will address the current issues of unacceptable and dangerous gas quality.

581. AltaGas indicated it would use its internal engineering, system planning and design resources for detailed development of the project. AltaGas considered that the main risk with the project is securing a connection agreement with ATCO Pipelines and TCPL to ensure sufficient winter load capacity.

582. SMi did not provide a technical opinion on the proposed Westlock gas supply project, only indicating that it understood the urgency of this project. SMi concluded that the cost estimate is "in accordance with normal practice."[642]

Commission findings

583. The Commission has reviewed the business cases and the evidence of the UCA with respect to each of AltaGas' gas supply projects and accepts the evidence of AltaGas that these gas supply replacement activities are required in 2013 to maintain service reliability and safety at adequate levels.

584. With respect to the scope and forecast costs of the gas supply projects, the Commission has reviewed AltaGas' data provided for its actual scope and costs for the gas supply projects for the years 2010 to 2012 as well as the forecast data on the program scope and costs for both of the gas supply projects planned for 2013.[643] Specifically, AltaGas provided detailed work order

[641] Exhibit 109.02, UCA evidence of J. Shah and N. Tehsin, page 20.
[642] Exhibit 109.02, UCA evidence of J. Shah and N. Tehsin, pages 21-22.
[643] Exhibit 39.01, AltaGas application, business cases, Suncor Athabasca gas supply (AT-078) and Westlock gas supply (WS-040); Exhibit 90.01, information responses, AUC-AUI-8.

estimates for both of its gas supply projects including labour hours and rates, as well as material quantities and unit costs for 2013.[644] SMi concluded that the cost estimate for AltaGas' gas supply projects is "in accordance with normal practice."[645] In addition, the Commission observes that the forecast scope and costs for the two gas supply projects proposed by AltaGas for 2013 are comparable to the scope of work completed and the actual costs for the gas supply projects in the years 2010 to 2012.[646]

585. The Commission considers that the proposal at the Suncor Athabasca site to construct a new RMO station, in addition to new sourcing of gas supply from TCPL, is a practical and cost effective solution to address the supply reliability situation in the area. Equally, the proposal at the Westlock location to construct a new RMO station, in addition to new sourcing of gas supply from ATCO Pipelines, is a practical and cost effective solution to address the gas quality issues that have arisen.

586. For the above reasons, the Commission finds that the information provided by AltaGas supports a finding that the proposed scope, level, timing and forecast costs of each gas supply project, as proposed for 2013, are reasonable, thereby satisfying the project assessment requirement of Criterion 1.

5.2.2 Accounting test

587. In Section 3.3.1 of this decision, the Commission found that in order to satisfy the accounting test and thus demonstrate that a program or project (depending on the approved level of grouping) is outside the normal course of the company's ongoing operations, the associated revenue provided under the I-X mechanism would not be sufficient to recover the entire revenue requirement associated with the prudent capital expenditures for the program or project.

588. In sections 3.1.2 and 3.1.3 of this decision, the Commission determined that the project net cost approach adequately demonstrates that a particular project proposed for capital tracker treatment does not result in double counting and is a reasonable method to identify the extent to which a project is underfunded by the I-X mechanism. Accordingly, the Commission determined that the accounting test should be based on a project net cost approach, because this approach is sufficient to satisfy the Commission that all of the forecast or actual expenditures for a capital project or program are, or a portion is, outside of the normal course of the company's ongoing operations.

Commission findings

589. AltaGas used a project net cost approach to demonstrate that its three programs merit capital tracker treatment. The Commission has reviewed AltaGas' schedules[647] that make up its project net cost analysis, and is satisfied that AltaGas' forecast revenue provided under the

[644] Exhibit 39.01, AltaGas application, business cases, Suncor Athabasca gas supply (AT-078) and Westlock gas supply (WS-040).
[645] Exhibit 109.02, UCA evidence of J. Shah and N. Tehsin, pages 21-22.
[646] Exhibit 90.01, information responses, AUC-AUI-8.
[647] Exhibit 223.04, AltaGas capital tracker schedules, revised July 12, 2013.

I-X mechanism is not sufficient to provide the entire revenue requirement associated with the forecast capital expenditures for each of the company's three capital programs in 2013.[648]

590. Accordingly, the Commission finds that each of AltaGas' programs proposed for capital tracker treatment satisfies the accounting test requirement of Criterion 1. The reasonableness of the 2013 forecast capital expenditures for AltaGas' three programs was determined in the project assessment. For these reasons, the Commission finds that, for the purposes of this decision, AltaGas' three capital programs are outside the normal course of the company's ongoing operations, thereby satisfying Criterion 1.

5.3 Criterion 2 – Ordinarily the project must be for replacement or required by an external party

591. As discussed in Section 3.2.1 of this decision, Criterion 2 requires that in most cases a capital tracker project should be for asset replacement or required by an external party. In that section, the Commission also explained that, in principle, a growth-related project will satisfy the requirements of Criterion 2 when it can be demonstrated that customer contributions together with the incremental revenues allocated to the project on some reasonable basis, when added to the revenue provided under the I-X mechanism, are insufficient to offset the revenue requirement associated with the project in a PBR year.

592. The UCA agreed that since AltaGas' programs are either for asset replacement or made necessary through third party actions, these programs satisfy Criterion 2. AltaGas submitted that the proposed pipeline replacement and station refurbishment programs are primarily driven by these facilities having come to the end of their useful life, whether due to age or concerns with respect to risk of failure. AltaGas also explained that the current gas supply project requirements are either driven by third parties or are supply-related and are therefore outside the control of AltaGas.[649]

Commission findings

593. Based on the evidence presented, the Commission finds that the three programs proposed by for capital tracker treatment in 2013 are either for asset replacement, refurbishment or driven by external parties, and therefore satisfy the requirements of Criterion 2.

5.4 Criterion 3 – The project must have a material effect on the company's finances

594. In Section 3.3 of this decision, the Commission determined that a two-tier materiality threshold should be adopted for capital trackers. The first tier of the materiality threshold, the four basis point threshold, will be applied at the level of individual projects or programs proposed for capital tracker treatment (grouped in the manner approved by the Commission). The second tier of the materiality threshold, the 40 basis point threshold, will be applied to the aggregate revenue requirement proposed to be recovered by way of all capital trackers.

595. Based on the Commission's estimates in Table 8 of this decision, the first tier of the materiality threshold for AltaGas in 2013 is $31,000. Given the Commission's findings with respect to AltaGas' grouping of projects, the materiality threshold will apply to the revenue

[648] These amounts include working capital. As discussed in Section 4.2, although the Commission directs AltaGas to exclude working capital in its subsequent capital tracker filings, the amount of working capital included in this application is minimal and does not affect the accounting test.

[649] Exhibit 39.01, AltaGas application, paragraphs 9 and 60.

requirement associated with each program that is not adequately funded under the I-X mechanism. The revenue requirement not funded under the I-X mechanism for each of AltaGas' three programs, as filed by AltaGas, is set out in Table 9 above. The Commission observes that each of these amounts exceeds the first tier of the materiality threshold.[650]

596. With respect to the second tier of the materiality threshold, based on the Commission's estimates in Table 8 of this decision, the second tier materiality threshold for AltaGas is $0.313 million. The total amount of revenue requirement not funded under the I-X mechanism for AltaGas' three programs proposed for capital tracker treatment, in aggregate, as filed by AltaGas, is set out in Table 9 above. The Commission observes that this amount exceeds the second tier of the materiality threshold.

597. Accordingly, the Commission finds that the capital tracker programs proposed by AltaGas for 2013 satisfy the requirements of Criterion 3.

5.5 AltaGas' 2013 approved capital trackers and K factor amount

598. In sections 5.2 to 5.4, the Commission determined that each of AltaGas' three programs proposed for capital tracker treatment satisfies the Commission's three criteria. Accordingly, the Commission approves capital tracker treatment for each of the three proposed programs for 2013.

599. The Commission had reviewed AltaGas' K factor calculations[651] and finds that they comply with the K factor calculation methodology approved by the Commission in Section 4.4 of this decision, with one exception. As discussed in Section 4.2, AltaGas proposed to include cash working capital as a component of rate base in the calculation of its K factor. However, the Commission found that cash working capital should not be included in K factor calculations. Nevertheless, given that the amount of cash working capital included in this application is minimal, the Commission will not require a refiling to exclude the cash working capital component included in AltaGas' K factor calculation at this time. The Commission directs AltaGas to exclude cash working capital from its K factor calculation at the time of its 2013 capital trackers true-up application and in its subsequent capital tracker filings.

600. Accordingly, the 2013 forecast costs for each of AltaGas' three capital tracker programs are approved, as filed, for inclusion in its 2013 K factor. The Commission approves AltaGas' 2013 K factor of $1.031 million to be recovered from customers on an interim basis. As determined at paragraphs 615 and 974 of Decision 2012-237, AltaGas will only be permitted to collect the approved forecast amounts for its approved capital tracker programs on an interim basis, subject to a prudence review and true-up to actual costs in respect of these programs, to be undertaken following completion of the 2013 programs.

601. AltaGas is directed to file an application for an adjustment to Rate Rider F to collect, on an interim basis, the 2013 forecast K factor amount in excess of the 60 per cent K factor placeholder amount that was included in AltaGas' 2013 PBR rates. This amount is to be recovered by December 31, 2014. AltaGas' 2014 K factor placeholder proposed in its 2014 annual PBR rate adjustment filing is not to be modified to account for the 2013 K factor amount.

[650] These amounts include working capital. As discussed in Section 4.2, although the Commission directs AltaGas to exclude working capital in its subsequent capital tracker filings, the amount of working capital included in this application is minimal and does not affect the assessment of materiality.

[651] Exhibit 223.04, AltaGas capital tracker schedules, revised July 12, 2013.

6 ATCO Gas

602. An overview of ATCO Gas' proposal was provided in Section 2.2.1. In summary, ATCO Gas' capital tracker application included six programs proposed for capital tracker treatment totaling approximately $112 million of capital expenditures in 2013.

603. In sections 3.1.2 and 3.1.3 of this decision, the Commission determined that ATCO Gas' overall approach to capital trackers, including its "reasoned demonstration," should not be used for the purposes of demonstrating the absence of double counting and quantifying the investments outside of the normal course of the company's ongoing operations, as required to satisfy Criterion 1. In Section 4.4 the Commission also did not accept the K factor calculation methodology under the aggregate investment shortfall approach utilized by the ATCO companies.

604. Accordingly, the Commission does not approve any of the projects proposed by ATCO Gas for capital tracker treatment at this time. Nonetheless, the Commission has considered in the sections that follow, for purposes of providing additional guidance on the programs and projects applied for, whether these programs and projects are properly grouped and comply with the requirements of the project assessment component of Criterion 1 and the requirements of Criterion 2. With respect to the accounting test component of Criterion 1 and the Criterion 3 materiality test, the Commission has provided ATCO Gas with certain directions as set out in sections 6.2.2 and 6.4 below.

6.1 Grouping of projects proposed for capital tracker treatment

605. As discussed in Section 2.2.1 of this decision, the following table summarizes the grouping of capital tracker projects into programs and the aggregate K factor amount, as applied for by ATCO Gas. Each capital tracker program was supported by at least one business case.

Table 11. ATCO Gas proposed capital tracker programs ($000)[652]

	Capital expenditure			K factor		
Capital tracker	North	South	Total	North	South	Total
Urban mains replacement	18,074	5,426	23,500	1,338	515	1,853
PE/PVC rural mains replacement	12,300	16,700	29,000	1,365	1,081	2,446
Meter relocation & replacement project	15,279	21,987	37,266	1,612	1,904	3,516
Line heater replacements	3,120	2,080	5,200	323	242	565
Transmission driven capital	6,082	1,615	7,697	346	871	1,217
Third-party replacements	6,635	3,400	10,035	499	225	724
Total	61,490	51,208	112,698	5,483	4,838	10,321

606. The 2013 urban mains replacement program is the annual installment of an ongoing multiyear program for the replacement of ATCO Gas' urban steel mains. In 2013, six individual replacement projects were scheduled as part of the urban mains replacement program.

607. The rural mains replacement program is intended to replace all polyethylene (PE) and polyvinylchloride (PVC) plastic pipe installed prior to 1978 within 20-years commencing in

[652] Exhibit 36.01, ATCO Gas application, Table 3.1.

2011, as approved by the Commission in Decision 2011-450.[653] The program is expected to continue until 2031 with an overall estimated cost of $950 million.[654]

608. The meter relocation and replacement project addresses safety issues that have been identified for inside meter sets with an above ground entry.[655] The project was approved in Decision 2011-450[656] to replace high and medium risk meters as part of a four-year program.

609. In Decision 2011-450,[657] the Commission also approved a three-year program, commencing in 2011, for the replacement of ATCO Gas' line heaters that have Occupational Health and Safety code compliance issues. ATCO Gas proposed a 2013 capital tracker for the replacement of 61 line heaters at a forecast cost of $5.2 million.[658]

610. ATCO Gas' transmission driven capital tracker program is composed of nine projects which are organized into three categories: high pressure replacements and relocations, high pressure pipeline retirements, and transmission company operational issues related to gas quality mitigation. ATCO Gas explained that high pressure replacements and relocations arise when a transmission company replaces or relocates a part of the high pressure pipeline and ATCO Gas has to connect the existing distribution system to the transmission system, which requires the installation of a regulating meter station and distribution pipeline.[659] High pressure pipeline retirements require ATCO Gas to install a regulating meter station and distribution pipeline in response to the retirement of a lateral or portion of the high pressure pipeline.[660] The gas quality mitigation project involves the installation of a regulating meter station and distribution pipeline to connect to a new high pressure source as a result of the transmission utility addressing a gas quality issue.[661]

611. Third-party replacements are projects where "ATCO Gas undertakes to alter, relocate or retire their facilities so that the third party can continue with their work."[662] Third-parties include municipalities, Alberta Transportation, and landowners.[663] ATCO Gas stated that it has no other alternative but to carry out these projects due to franchise agreements or the requests of Alberta Transportation and landowners.[664]

[653] Decision 2011-450: ATCO Gas (a Division of ATCO Gas and Pipelines Ltd.), 2011-2012 General Rate Application Phase I, Application No. 1606822, Proceeding ID No. 969, December 5, 2011, paragraph 188.
[654] Exhibit 36.01, ATCO Gas application, Appendix B, RMR business case, paragraph 7.
[655] Exhibit 36.01, ATCO Gas application, Appendix B, MRRP business case, paragraph 1.
[656] Decision 2011-450, paragraphs 160 and 161.
[657] Decision 2011-450, paragraph 200.
[658] Exhibit 36.01, ATCO Gas application, Appendix B, Line heater reliability business case, paragraph 7.
[659] Exhibit 36.01, ATCO Gas application, Appendix B, Transmission driven capital business case, paragraph 13.
[660] Exhibit 36.01, ATCO Gas application, Appendix B, Transmission driven capital business case, paragraph 14.
[661] Exhibit 36.01, ATCO Gas application, Appendix B, Transmission driven capital business case, paragraph 15.
[662] Exhibit 36.01, ATCO Gas application, Appendix B, Third-party replacements business case, paragraph 1.
[663] Exhibit 36.01, ATCO Gas application, Appendix B, Third-party replacements business case, paragraph 1.
[664] Exhibit 36.01, ATCO Gas application, Appendix B, Third-party replacements business case, paragraphs 2 and 3.

612. On the topic of grouping, ATCO Gas stated:

> While it is recognized that the Distribution Utilities must justify the necessity of capital expenditures on a project specific basis, it is submitted that the assessment of the three criteria should occur on a Capital Tracker program basis.[665]

613. The UCA recommended that the grouping of capital trackers be analyzed on a project-by-project basis for the purpose of assessing if it is required to prevent a decline in safety and service quality and for the purpose of determining the drivers of the tracker and materiality.[666] The UCA stated that, for the purpose of assessing historic levels of spending, the analysis should be done on a program level.[667]

614. Calgary submitted that paragraph 601 of Decision 2012-237 directed that projects should not be grouped together in order to assess materiality. Calgary submitted that ATCO Gas' "Reasoned Demonstration" was constructed to assess the overall funding shortfall contrary to the Commission's grouping direction.[668] Calgary recommended that capital trackers should be both "applied for and assessed at the project level."[669]

Commission findings

615. In Section 3.4 of this decision, the Commission determined that, once a proposed grouping of projects into a program has been approved, the accounting test and the first tier of the materiality test will be applied at the program level. The project assessment will be done on either a program or on a project basis, depending on the particular circumstances. The second tier of the materiality test will be applied at the level of all capital tracker projects, in aggregate. The Commission also determined that the reasonableness of the grouping of capital projects is best assessed on a case-by-case basis for each individual company.

616. With respect to the groupings provided by ATCO Gas, the Commission has determined that they are reasonable. The proposed capital trackers, as grouped, comprise projects of a similar nature and, where applicable, are consistent with ATCO Gas' past practice in general rate applications. The Commission also notes that ATCO Gas has grouped its UMR and RMR projects into two separate programs. Each of the programs includes projects for the replacement of pipe of a similar asset type with a relatively common vintage. It is the asset type and vintage characteristics of each type of pipe that give rise to the requirement for replacement. With respect to the MRRP and line heater replacements, the Commission notes that the component projects in each of these programs are for a common asset or facility type with similar safety characteristics that give rise to the requirement for replacement. Finally, with respect to the transmission driven capital and third-party replacements, the Commission notes that the component projects in each of these programs have a common driver for the replacement need. The driver for transmission driven capital is the requirement to replace facilities to connect to a gas transmission service provider. Third-party replacements are driven at the request of an external party. For these reasons, the Commission does not share the concerns of the UCA with respect to the grouping proposed by ATCO Gas. ATCO Gas' grouping of projects into programs, as proposed for capital tracker treatment, is approved as filed.

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665 Exhibit 265.01, ATCO Gas argument, paragraphs 145.
666 Exhibit 268.02, UCA amended argument paragraph 218.
667 Exhibit 268.02, UCA amended argument, paragraph 218.
668 Exhibit 269.01, Calgary argument, paragraph 233.
669 Exhibit 269.01, Calgary argument, paragraph 235.

617. For the purpose of the project assessment, the Commission will assess individually each of the component projects in ATCO Gas' six programs proposed for capital tracker treatment, commensurate with the level and detail of the information provided in support of each program.

6.2 Criterion 1 – The project must be outside of the normal course of the company's ongoing operations

618. In Section 3.1.1, the Commission found that, in order to determine if a project or program (depending on the accepted level of grouping) proposed for capital tracker treatment satisfies the requirements of Criterion 1, both a project assessment and an accounting test are necessary.

619. The purpose of the project assessment is to determine whether a project proposed for capital tracker treatment is (i) required to provide utility service at adequate levels and, if so, (ii) that the scope, level and timing of the project are prudent, and the forecast or actual costs of the project are reasonable. Section 6.2.1 applies the project assessment to ATCO Gas' six programs proposed for capital tracker treatment.

620. The purpose of the accounting test is to determine whether a project or program is outside of the normal course of the company's ongoing operations. As discussed in Section 3.1.1, in order for a capital project or program to be considered outside of the normal course of the company's ongoing operations, the associated revenue provided under the I-X mechanism would not be sufficient to recover the entire revenue requirement associated with the prudent capital expenditures for the project or program.

6.2.1 Project assessments

6.2.1.1 Adequacy of information provided in support of ATCO Gas' projects

621. The Commission has previously considered concerns with respect to the format and preparation of a business case and an engineering study in Section 3.1.4, including ATCO Gas' view that programs that are driven by third parties or operating conditions often do not require engineering studies to define the business need or part of the design solution. That section also addressed ATCO Gas' comment that it had provided engineering studies where it made sense to do so but that for "some Programs, engineering studies are not appropriate, practical, or useful."[670]

622. Calgary stated that ATCO Gas' capital tracker programs failed to meet the Commission's criteria, specifically Criterion 1, because ATCO Gas had been conducting each of its proposed capital trackers for a number of years which means they were not outside the normal course of business.[671] Therefore, Calgary had no comments on ATCO Gas' engineering studies.[672]

Commission findings

623. Despite SMi's general concerns that an engineering study should be prepared separately from a business case and that an engineering study must be properly formatted to meet with the prevailing code requirements and needs to be certified by a professional engineer,[673] the Commission finds that the format of the information provided by ATCO Gas in its business

[670] Exhibit 265.01, ATCO Gas argument, paragraphs 115 and 116.
[671] Exhibit 269.01, Calgary argument, paragraph 122.
[672] Exhibit 269.01, Calgary argument, paragraph 154.
[673] Transcript, Volume 10, page 1934.

cases is acceptable and the Commission will undertake its project assessment on the basis of that information.

624. However, the Commission considers it essential for a company to demonstrate that the costs it has included in a capital project proposed for capital tracker treatment are necessary to maintain a company's ability to provide utility service at adequate levels. In order for the Commission to make such an assessment, the company must provide sufficiently detailed cost information on all capital projects proposed for capital tracker treatment. The Commission considers it reasonable to assume that the company has performed some sort of analysis on costs when generating its overall forecast. For example, it is normally the case that a company will make several key assumptions when forecasting costs. Without knowing and understanding the assumptions that lie behind the forecast, the Commission will be unable to establish if the cost forecast is reasonable. Without a determination on reasonable costs a capital project will not qualify for capital tracker treatment.

625. The Commission considers the amount of detail provided in support of ATCO Gas' cost estimates, as demonstrated in some of its business cases, was insufficient to allow all parties to assess adequately its project cost estimates.

626. In future capital tracker applications, the supporting calculations should provide information that identifies the assumptions made by ATCO Gas. This should include identifying the components of the costs (e.g., whether they are labour, materials, contractor expenses, overheads, contingencies), identifying major sub-components of projects (e.g., work being done in different municipalities or separation of different phases of a project), identifying the number of units and corresponding costs-per-unit, identifying offsetting customer contributions, and identifying economic assumptions such as inflation rates or population growth estimates. When the financial assumptions differ from one alternative to another, any changes arising from these differences should be identified.

627. ATCO Gas will be permitted to amend the projects it proposes for capital tracker treatment in its 2013 capital tracker refiling and true-up application.

628. The positions presented in the evidence of ATCO Gas and the interveners, with respect to the programs proposed for capital tracker treatment, and the Commission's findings with respect to each program, are set out in the sections below.

6.2.1.2 Urban mains replacement

629. As part of its business case for the UMR program, ATCO Gas submitted engineering assessments for each of the six projects identified in 2013 that comprised the $23.5 million of forecast expenditures. Of that $23.5 million, $3.4 million were forecast for emergency replacements as a three-year average.[674] The breakdown of cost per site, as given by ATCO Gas, is set out in Table 12.[675] In 2012, ATCO Gas actually spent $26.7 million on its UMR program, not including emergency replacements.[676]

[674] Exhibit 36.01, ATCO Gas application, paragraph 61.
[675] Exhibit 36.01, ATCO Gas application, Appendix B, UMR business case, Table 1.1.
[676] Transcript, Volume 2, page 414, lines 15-16.

Table 12. ATCO Gas urban mains replacement forecast

Area	2013 forecast ($000)
Whitehorn	4,100
Dominion Industrial	2,400
Delton 2	3,900
Delton 1	4,100
Belmead	3,300
Prince Rupert	2,300
Total:	**20,100**

630. In identifying these six UMR projects, ATCO Gas used its leak cluster density tool and demerit point system to determine which sections of urban mains presented the highest overall risk.[677] The engineering report for each project provided as Attachment 1 to the UMR business case detailed the age, leak frequency and length of pipe scheduled for replacement. In UCA-AG-06, ATCO Gas provided its calculations of each projects' demerit score as well as the demerit score for each of the next 10 UMR projects.[678]

631. In AUC-AG-14,[679] the Commission requested ATCO Gas to provide backup calculations to support the cost estimates for each of the projects proposed for capital tracker treatment. ATCO Gas did not provide the requested information and stated that it has provided a level of detail with respect to its cost estimates similar to that provided historically in its GRAs.[680] ATCO Gas claimed that material, labour and contractor costs are confidential because they have the potential to affect ATCO Gas' competitive bidding process.[681]

632. The UCA's engineering witness, SMi, disagreed with the ATCO Gas position that the number of leaks and volume of pipe replacement would increase over time if an integrity program, including visual inspections, regularly scheduled assessments, and cathodic protection were maintained.[682] ATCO Gas replied that it had already undertaken integrity management activities similar to those recommended and such activities had been "exhausted."[683] ATCO Gas noted that assessments of all its distribution pipe as well as random digs for visual inspection would not be an effective use of its resources.[684] However, when a leak does occur ATCO Gas performs a dig and analyzes the condition of the pipe in question.[685]

633. SMi recommended that none of the six UMR projects scheduled in 2013 should be replaced and provided a number of reasons. SMi stated that safety and reliability aspects need to be quantified by key performance indicators (KPI) in order to make proper replacement capital decisions. SMi provided examples of KPIs including the number of customers served, population density and total length of pipe. If no KPIs were available, SMi stated that yearly operations and maintenance cost estimates for the existing assets could be compared to the cost of replacement. In addition, SMi recommended that any associated service replacements that are included in a

677 Exhibit 36.01, ATCO Gas application, Appendix B, UMR business case, paragraphs 7-10.
678 Exhibit 76.01, UCA-AG-06, Attachment (b) and (c).
679 Exhibit 74.01, AUC-AG-14.
680 Exhibit 74.01, AUC-AG-14.
681 Exhibit 74.01, AUC-AG-14, page 2; and Exhibit 195.02, ATCO Gas rebuttal evidence, paragraph 87.
682 Exhibit 109.03, UCA evidence of SMi on ATCO Gas, paragraphs 15-17.
683 Exhibit 195.02, ATCO Gas rebuttal evidence to the UCA, paragraph 119.
684 Exhibit 195.02, ATCO Gas rebuttal evidence to the UCA, paragraphs 139 and 140.
685 Exhibit 195.02, ATCO Gas rebuttal evidence to the UCA, paragraph 97.

mains replacement project should be taken out of the scope of the program. Doing so, SMi noted, "will not have any significant impact on safety and reliability KPIs."[686] SMi further argued that ATCO Gas needs to provide additional details with respect to its cost estimates which may include material and man hour costs. SMi stated that the engineering assessments should include a failure analysis and proposals to further avoid similar failures with its replacements. As an example, SMi noted that the leaks with respect to the Delton 1 and 2 projects were primarily mechanical and suggested that the cause and remedy be included in the assessment. Lastly, SMi stated it was not clear whether there could be a cost savings from conducting these replacements in conjunction with other work.[687]

634. ATCO Gas responded to each concern in its rebuttal evidence. ATCO Gas stated that, although system wide KPIs may not be affected by replacing the pipe as scheduled, it "cannot expose some customers to unacceptable levels of risk simply because the overall metrics are reasonable."[688] ATCO Gas further stated that repair cost data was not provided because the UMR areas included in its business case are determined based on safety rather than the cost of repair. In response to SMi's allegation that service lines should be removed from the projects, ATCO Gas replied that 70 per cent of the leaks in the six project areas were on service lines and a leak on a service line is no less important than one on a main.[689] ATCO Gas stated that failure analysis is currently conducted and included in its assessment of sections that require replacement.[690] Furthermore, ATCO Gas noted that the estimated costs in their application assumed coordination with municipalities "to the greatest extent possible."[691]

Commission findings

635. In Decision 2011-450 the Commission found:

> 132. The Commission has in past decisions accepted the rationale used by AG in forecasting urban steel main replacement projects during a test period. The demerit point system and associated leak and engineering studies have been in use for some years in identifying and prioritizing urban steel main replacements and this methodology continues to perform as intended.[692]

636. The Commission continues to accept the need for the UMR program previously approved in Decision 2011-450, and finds that the demerit point system and associated leak and engineering studies remain an acceptable method for identifying sections of ATCO Gas' urban mains that require replacement. The Commission notes the information provided in UCA-AG-06 Attachment (b) and encourages ATCO Gas to provide similar information on its demerit score calculations in future applications. The Commission also agrees with ATCO Gas that it is neither practicable nor cost effective for ATCO Gas to conduct integrity digs or engineering assessments for its entire urban mains network as suggested by SMi.[693]

637. Given the Commission's acceptance of ATCO Gas' demerit point system and associated leak and engineering studies for identifying sections of ATCO Gas' urban mains that require

[686] Exhibit 168.02, AG-UCA-SMi-6(a).
[687] Ibid.
[688] Exhibit 195.02, ATCO Gas rebuttal evidence to the UCA, paragraph 144.
[689] Ibid.
[690] Exhibit 195.02, ATCO Gas rebuttal evidence to the UCA, paragraph 100.
[691] Exhibit 195.02, ATCO Gas rebuttal evidence to the UCA, paragraph 144.
[692] Decision 2011-450, paragraph 132.
[693] Exhibit 109.03, UCA evidence of SMi Faciliop on ATCO Gas, page 7.

replacement, and considering that ATCO Gas' 2013 forecast scope of the UMR program is commensurate with the scope of work undertaken in 2012,[694] the Commission finds that ATCO Gas' forecast scope of the UMR program appears to be reasonable. At the time of the 2013 refiling and true-up application, ATCO Gas will be required to support the actual scope of the UMR work undertaken and explain how the demerit point system, and associated leak and engineering studies, correlate with the final scope of the work completed.

638. When requested to provide detailed cost data for the UMR program in AUC-AG-14, ATCO Gas did not provide the requested information and stated that it provided a level of detail with respect to its cost estimates similar to that provided historically in its GRAs. In the absence of this information, the Commission examined the information provided in AUC-AG-5 with respect to historical UMR expenditures for km installed in an attempt to compare the historical average installed cost per km to the forecast average cost per km. However, the historical average cost per km set out in AUC-AG-5 does not appear to provide a reasonable basis for comparison because the historical average cost per km varies considerably. Accordingly, the Commission does not have sufficient information to assess the reasonableness of the forecast costs for the six UMR projects. The Commission finds that the UMR program, as filed, does not satisfy the project assessment requirement of Criterion 1. In its 2013 capital tracker refiling and true-up application, ATCO Gas will be required to demonstrate the prudence of its actual 2013 capital expenditures for the UMR program.

6.2.1.3 Rural mains replacement

639. The RMR program capital tracker proposed 2013 capital expenditures of $29 million to replace 270 km of pipe. The replacement of ATCO Gas rural PE/PVC pipe commenced in 2011 and is expected to continue for 20 years until 2031 with an overall estimated cost of $950 million.[695] In 2012 ATCO Gas spent $20.5 million, replacing 163 km of pipe, on its RMR program.[696]

640. In support of the proposed RMR capital tracker a business case was submitted for the overall program. No specific areas of pipe scheduled for replacement were identified. Consequently, site specific engineering support was not provided. During the hearing, however, ATCO Gas indicated that the engineering assessment for the overall need of the RMR program was previously reviewed in the 2011-2012 GRA. Site specific engineering designs are made once the actual replacement sites are identified and work is scheduled.[697]

641. ATCO Gas stated that in 2013, 270 km of pipe at 58 different sites would be replaced at an average cost of $108 per meter.[698] For 2011 and 2012, ATCO Gas' costs per meter were $115 and $113, respectively.[699] ATCO Gas explained that "tracking rural replacement costs in a dollar per kilometer manner is the most accurate method of forecasting program costs."[700] In order to

[694] Exhibit 74.01, AUC-AG-5.
[695] Exhibit 36.01, ATCO Gas application, Appendix B, RMR business case, paragraph 7.
[696] Exhibit 74.01, AUC-AG-1(b) attachment, page 10.
[697] Transcript, Volume 2, page 421, line 8 to page 422, line 13.
[698] Exhibit 74.01, AUC-AG-7, page 3 and Transcript, Volume 2, page 423, lines 21-25.
[699] Exhibit 74.01, AUC-AG-7.
[700] Exhibit 36.01, ATCO Gas application, Appendix B, RMR business case, paragraph 28.

replace the total 8,800 km of pipe in the 20-year timeframe, ATCO Gas stated that on average 440 km of pipe would be required to be replaced each year.[701]

642. ATCO Gas indicated that 2011 and 2012 were the first years that rural mains replacement had been done on a full scale and currently ATCO Gas has more accurate estimations of the costs of the program.[702] The RMR program is currently replacing pipe in the most densely populated areas and therefore, ATCO Gas expects that the cost in future years should decrease.[703]

643. In AUC-AG-14[704] the Commission requested ATCO Gas to provide backup calculations to support the cost estimates for each of the projects proposed for capital tracker treatment. ATCO Gas did not provide the requested information and stated that it has provided a similar level of detail with respect to its cost estimates as it has historically provided in its GRAs. Material, labour and contractor costs are seen as confidential as they have the potential to affect ATCO Gas' competitive bid process.[705]

644. SMi agreed that forecasting costs in dollars per km would lead to better cost estimates.[706] SMi also agreed with ATCO Gas' proactive replacement, however, stated "it is our opinion that not all reasonable solutions have been completed"[707] in addressing the RMR program. In an information response, SMi listed additional considerations for the RMR program that should be completed before replacements begin. Similar to UMR, SMi wanted quantified safety and reliability KPIs to help inform replacement decisions and in the absence of KPIs, repair and O&M costs should be provided. SMi argued that any service replacements grouped together with the RMR program are out of scope and will not have an effect on KPIs. SMi stated that ATCO Gas should be required to provide the details of any demerit point system used for the PE/PVC pipe as well as any additional information on materials and cost estimates. With respect to ATCO Gas' supporting materials, SMi stated that identified sections of pipe should include an engineering assessment and a failure analysis in order to determine the cause and prevent further failures. SMi noted that ATCO Gas should identify any sections of pipe where cost savings may arise due to combined work with other ATCO projects.[708]

645. Although SMi recommended that ATCO Gas provide additional details regarding its cost estimates, SMi's overall conclusion concerning the costs of the RMR program was that "the cost estimate is relevant to the activities identified is in accordance with normal practice from our [SMi] experience."[709] SMi explained that its conclusion regarding cost estimates for the RMR program was different than that of the UMR program because, in its application, ATCO Gas provided additional factors in support of its RMR cost estimates.[710]

646. In its rebuttal evidence, ATCO Gas addressed each of the concerns SMi had expressed. ATCO Gas did not consider KPI targets to be appropriate because it "must consider the risk in

[701] Exhibit 74.01, AUC-AG-7, page 2.
[702] Exhibit 36.01, ATCO Gas application, Appendix B, RMR business case, paragraph 28.
[703] Exhibit 74.01, AUC-AG-7, page 3.
[704] Exhibit 74.01, AUC-AG-14.
[705] Exhibit 74.01, AUC-AG-14, page 2; and Exhibit 195.02, ATCO Gas rebuttal evidence, paragraph 87.
[706] Exhibit 109.03, UCA evidence of SMi Faciliop on ATCO Gas, page 10, paragraph 28.
[707] Exhibit 109.03, UCA evidence of SMi Faciliop on ATCO Gas, page 11, paragraph 36 and A12.
[708] Exhibit 168.02, AG-UCA-SMi-11(b).
[709] Exhibit 109.03, UCA evidence of SMi Faciliop on ATCO Gas, page 11, paragraph A14.
[710] Transcript, Volume 11, pages 2062 to 2065.

each individual segment of its system as well as overall."[711] Furthermore, in order to complete the RMR within 20 years a small amount of work has to be done each year. ATCO Gas further noted that the RMR program is not a consideration of repair costs versus replacement costs, rather the program is being done for safety reasons. ATCO Gas stated that including its service lines in the replacement, when the material of pipe is the same, is a cost effective method and failure of a service line is as significant as failure of a main. ATCO Gas clarified that it does not use the demerit point system for its rural replacements. ATCO Gas stated that there is typically no other work being conducted in the same areas as its rural mains replacements, including other ATCO Gas projects; however, if there is work planned by regional or municipal governments or other RMR projects nearby, ATCO Gas "coordinates its activities in geographical areas to maximize its efficiency."[712]

Commission findings

647. The Commission agrees with ATCO Gas that the need for the 20-year RMR program was previously reviewed in detail in ATCO Gas' last GRA and approved in Decision 2011-450[713] and that no significant event has occurred to suggest that the rationale for the program has changed. Accordingly, the Commission accepts the need for the continuation of the RMR program in 2013.

648. Given the nature of the RMR program, the Commission is satisfied that the site-specific engineering designs are not available until the work has been scheduled and therefore cannot be submitted at the time of the application. ATCO Gas also noted in its application that the project costs when working in rural areas is affected by housing density and location.[714]

649. During the hearing, ATCO Gas stated that "we have thousands of kilometers of mains. We have them sorted by risk, and we are proceeding with them."[715] The Commission finds that the sorting of the RMR pipe for replacement by risk is an acceptable method for sequencing the priority of replacement activities. ATCO Gas should provide sufficient documentation in its 2013 capital tracker refiling and true-up application to demonstrate the reasonableness of the criteria used in sequencing projects by risk and the documented results of this assessment for the particular year.

650. ATCO Gas stated that in 2013, 270 km of pipe at 58 different sites would be replaced at an average cost of $108 per meter.[716] The Commission generally accepts the proposed scope of the program, since it is generally aligned with the 20-year timeframe of the RMR program previously approved by the Commission. As ATCO Gas explained, in order to replace the total 8,800 km of pipe in the 20-year timeframe, an average of 440 km of pipe would be required to be replaced each year.[717]

[711] Exhibit 195.02, ATCO Gas rebuttal evidence, paragraph 161.
[712] Ibid.
[713] Decision 2011-450, paragraphs 165 to 193.
[714] Exhibit 36.01, ATCO Gas application, Appendix B, RMR business case, paragraphs 32 and 33.
[715] Transcript, Volume 2, page 422, lines 5-7.
[716] Exhibit 74.01, AUC-AG-7, page 3 and Transcript, Volume 2, page 423, lines 21-25.
[717] Exhibit 74.01, AUC-AG-7, page 2.

651. In Decision 2012-191,[718] the compliance decision to the 2011-2012 GRA, the Commission approved RMR capital expenditures of $16.6 million and $19.9 million for 2011 and 2012, respectively. The associated revenue requirement was $1 million for 2011 and $3.1 million for 2012.[719]

652. ATCO Gas' forecast costs per meter of $108 are comparable to the 2011 and 2012 costs per meter of $115 and $113, respectively.[720] ATCO Gas indicated that 2011 and 2012 were the first years that rural mains replacement had been done on a full scale and currently ATCO Gas has more accurate estimations of the costs of the program.[721] However, when requested to provide detailed cost data for the RMR program in AUC-AG-14, ATCO Gas did not provide the requested information and stated that it provided a level of detail with respect to its cost estimates similar to that provided historically in its GRAs. Accordingly, the Commission finds that it does not have sufficient information to assess the reasonableness of the forecast costs for the RMR projects at this time. The Commission finds that the RMR program, as filed, does not satisfy the project assessment requirement of Criterion 1. In its 2013 capital tracker refiling and true-up application, ATCO Gas will be required to demonstrate the prudence of its actual 2013 capital expenditures for the RMR program.

6.2.1.4 Meter relocation and replacement program

653. The 2013 MRRP program was originally forecast at $37.3 million,[722] however, in information responses to the Commission, ATCO Gas indicated that fewer replacements would be carried out in 2013, and as such, the estimate was reduced to $29.8 million.[723] ATCO Gas suggested that the K factor amount not be updated as there were changes to ATCO Gas' other capital trackers that would net out while any leftover differences would be trued-up.[724] In 2012 ATCO Gas actually spent $22 million on its MRRP.[725]

654. ATCO Gas noted that as a result of contractor issues, which also contributed to the lower number of 2013 replacements, ATCO Gas extended the MRRP until the end of 2015 in an effort to more evenly distribute the costs of the program.[726]

655. The meters scheduled for relocation and replacement in 2013 divided into two categories: Tier 2/3M and Tier 3L/4. Tier 2/3M are composed of high and medium risk sites whereas Tier 3L/4 are made up of low and no risk sites.[727] The MRRP business case contained descriptions on what constitutes a high, medium and low level of risk as well as how those rankings are prioritized, using the Tier system, for replacement.[728] ATCO Gas also provided an over-view of the potential safety issues with the meters scheduled for replacement.

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[718] Decision 2012-191: ATCO Gas 2011-2012 General Rate Application Phase I Compliance Filing, Application No. 1608144, Proceeding ID No. 1709, July 20, 2012.
[719] Decision 2012-191, paragraph 62.
[720] Exhibit 74.01, AUC-AG-7.
[721] Exhibit 36.01, ATCO Gas application, Appendix B, RMR business case, paragraph 28.
[722] Exhibit 36.01, ATCO Gas application, Table 1.1.
[723] Exhibit 74.01, AUC-AG-8(a) attachment, page 5.
[724] Exhibit 74.01, AUC-AG-8, pages 4 and 5.
[725] Exhibit 74.01, AUC-AG-1(b) attachment, page 10.
[726] Exhibit 74.01, AUC-AG-8, pages 3 and 4.
[727] Exhibit 36.01, ATCO Gas application, Appendix B, MRRP business case, Table 1 and Table 2.
[728] Exhibit 36.01, ATCO Gas application, Appendix B, MRRP business case, Table 1 and Table 2.

656. In support of their cost estimates, ATCO Gas provided a breakdown of the number of moves and unit costs for each of the Tier 2/3M and Tier 3L/4 categories. At the time of the application, Tier 2/3M consisted of 9,638 regular moves and 500 customer refusal and complex moves for 2013. Tier 3L/4 consisted of 435 safety and accessibility moves and 3,800 recall moves for 2013. Each sub-category of move was supported by a cost per unit for 2013.[729]

Table 13. ATCO Gas MRRP capital expenditures by sub-category[730]

Year of program	Item	Tier 2/3M		Tier 3L/4		Total cost per year
		Regular moves	Customer refusal & complex moves	Safety & accessibility moves	Recall moves	
2013 capital tracker	Units	9,638	500	435	3,800	
	Cost/unit	$2,543	$4,960	$1,396	$2,543	
	Total capital (000)	$24,509	$2,480	$607	$9,663	$37,259
2014 forecast	Units	15,662	1,000	435	3,800	
	Cost/unit	$2,684	$4,955	$1,380	$2,684	
	Total capital (000)	$42,037	$4,995	$600	$10,199	$57,831

657. ATCO Gas explained that the forecast cost information provided was based on experience from previous years of the program. In addition, ATCO Gas' cost estimates took into consideration forecast contract rate increases which were based on "experience with other contract increases ATCO Gas has seen over the past several years, Alberta contracting market trends, and increasing material costs."[731]

658. SMi agreed with ATCO Gas that the "only viable option is to relocate / replace meters for public and worker safety."[732] In addition, SMi expressed its view that the cost estimates provided in the business case are "in accordance with normal practice in the industry."[733]

Commission findings

659. The Commission agrees with ATCO Gas and SMi that ATCO Gas must replace the meters outlined in the business case due to issues of public and worker safety. In addition, the need for this work was previously recognized by the Commission in Decision 2011-450 where the Commission approved replacement of Tier 2/3M meters over the years 2011 to 2014.[734] ATCO Gas was directed to replace and relocate Tier 3L/4 meters if they developed safety issues or if similar work such as a meter recall was required.[735] Accordingly, the Commission accepts the need for the continuation of the MRRP program in 2013.

[729] Exhibit 36.01, ATCO Gas application, Appendix B, MRRP business case, Table 3.
[730] Exhibit 36.01, ATCO Gas application, Appendix B, MRRP business case, Table 3.
[731] Exhibit 36.01, ATCO Gas application, Appendix B, MRRP business case, paragraph 28.
[732] Exhibit 109.03, UCA evidence of SMi Faciliop on ATCO Gas, page 14, paragraph A19.
[733] Exhibit 109.03, UCA evidence of SMi Faciliop on ATCO Gas, page 14, paragraph A20.
[734] Decision 2011-450, paragraph 164.
[735] Decision 2011-450, paragraph 160 and 161.

660. The Commission notes that ATCO Gas' actual 2012 expenditures were $22 million[736] compared to 2013 forecast expenditures of $29.8 million. The Commission approved MRRP capital costs of $26.6 million in 2011 and $24.6 million in 2012.[737] ATCO Gas' actual expenditures for 2012 were therefore $2.6 million less than the approved forecast amount, which resulted in part because of compliance with Commission directions dealing with the replacement of certain Tier 3 and Tier 4 meters. Unit costs approved for 2012 and forecast for 2013 are provided as follows:[738]

Table 14. ATCO Gas MRRP unit cost forecast

	Tier 2/3M regular moves	Tier 2/3M customer refusal & complex moves	Tier 3L/4 safety & accessibility moves	Tier 3L/4 recall moves
2012	$2,665	N/A	$1,331	$2,066*
2013	$2,543	$4,960	$1,396	$2,543

*Calculated from the total capital expenditures divided by the number of recall moves

661. The Commission is satisfied with the level of supporting cost information provided in the business case, which includes a breakdown of sub-category per unit costs and number of moves for each risk tier. SMi expressed its view that the cost estimates provided in the business case are "in accordance with normal practice in the industry."[739] The Commission agrees and considers that the business case and engineering details provided by ATCO Gas in support of the meter relocation and replacement program provides sufficient support for its forecast MRRP costs in 2013.

662. The Commission finds that the proposed scope, level, timing and forecast cost of the MRRP, as proposed for 2013, are reasonable. Accordingly, the Commission finds that this program satisfies the project assessment requirement of Criterion 1. In its 2013 capital tracker refiling and true-up application, ATCO Gas will be required to demonstrate the prudence of its actual 2013 capital expenditures for the MRRP. In addition, ATCO Gas will be required to demonstrate that the replaced Tier 3L/4 meters developed safety issues or were replaced because similar work such as a meter recall was required.

6.2.1.5 Line heater replacement program

663. The line heater replacement capital tracker is a continuation of a program which began in 2011 and now has an estimated completion date of 2019.[740] The program is to replace line heaters that have Occupational Health and Safety code compliance issues. ATCO Gas proposed a 2013 capital tracker for the replacement of 61 line heaters for a total forecast cost of $5.2 million.[741] Decision 2012-191, the compliance decision to the 2011-2012 GRA, approved $6 million in expenditures in 2011 and 2012 based on the expectation that the program would be completed in 2013.[742] In 2012 ATCO Gas spent $3.2 million on its line heater replacement program.[743]

736 Exhibit 74.01, AUC-AG-1(b) attachment, page 10.
737 Exhibit 74.01, AUC-AG-1(b) attachment.
738 Exhibit 74.01, AUC-AG-8(a) attachment.
739 Exhibit 109.03, UCA evidence of SMi Faciliop on ATCO Gas, page 14, paragraph A20.
740 Exhibit 36.01, ATCO Gas application, Appendix B, Line heater reliability business case, paragraph 7.
741 Exhibit 36.01, ATCO Gas application, Appendix B, Line heater reliability business case, paragraph 7.
742 Decision 2012-191, paragraph 65.
743 Exhibit 74.01, AUC-AG-1(b) attachment, page 10.

664. ATCO Gas explained that the decision had been made to extend the program until 2019 because more specialized solutions were required to address the compliance issues.[744]

665. The estimated per site cost to fix the compliance issues is $84,629.[745] ATCO Gas acknowledged that the cost forecast going forward for line heater replacement are significantly higher than what was forecast in their previous GRA which was $41,700 per site.[746] ATCO Gas explained during the hearing that the costs had increased because they now included an average of $25,000 per line heater for a burner management system as dictated by safety standards. In addition, the replacement of certain line heaters required the acquisition of additional land and some experienced additional costs because of the inability to extend exhaust stacks as originally planned.[747]

666. In support of the line heater project and the average cost per site estimate, ATCO Gas provided a detailed breakdown of the potential costs involved in a line heater replacement.[748]

667. At the time of the application, ATCO Gas stated that engineering assessments have been completed for 354 line heaters and provided an example engineering assessment, risk model and solution example.[749] The example engineering assessment detailed the issues with the specific line heater site and the forecast breakdown of costs required to address those issues.

668. SMi agreed with the replacement of the code compliance line heaters and stated that "the cost estimate is relevant to the activities identified."[750] SMi concluded that all "reasonable solutions have been evaluated."[751]

Commission findings

669. The Commission agrees with ATCO Gas and SMi that ATCO Gas must replace a certain number of line heaters where necessary to comply with health and safety code requirements. In addition, the need for this work was previously recognized by the Commission in Decision 2011-450.[752] Accordingly, the Commission accepts the need for the continuation of the line heater replacement program in 2013.

670. The Commission is satisfied with the level of supporting cost information provided in the business case and sample engineering assessment, which includes a range of prices required to address various reliability issues and how they are applied in the engineering assessment. The Commission considers that the business case and engineering study provided by ATCO Gas in support of the line heater replacement program provides sufficient support for its forecast line heater replacement project scope and costs in 2013.

671. The Commission finds that the proposed scope, level, timing and forecast cost of the line heater replacement program, as proposed for 2013, are reasonable. Accordingly, the Commission

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744 Exhibit 36.01, ATCO Gas application, Appendix B, Line heater reliability business case, paragraphs 15 to 24.
745 Exhibit 36.01, ATCO Gas application, Appendix B, Line heater reliability business case, paragraph 23.
746 Decision 2011-450, paragraph 199.
747 Transcript, Volume 2, page 435, line 10 to page 436, line 24.
748 Exhibit 36.01, ATCO Gas application, Appendix B, Line heater reliability business case, paragraph 26.
749 Exhibit 36.01, ATCO Gas application, Appendix B, Line heater reliability business case, paragraph 23 and Attachment 1.
750 Exhibit 109.03, UCA evidence of SMi Faciliop on ATCO, page 15, paragraph 17 and page 16, paragraph A26.
751 Exhibit 109.03, UCA evidence of SMi Faciliop on ATCO, page 16, paragraph A25.
752 Decision 2011-450, paragraph 200.

finds that this program satisfies the project assessment requirement of Criterion 1. In its 2013 capital tracker refiling and true-up application, ATCO Gas will be required to demonstrate the prudence of its actual 2013 capital expenditures for the line heater replacement program.

6.2.1.6 Transmission driven capital

672. ATCO Gas applied for a capital tracker of $7.7 million in capital expenditures for its transmission driven capital projects.[753] These expenditures are for projects that arise when the transmission company, either ATCO Pipelines or NOVA Gas Transmission Ltd., makes a change to its transmission system that requires a change to ATCO Gas' distribution facilities.[754] The breakdown of the 2013 transmission driven projects is shown below.

Table 15. ATCO Gas transmission driven projects summary[755]

Category	Project		2013 ($000)
High pressure replacements and relocations	Southern extension	Distribution	1,991
		Measurement	2,062
	Indus	Distribution	585
		Measurement	550
	Canmore	Distribution	220
		Measurement	0
	Kew Ridge	Distribution	80
		Measurement	90
High pressure pipeline retirements	Ardrossan	Distribution	410
		Measurement	100
	Rossdale	Distribution	750
		Measurement	0
	DeWinton	Distribution	0
		Measurement	190
	Granum	Distribution	0
		Measurement	60
Gas quality mitigation	Flynn & Manor	Distribution	350
		Measurement	260

673. In 2012 ATCO Gas spent $17.3 million on transmission driven capital projects.[756]

674. ATCO Gas provided a business case with respect to transmission driven projects with a specific attachment for each of the transmission driven projects. Each individual business case provided the cost estimates for a number of alternatives that could complete the project. Each alternative was broken down into the expenditures faced individually by ATCO Gas and the

[753] Exhibit 36.01, ATCO Gas application, Table 1.1.
[754] Exhibit 36.01, ATCO Gas application, paragraph 129.
[755] Exhibit 36.01, ATCO Gas application, transmission driven capital business case, paragraphs 13-15 and Attachment 2.
[756] Exhibit 74.01, AUC-AG-1 (b) attachment, page 10.

transmission company. During the hearing, Mr. Feltham was asked how ATCO Gas arrived at the alternative chosen:

> So whenever there's a change to the transmission system, ATCO Gas gets together with the transmission system operator -- the majority of times that's ATCO Pipelines -- and evaluates alternatives. And when the alternatives are evaluated, an ATCO Pipelines dollar is valued the same as an ATCO Gas dollar, and it's the combined total for each alternative that is compared. And then regardless of which company in a particular circumstance bears most of the cost, the least cost alternative is chosen.[757]

675. In AUC-AG-14[758] the Commission requested ATCO Gas to provide backup calculations to support the cost estimates for each of the projects proposed for capital tracker treatment. ATCO Gas did not provide the requested information and stated that it has provided a similar level of detail with respect to its cost estimates as it has historically provided in its GRAs. Material, labour and contractor costs are seen as confidential as they have the potential to affect ATCO Gas' competitive bid process.[759]

676. SMi argued that the cost estimates provided by ATCO Gas were not supported with details regarding materials and construction costs.[760] ATCO Gas responded that it had concerns with releasing more detailed cost estimates as it could have a negative impact on their ability to obtain competitive contractor rates.[761]

677. In an information response to the Commission, ATCO Gas identified an additional transmission driven project that it would undertake in 2013. The Northwest Edmonton project has 2013 capital expenditures estimated at $1.589 million.[762] No business case was submitted in support of the Northwest Edmonton project.

678. The individual transmission driven capital business cases did not contain engineering assessments or support.

Commission findings

679. The Commission accepts that ATCO Gas must respond to changes to the transmission systems that require facility changes to its distribution system. The Commission has evaluated the alternatives considered in each of the business cases and agrees with the alternative selected and the resulting scope of the project, except in the case of the Northwest Edmonton project, where a business case was not provided. Accordingly, with the exception of the Northwest Edmonton project, the Commission accepts the need for the transmission driven capital program in 2013.

680. When requested to provide detailed cost data for the transmission driven projects in AUC-AG-14, ATCO Gas did not provide the requested information and stated that it provided a level of detail with respect to its cost estimates similar to that provided historically in its GRAs. In the absence of this information, the Commission examined the information provided in

[757] Transcript, Volume 2, page 445, lines 13-22.
[758] Exhibit 74.01, AUC-AG-14.
[759] Exhibit 74.01, AUC-AG-14, page 2 and Exhibit 195.02, ATCO Gas rebuttal evidence, paragraph 87.
[760] Exhibit 109.03, UCA evidence of SMi Faciliop on ATCO Gas, page 18, paragraph A32.
[761] Exhibit 195.01, ATCO Gas rebuttal evidence, paragraph 179.
[762] Exhibit 74.01, AUC-AG-10, page 4.

AUC-AG-10 with respect to historical expenditures for transmission driven projects for years 2009 to 2012. However, these historical expenditures are only at an aggregate level. In addition, ATCO Gas did not provide sufficient explanation on the allocation of the overall project costs between distribution and transmission utilities. Accordingly, the Commission does not have sufficient information to assess the reasonableness of the forecast costs for the transmission driven projects. The Commission finds that the transmission driven projects, as filed, do not satisfy the project assessment requirement of Criterion 1. In its 2013 capital tracker refiling and true-up application, ATCO Gas will be required to demonstrate the prudence of its actual 2013 capital expenditures for the transmission driven capital projects within this program.

6.2.1.7 Third-party replacements

681. ATCO Gas forecast $10 million for third-party replacements in 2013, with expected contributions of $2.4 million, resulting in a proposed capital tracker of $7.6 million net expenditures.[763] ATCO Gas forecast its expenditures and contributions for third-party replacements based on three-year averages. ATCO Gas noted that it has no control over the size and timing of these projects, and as such, the total amount would not be known until late in 2013.[764] In its application, ATCO Gas stated that net expenditure for currently identified projects was forecast at $2.722 million.[765] At the time of the hearing the forecast amount was $10.2 million.[766]

682. In 2012 ATCO Gas spent $10.2 million on third-party replacement projects.[767]

683. In addition, ATCO Gas indicated in its response to AUC-AG-12[768] that business cases are only "prepared for the larger projects" and provided them for the Southeast LRT relocation projects, the Northeast Anthony Henday Drive relocation projects, and the 41 Ave and Highway 2 overpass relocation projects.[769] The business cases included outlines of the proposed work and high-level cost estimates. As well, ATCO Gas included a list of additional known projects, which outlined the nature of the work, the forecast expenditures and contributions, and the area where the work would take place.[770]

684. SMi stated that:

> It is noted and agreed that AG's only viable option is to relocate / alter to meet requirements and honor franchise agreements.
>
> …
>
> In our opinion, the cost estimate relevant to the activities identified in business case, is in accordance with normal practice in the industry. ATCO Gas typically forecasts third

[763] Exhibit 36.01, ATCO Gas application, Appendix B, Third-party replacements business case, paragraph 5.
[764] Exhibit 36.01, ATCO Gas application, Appendix B, Third-party replacements business case, paragraph 16.
[765] Exhibit 36.01, ATCO Gas application, Appendix B, Third-party replacements business case, paragraph 4; and Exhibit 74.01, AUC-AG-12(a), page 1.
[766] Transcript, Volume 2, page 447, line 21.
[767] Exhibit 74.01, AUC-AG-1(b) attachment, page 10.
[768] Exhibit 74.01, AUC-AG-12.
[769] Exhibit 74.01, AUC-AG-12(b), attachments 1 to 3.
[770] Exhibit 74.01, AUC-AG-12(b), Attachment 4.

party replacement costs based on a three year average of total expenditure and contributions.[771]

685. The third-party driven capital tracker did not contain an engineering assessment for any identified projects. ATCO Gas stated that for third-party driven projects, engineering assessments are not always required as the need for the project is established by the third party.[772]

Commission findings

686. ATCO Gas forecast its expenditures and contributions for third-party replacements based on three-year averages. ATCO Gas noted that it has no control over the size and timing of these projects, and as such, the total amount would not be known until late in 2013.[773] The Commission acknowledges that third-party replacements are required on an annual basis to satisfy external parties' requests and franchise agreement obligations. However, without sufficient supporting documentation on the forecast timing, costs and scope of the program, the Commission cannot determine the reasonableness of the proposed program. Therefore, the Commission was unable to undertake a project assessment with respect to the third-party replacements program.

687. Accordingly, the Commission finds that the ATCO Gas third-party replacements program, as filed, does not satisfy the project assessment requirement of Criterion 1.

6.2.2 Accounting test

688. In Section 3.1.1 of this decision, the Commission found that in order to satisfy the accounting test and thus demonstrate that a program or project (depending on the approved level of grouping) is outside the normal course of the company's ongoing operations, the associated revenue provided under the I-X mechanism would not be sufficient to recover the entire revenue requirement associated with the prudent capital expenditures for the program or project.

689. In sections 3.1.2 and 3.1.3 of this decision, the Commission determined that ATCO Gas' aggregate investment shortfall approach should not be used to demonstrate the absence of double counting or to determine whether all of the forecast or actual expenditures for a capital project or program are, or a portion is, outside of the normal course of the company's ongoing operations, as required to satisfy Criterion 1. The Commission determined that the accounting test requirement of Criterion 1 cannot be performed when an applicant uses the aggregate investment shortfall approach.

690. Since ATCO Gas' capital tracker application used an aggregate investment shortfall approach, the Commission is unable to determine in this proceeding whether any of ATCO Gas' projects proposed for capital tracker treatment satisfy the accounting test requirement of Criterion 1 and are therefore outside the normal course of the company's ongoing operations.

691. In sections 3.1.2 and 3.1.3 of this decision, the Commission determined that the project net cost approach adequately demonstrates that a particular project proposed for capital tracker treatment does not result in double counting and is a reasonable method to identify the extent to which a project is underfunded by the I-X mechanism. Therefore, the Commission finds that the accounting test should be based on a project net cost approach.

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[771] Exhibit 109.03, UCA evidence of SMi Faciliop on ATCO Gas, page 20, paragraphs A37 and A38.
[772] Exhibit 265.01, ATCO Gas argument, paragraph 115.
[773] Exhibit 36.01, ATCO Gas application, Appendix B, Third-party replacements business case, paragraph 16.

692. Accordingly, in its 2013 capital tracker refiling and true-up application, ATCO Gas is directed to demonstrate, based on a project net cost approach, the extent to which each of its projects (at ATCO Gas' proposed level of grouping) proposed for capital tracker treatment is underfunded by the I-X mechanism, thus satisfying the accounting test requirement of Criterion 1.

6.3 Criterion 2 – Ordinarily the project must be for replacement or required by an external party

693. As discussed in Section 3.2.1 of this decision, Criterion 2 requires that in most cases a capital tracker project should be for asset replacement or required by an external party. In that section, the Commission also explained that, in principle, a growth-related project will satisfy the requirements of Criterion 2 when it can be demonstrated that customer contributions together with the incremental revenues allocated to the project on some reasonable basis, when added to the revenue provided under the I-X mechanism, are insufficient to offset the revenue requirement associated with the project in a PBR year.

694. ATCO Gas classified its UMR, RMR and MRRP as programs required for the replacement of existing assets.[774] Line heater replacements were classified as a program required to replace, relocate and refurbish existing assets, in addition to being required as the result of a change in code "at the discretion of an external party."[775] Transmission driven and third-party replacement capital projects were classified by ATCO Gas as being required by an external party.[776]

695. Calgary stated that ATCO Pipelines should not qualify as an independent third-party as it is not at "arm's length" and that as a result of the common ownership of ATCO Gas and ATCO Pipelines, they could work together to maximize their return.[777]

Commission findings

696. The Commission agrees that the UMR, RMR and MRRP programs are required for the replacement of assets and therefore meet the Commission's second capital tracker criterion. Line heater replacements are found to meet the Commission's Criterion 2 on the basis of being required for replacement and refurbishment of existing assets.

697. In Section 3.2.3, the Commission disagreed with the position of Calgary that in order to be considered externally driven, a project must be for a party that is at arms-length to the utility. Additionally, the Commission notes that the transmission portion of the projects requires the approval of the Commission or the National Energy Board. The Commission finds that ATCO Gas' transmission driven and third-party replacement capital projects are required by an external party and therefore meet the Commission's second capital tracker criterion.

6.4 Criterion 3 – The project must have a material effect on the company's finances

698. In Section 3.3 of this decision, the Commission determined that a two-tier materiality threshold should be adopted for capital trackers. The first tier of the materiality threshold, the four basis point threshold, will be applied at the level of individual projects or programs

[774] Exhibit 36.01, ATCO Gas application, paragraphs 75, 91 and 107.
[775] Exhibit 36.01, ATCO Gas application, paragraphs 123 and 124.
[776] Exhibit 36.01, ATCO Gas application, paragraphs 139 and 151.
[777] Exhibit 269.01, Calgary argument, paragraphs 174 and 175.

proposed for capital tracker treatment (grouped in the manner approved by the Commission). The second tier of the materiality threshold, the 40 basis point threshold, will be applied to the aggregate revenue requirement proposed to be recovered by way of all capital trackers.

699. Based on the Commission's estimates in Table 8 of this decision, the 40 basis point threshold for ATCO Gas in 2013 is $2.635 million and the four basis point threshold is $264,000. Given the Commission's findings with respect to ATCO Gas' grouping of projects, should the groupings remain the same on a refiling, the four basis point threshold will apply to that portion of the revenue requirement associated with each capital tracker program that is not funded under the I-X mechanism. The 40 basis point threshold will apply to the aggregate revenue requirement proposed to be recovered by way of all capital trackers.

700. As noted in sections 3.1.2 and 3.1.3 of this decision, the Commission determined that a project net cost approach is sufficient to satisfy the Commission that all of the forecast expenditures for a capital project or program are, or a portion is, outside the normal course of the company's ongoing operations. However, since ATCO Gas' capital tracker application used an aggregate investment shortfall approach in this proceeding, the Commission is unable to assess materiality with respect to any of ATCO Gas' programs proposed for capital tracker treatment as required under Criterion 3.

6.5 ATCO Gas' 2013 capital trackers and K factor amount

701. In sections 6.2.2 and 6.4 above, the Commission determined that since ATCO Gas did not use a project net cost approach in its 2013 capital tracker application, the Commission is unable to determine whether its programs proposed for capital tracker treatment satisfy the accounting test requirement of Criterion 1 and the materiality test under Criterion 3. Accordingly, the Commission does not approve any of the projects proposed by ATCO Gas for capital tracker treatment at this time.

702. In Section 4.4 of this decision, the Commission did not approve the K factor calculation methodology resulting from ATCO Gas' aggregate investment shortfall approach. Accordingly, the Commission is unable to approve a K factor amount for 2013 for ATCO Gas. Therefore, ATCO Gas is directed to retain, in rates, its current K factor placeholder equivalent to 60 per cent of its applied-for 2013 forecast K factor amount.

703. In accordance with the direction set out in Section 10.1 of this decision, ATCO Gas shall file on or before May 15, 2014, a capital tracker refiling and true-up application using 2013 actual capital expenditures for those projects or programs the company proposes for 2013 capital tracker treatment in compliance with the directions set out in this decision. Specifically, ATCO Gas is directed, based on a project net cost approach, to demonstrate that each of its projects and programs proposed for capital tracker treatment satisfies the accounting test requirement of Criterion 1 and the materiality test under Criterion 3. ATCO Gas is also directed to calculate its K factor amount using the project net cost approach in accordance with the Commission-approved method set out in Section 4.4 of this decision. This application should include material sufficient to address the Commission's three capital tracker criteria as explained and applied in this decision.

7 ATCO Electric

704. ATCO Electric proposed 42 projects for capital tracker treatment. These projects were grouped into eight programs for 2013 resulting in $223.6 million of forecast net capital additions, with an aggregate K factor amount of $19.7 million. A summary of the projects can be found in Table 4 of Section 2.2.2. In sections 3.1.2 and 3.1.3 of this decision, the Commission determined that ATCO Electric's overall approach to capital trackers, including its "reasoned demonstration," should not be used for the purposes of demonstrating the absence of double counting and quantifying the investments outside of the normal course of the company's ongoing operations, as required to satisfy Criterion 1. In Section 4.4, the Commission also did not accept the K factor calculation methodology under the aggregate investment shortfall approach utilized by the ATCO companies.

705. Accordingly, the Commission does not approve any of the projects proposed by ATCO Electric for capital tracker treatment at this time. Nonetheless, the Commission has considered in the sections that follow, for purposes of providing additional guidance on the programs and projects applied for, whether these programs and projects are properly grouped and comply with the requirements of the project assessment component of Criterion 1 and the requirements of Criterion 2. With respect to the accounting test component of Criterion 1 and the Criterion 3 materiality test, the Commission has provided ATCO Electric with certain directions as set out in sections 7.2.2 and 7.4 below.

7.1 Grouping of projects proposed for capital tracker treatment

706. ATCO Electric sorted its projects into eight programs.[778] These programs included: end of life and life extension projects, capacity projects, clearance and safety projects, reliability projects, line move projects, distribution costs associated with transmission projects, new extensions and distribution to transmission contributions.

707. Within most of these eight programs, ATCO Electric also identified subprograms and individual projects comprising the subprograms. This grouping structure was discussed in an exchange between Commission counsel and Mr. Howell:[779]

> Q. So you have programs at the whole -- at the total level. You've got subprograms that you've broken out for costs. And then you've got projects by business case; is that right?
> A. MR. HOWELL: That's correct. I doubt if you'll find the word subprograms in this application, but really that's how we think of them in terms of rolling up into the whole life extension.
> Q. It's certainly a new term on me.
> A. MR. HOWELL: Yeah. We're running out of words, sir, I think, is where we're at.

708. The ATCO companies expressed the view that the assessment of capital trackers should occur at the program level.[780]

709. The UCA stated that "from an examination of the individual projects found within ATCO Electric's eight programs there is some variability in drivers between the projects. Due to this

[778] Exhibit 37.01, ATCO Electric application, paragraph 59.
[779] Transcript, Volume 2, page 257.
[780] Exhibit 265.01, ATCO Electric and ATCO Gas argument, paragraph 144.

variability it is not appropriate to utilize a generalization regarding the driver of the program to qualify all projects as meeting criterion 2."[781]

Commission findings

710. In Section 3.4 of this decision, the Commission determined that once a proposed grouping of projects into a program has been approved, the accounting test and the first tier of the materiality test will be applied at the program level. The project assessment will be done on either a program or on a project basis, depending on the particular circumstances. The second tier of the materiality test will be applied at the level of all capital tracker projects, in aggregate. The Commission also determined that the reasonableness of the grouping of capital projects is assessed on a case-by-case basis for each individual company.

711. The Commission finds that ATCO Electric's subprogram level presents a better grouping of projects of a similar nature, for capital tracker treatment, than grouping at the program level as applied for. A grouping at the subprogram level still appears to be consistent with ATCO Electric's past practice in general tariff applications. Therefore, ATCO Electric should reassess the grouping of its projects in future applications to isolate assets for capital tracker treatment that are similar in nature or function and have a common requirement for capital investment.

712. For the purpose of conducting a project assessment, in this decision, the Commission will assess only those projects within a subprogram where the Commission finds that ATCO Electric has provided sufficient information with respect to the scope, timing and cost of the project to allow the Commission to undertake a project assessment. The Commission will assess each individual project for which there is sufficient information in the ATCO Electric application.

7.2 Criterion 1 – The project must be outside of the normal course of the company's ongoing operations

713. In Section 3.1.1, the Commission found that, in order to determine if a project or program (depending on the accepted level of grouping) proposed for capital tracker treatment satisfies the requirements of Criterion 1, both a project assessment and an accounting test are necessary.

714. The purpose of the project assessment is to determine whether a project proposed for capital tracker treatment is (i) required to provide utility service at adequate levels and, if so, (ii) that the scope, level and timing of the project are prudent, and the forecast or actual costs of the project are reasonable. The Commission's project assessment is set out in Section 7.2.1.

715. The purpose of the accounting test is to determine whether a project or program is outside of the normal course of the company's ongoing operations. As discussed in Section 3.1.1, in order for a capital project or program to be considered outside of the normal course of the company's ongoing operations, the associated revenue provided under the I-X mechanism would not be sufficient to recover the entire revenue requirement associated with the prudent capital expenditures for the project or program.

7.2.1 Project assessments

716. ATCO Electric provided a business case to support each of the projects that it proposed for capital tracker treatment. The business cases had varying levels of detail, from high level

[781] Exhibit 268.02, UCA argument, paragraph 222.

descriptions of the projects in some cases,[782] to detailed technical drawings and cost breakdowns in others.[783]

717. The Commission has considered concerns relating to the format and preparation of a business case and an engineering study in Section 3.1.4, including ATCO Electric's view that programs driven by third parties, or by operating conditions, often do not require engineering studies in order to define the business need, or to explain the design solution. These sections also address ATCO Electric's comment that it had provided engineering studies when it made sense to do so but that, for "some categories of Projects, engineering studies are not practicable or useful."[784] The Commission also determined that there is no requirement for an engineering study to be stamped and sealed when assessing the eligibility of projects for capital tracker treatment.

718. PEG, on behalf of the CCA, did not assess each capital project proposed by ATCO Electric for capital tracker treatment, but it did provide some general commentary when it stated:

> ATCO Electric presents eight categories of capex for K factor eligibility. Some of these categories (e.g. end of life, clearance-safety reliability, line moves, transmission driven projects, and distribution to transmission) are potentially consistent with the Commission's eligibility guidelines but capacity additions and new extensions, AE's largest proposed capex category, are not.[785]

719. PEG was also concerned about the lack of engineering studies provided in support of ATCO Electric's proposed capital tracker program.

> AE generally did not support its evidence with engineering studies. The UMS study for which AE apparently paid more than $200,000 was not prepared by engineers. In a response to information request AUC-AE-7, ATCO Electric indicated that it had prepared engineering studies for less than half of its projects.[786]

720. The UCA retained the services of Teshmont, specifically Mr. Baker, to assess the capital projects proposed by ATCO Electric for capital tracker treatment. Teshmont's opinions about specific projects are provided below.

7.2.1.1 Adequacy of information provided in support of ATCO Electric's projects

721. Several ATCO Electric business cases included only the total dollar figures for the projects. In AUC-AE-13, the Commission sought additional information on the calculations used by ATCO Electric to support the cost estimate for its projects. ATCO Electric, in its response, declined to provide this additional information.[787]

> **Request:** Please provide backup calculations to support the cost estimates for each of the projects requested to be recovered by ATCO Electric as a capital tracker. Identify all assumptions used by ATCO Electric to arrive at its estimates.

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782 See, for example: Exhibit 37.01, ATCO Electric application, Appendix B, 70001 – Residential/Commercial Extensions.

783 See, for example: Exhibit 37.01, ATCO Electric application, Appendix B, 70225 – Rebuild and Re-Conductor 5L214; accompanied with Exhibit 81.01, AUC-AE-7, Attachment 1, pages 1-9.

784 Exhibit 81.01, AUC-AE-7.

785 Exhibit 108.01, CCA evidence of PEG, pages 59-60.

786 Exhibit 108.01, CCA evidence of PEG, page 67.

787 Exhibit 81.01, AUC-AE-13.

> **Response:** ATCO Electric notes that this is the first time it has made an application of this nature in its history. Furthermore, it was given an extremely limited time frame within which to prepare and file this Application, especially in light of its unique nature.
>
> ATCO Electric has provided complete and detailed business cases as provided in Appendix B to support its Capital Tracker programs. The business cases provided are consistent with past practice and contain a similar or greater level of detail on the capital expenditure forecasts as is typically provided in former cost of service GTA proceedings. The detail provided in 70004, 70042, and 70161 for example, is unprecedented. ATCO Electric has also indicated that if required by the Commission it can provide Engineering Studies (where available) at the time of the true-up of the Capital Trackers for actuals and it has already provided several Engineering Studies in the response to AUC-AE-7. ATCO Electric has also provided the UMS study to further support the reasonability of the capital maintenance projects, which is something that has not been provided historically in past applications.
>
> If the Commission views that a greater level of information is required to support Capital Tracker applications than has been required under Cost of Service regulation, then in fairness, it should clarify that matter in the Decision for this proceeding. It should not penalize ATCO Electric for relying on long-standing practices in the development of its capital forecasts and business cases, especially in light of the limited amount of time provided to prepare the first Capital Tracker application. Furthermore, as discussed above, ATCO Electric has also provided the UMS study to further support the reasonability of its capital maintenance projects.[788]

722. The CCA took issue with the amount of supporting documentation ATCO Electric provided for its capital tracker cost estimates. The CCA stated:

> The utilities are asking for substantial supplements to the revenue provided by the I-X mechanism. These supplements fund cost growth that involves a rate of productivity growth far below the long-term industry trend. Regulatory cost is increased and performance incentives are attenuated. The utilities are incented to exaggerate capex needs and may bypass the discovery process by which true needs are recognized. Considering these serious consequences, it is vitally important that the utilities present compelling evidence of need for K factored projects.[789]

723. Making specific reference to the cost estimates of ATCO Electric, the CCA stated:

> At least one utility failed to provide underlying information underpinning their cost forecasts.[115] [790]

[115] AUC-AE-13.

724. Throughout the proceeding some additional information was provided by ATCO Electric on the cost estimates for various business cases, providing some breakdown of how the overall cost forecasts in certain business cases were derived. More detailed cost estimates were provided for:

[788] Exhibit 81.01, AUC-AE-13.
[789] Exhibit 270.02, CCA argument, paragraph 51.
[790] Exhibit 270.02, CCA argument, paragraph 54.

Table 16. ATCO Electric projects for which a breakdown of the overall cost estimates were provided

Project	Source of cost estimate details
70004 – Life extension and replacements (supporting calculations provided for streetlights and ground and anchor rods, but not for other assets)	Exhibit 37.01, Appendix B, Project 70004, pages 3 and 4.
70041 – Pole replacements	Exhibit 37.01, Appendix B, Project 70041, page 4.
70160 – Conductor and cable replacement (supporting calculations provided for underground primary cable replacement projects, but not for other assets)	Exhibit 37.01, Appendix B, Project 70160, page 3.
70272 – Porcelain switch replacement	Exhibit 37.01, Appendix B, Project 70272, page 3.
70225 – Rebuild and re-conductor 5L214	Exhibit 81.01, AUC-AE-7, Attachment 1, page 5.
70287 – 5L322 Voltage unbalance mitigation	Exhibit 81.01, AUC-AE-7, Attachment 1, page 110.
74271 – Rycroft tie line	Exhibit 81.01, AUC-AE-7, Attachment 1, page 137.
70259 – High Prairie sub distribution interconnection	Exhibit 81.01, AUC-AE-7, Attachment 1, pages 171-172 and pages 178-181.
70265 – Hanna area distribution system improvement study	Exhibit 81.01, AUC-AE-7, Attachment 1, pages 191-192.
70266 – Central East distribution system improvement study	Exhibit 81.01, AUC-AE-7, Attachment 1, pages 198-199.
72XXX – Large new extensions	Exhibit 211.01, undertaking #8.

Commission findings

725. The Commission considers it essential for a company to demonstrate that the costs it has included in a capital project proposed for capital tracker treatment are necessary to maintain a company's ability to provide utility service at adequate levels. In order for the Commission to make such an assessment, the company must provide sufficiently detailed cost information on all capital projects proposed for capital tracker treatment. The Commission considers it reasonable to assume that the company has performed some sort of analysis on costs when generating its overall forecast. For example, it is normally the case that a company will make several key assumptions when forecasting costs. Without knowing and understanding the assumptions that lie behind the forecast, the Commission will be unable to establish if the cost forecast is reasonable. Without a determination on reasonable costs a capital project will not qualify for capital tracker treatment.

726. At times, ATCO Electric's business cases evaluated opposing alternatives. In identifying a preferred alternative from a set of alternatives, ATCO Electric used lower forecast costs as the primary driver in making its choice.[791] In instances like this, when there are several opposing alternatives, providing more detail on the costs of all of the alternatives, not just the preferred alternative, would allow all parties to assess the financial assumptions behind the alternatives and thereby generate a more complete adjudication process.

727. Generally speaking, the Commission considers the amount of detail provided in support of ATCO Electric's cost estimates, as demonstrated in its business cases, to be insufficient to allow all parties to assess adequately its project cost estimates.

728. The projects identified in Table 16 did provide a breakdown of the cost estimates that allowed for a better understanding of the forces driving the cost estimates. Even in these cases, however, the information provided was not always sufficiently detailed to identify the major assumptions used by ATCO Electric in arriving at its forecasts. Nonetheless, the Commission will assess each of the projects listed in this table in the sections below. This assessment should

[791] See, for example: Exhibit 37.01, ATCO Electric application, Appendix B: Project 70225 – Rebuild and re-conductor 5L214, Project 70322 – Janvier-Quigley connection, Project 74271 – Rycroft tie line.

provide ATCO Electric with some guidance as to whether these projects satisfy part of the capital tracker criteria, which may eliminate the need to perform an in-depth review of the same elements of these projects as part of ATCO Electric's 2013 capital tracker refiling and true-up application, should ATCO Electric apply for these projects for capital tracker treatment. The assessment also should provide ATCO Electric with some guidance on the types of supporting documentation that the Commission finds useful in assessing capital projects proposed for capital tracker treatment.

729. For all other projects, the Commission will not provide an assessment. The onus to justify the costs that the company expects to recover from customers remains with the company. The fact that the Commission will not provide approval of these projects in this decision does not prevent ATCO Electric from bringing forward the same projects in its 2013 capital tracker refiling and true-up application.

730. In future capital tracker applications, the supporting calculations should provide information that identifies the assumptions made by ATCO Electric. This should include identifying the components of the costs (e.g., whether they are labour, materials, contractor expenses, overheads, contingencies), identifying major sub-components of projects (e.g., work being done in different municipalities or separation of different phases of a project), identifying the number of units and corresponding costs-per-unit, identifying offsetting customer contributions, and identifying economic assumptions such as inflation rates or population growth estimates. When the financial assumptions differ from one alternative to another, any changes arising from these differences should be identified.

731. ATCO Electric will be permitted to amend the projects it proposes for capital tracker treatment in its 2013 capital tracker refiling and true-up application.

732. In sections 7.2.1.2 to 7.2.1.13, the Commission sets out its project assessments for the projects listed in Table 16 without commenting on the grouping of each project.

7.2.1.2 70004 – life extension and replacements

733. ATCO Electric explained that this project was required to extend the life of components of the distribution system, and to replace assets as they reach the end of their lives. ATCO Electric explained further that, because load growth has been sustained since about 1970, each year a larger number of assets are approaching the age at which life extension activities are required. They are also approaching a period of maximum rate of retirement (and subsequent replacement). ATCO Electric, therefore, expects this project to generate increases in expenditures at a rate that will exceed the rate of inflation. This project encompassed all of ATCO Electric's distribution asset replacement activities other than pole replacements, conductor and cable replacements, and porcelain switch replacements, all of which were addressed in separate business cases.[792]

[792] Exhibit 37.01, ATCO Electric application, Appendix B, 70004 business case, page 2.

734. This business case was composed of several asset types. The break-down of the forecast capital expenditures is as follows:

Table 17. ATCO Electric life extension and replacement forecast

Asset	2013 forecast additions ($ million)
Streetlights	1.6
Ground and anchor rods	2.2
Substation and line equipment	3.2
Transformers	2.8
Small voltage conversion projects	2.6
Insulators	0.9
Total	**13.3**

735. ATCO Electric provided supporting calculations for streetlights and for ground and anchor rods.[793] The calculations for these types of assets were based on testing results, where failed tests resulted in the replacement of assets two years later. Mr. Howell explained that the unit costs for streetlights and for ground and anchor rods were based on historical numbers, with escalations added to them.[794]

736. The forecasts for the other assets, included in the business case, including transformers, substation equipment, town conversions and insulators, were all described by ATCO Electric as being based on "historical levels of expenditure." In these cases, however, supporting calculations were not provided.[795]

737. Teshmont raised concerns over the lack of information provided by ATCO Electric on the expected life of the assets being replaced and the standards or methods used for testing.[796]

738. In response to Teshmont's concerns, ATCO Electric provided documentation on the testing programs used for ground rods and streetlights. These documents identified the procedures used by ATCO Electric to test the assets, the criteria used to determine when the assets are defective and requiring replacement, and the processes to be used to upgrade or replace the assets.[797]

Commission findings

739. The Commission has reviewed the business case for life extensions and replacements, and the evidence of Teshmont and finds that the additional information provided by ATCO Electric that outlines ground rod and streetlight testing programs is useful to parties when they assess the engineering requirements of the program. In addition, providing calculations to show how the forecasts for these two types of assets were developed was helpful in assessing the reasonableness of the costs.

740. Similar supporting information was not provided for the other types of assets included in the business case. Those assets included transformers, substation equipment, town conversions

[793] Exhibit 37.01, ATCO Electric application, Appendix B, 70004 business case, pages 3 and 4.
[794] Transcript, Volume 2, page 319.
[795] Exhibit 37.01, ATCO Electric application, Appendix B, 70004 business case, pages 2 and 4.
[796] Exhibit 110.02, UCA evidence of Teshmont, Project 70004, A2.
[797] Exhibit 198.01, ATCO Electric rebuttal evidence to UCA, attachments 4 and 5.

and insulators. These types of assets comprise $9.5 million of the total forecast of $13.3 million for the business case. The Commission finds that information to support the cost estimates of these assets should be provided in future capital tracker applications. This information should be similar to the information provided to support the cost estimates for streetlights and ground and anchor rods. Without supporting information of this kind in the majority of the business cases, the Commission is unable to comment on the reasonableness of the costs, nor is it able to assess the need for the projects from an engineering perspective.

741. Accordingly, the Commission finds that the life extensions and replacements project, as filed, does not satisfy the project assessment requirement of Criterion 1.

7.2.1.3 70041 – pole replacements

742. ATCO Electric explained that this project was required for wood pole treatment and the replacement of distribution poles that have reached the end of their life cycles. ATCO Electric's program for wood pole replacement and life extension is not based on age; it is based on condition which is determined by in-situ inspections and testing programs. ATCO Electric explained that pole replacements are required when pole test results determine that the wood pole has deteriorated to the point where the remaining strength is calculated to be insufficient to continue to provide the required safety factors, based on engineering test criteria. In addition, the program includes life extension of wood poles, such as internal and external preservative re-treatment when the wood has no longer retained the required amount of preservative treatment, as well as specialized activities to deal with situations such as woodpeckers, insects, fires, or mechanical damage. The forecast was composed of $16.1 million for pole replacements and re-spanning, and $2.1 million for pole treatment.[798]

743. ATCO Electric provided historical pole testing results, including testing results from 2011 that served as the basis for replacements to occur in 2013.[799] In addition, in response to criticism from Teshmont that focussed on a lack of engineering justification for the program, ATCO Electric provided documentation on its pole testing procedures.[800]

Commission findings

744. The Commission has reviewed the business case and related evidence provided by ATCO Electric for pole replacements and the evidence of Teshmont. The Commission considers that the pole testing program administrative procedure documents provided in Attachment 2 of ATCO Electric's rebuttal evidence provided engineering support for the pole replacement project. The Commission considers that the information provided by ATCO Electric supports that the number of poles proposed to be replaced in 2013 is required to maintain service reliability and safety at adequate levels.

745. The Commission considers that the objections raised by Teshmont related to the engineering justification for the pole replacement project were adequately addressed by ATCO Electric in its rebuttal evidence.

[798] Exhibit 37.01, ATCO Electric application, Appendix B, 70041 business case, pages 2 and 3.
[799] Exhibit 37.01, ATCO Electric application, Appendix B, 70041 business case, page 4.
[800] Exhibit 198.01, ATCO Electric rebuttal evidence to the UCA, Attachment 2.

746. The Commission finds that the proposed scope, level, timing and forecast cost of the pole replacement project, as proposed for 2013, are reasonable. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

7.2.1.4 70160 – conductor and cable replacement

747. ATCO Electric explained that this project included the life extension and replacement of distribution overhead conductors and underground cables that were close to reaching the end of their life cycles. Of ATCO Electric's 60,000 km of overhead conductor, an estimated 5,000 km of line was installed prior to 1970, with a number of different types and sizes of conductor. Some of these conductors are 50 years old and are reaching the end of their life cycles. Actual failures and test results have led ATCO Electric to conclude that these conductors require replacement.

748. There are over 2,200 km of underground cable in ATCO Electric's distribution system, with approximately 500 km installed prior to 1980. This program involves analyzing the underground cable to determine if the life of the cable can be extended or if it is at its end of life.[801]

749. This business case was composed of several asset types. The forecast capital expenditures are broken down as follows.

Table 18. ATCO Electric conductor and cable replacement forecast[802]

Asset	2013 forecast additions ($ million)
Underground primary cable replacement projects	1.3
Cable life extension	0.9
Conductor replacements	1.2
Total	**3.4**

750. ATCO Electric provided supporting calculations for underground primary cable replacement projects, showing testing results and the resulting replacement costs.[803] ATCO Electric explained that the forecast for overhead conductor projects was "based on historical expenditures."[804] However, the calculations necessary to support this claim were not provided. Information to support the cable life extension forecast was not provided in the business case.

751. With respect to engineering support for the project, ATCO Electric indicated that engineering documentation was not applicable because the project was based on "test or inspection criteria."[805] Documentation on the testing procedures for this project was not provided which was contrary to what had been provided to support pole replacements, streetlights and ground and anchor rods.[806]

752. Interveners did not comment on the specifics of this project.

[801] Exhibit 37.01, ATCO Electric application, Appendix B, 70160 business case, page 2.
[802] Exhibit 37.01, ATCO Electric application, Appendix B, 70160 business case, page 3.
[803] Exhibit 37.01, ATCO Electric application, Appendix B, 70160 business case, page 3.
[804] Exhibit 37.01, ATCO Electric application, Appendix B, 70160 business case, page 2.
[805] Exhibit 81.01, AUC-AE-7, page 4.
[806] Exhibit 198.01, ATCO Electric rebuttal evidence to UCA, attachments 2, 4 and 5.

Commission findings

753. The Commission has reviewed the business case for conductor and cable replacement and considers that the documentation supporting the calculation of the forecast for underground primary cable replacement projects was useful. However, similar documentation was not provided for over half of the costs included in the business case. Without sufficient supporting documentation on how the forecast was calculated, the Commission cannot determine the reasonableness of the costs. In addition, detailed information on the testing procedures used to assess the assets was not provided and, therefore, the Commission was unable to assess the project from an engineering perspective.

754. Accordingly, the Commission finds that the conductor and cable replacement project, as filed, does not satisfy the project assessment requirement of Criterion 1.

7.2.1.5 70272 – porcelain switch replacement

755. ATCO Electric explained that this project was required to replace critical porcelain cutout switches on a priority basis. ATCO Electric indicated that porcelain cutout switch failure reports dating back to 2006 indicate about 70 to 80 failures a year on an estimated base of approximately 300,000 switches, and that the level of switch failure was increasing dramatically. ATCO Electric estimates 450 or more porcelain cutout switches fail on its distribution system annually. Over the period 2013 to 2015, ATCO Electric plans to replace more than 23,000 switches. ATCO Electric noted that this is only a fraction of the total number of porcelain switches that remains on ATCO Electric's distribution system. ATCO Electric intends to monitor failure rates and, if necessary, it will expand this project to address the operating risks.[807]

756. ATCO Electric provided a high-level calculation showing how it arrived at its 2013 forecast for the project. It estimated that 10,000 switches would be replaced at a cost of $510 per unit, for a total forecast cost of $5.1 million. No information was provided to show which 10,000 switches would be replaced and on what basis these 10,000 switches were selected for replacement.[808]

757. Mr. Howell provided a high-level explanation of how ATCO Electric determined which switches should be replaced as part of the replacement program:[809]

> Well, we have several hundred thousand of these switches in place. And in order to address those areas of highest risk to our workers -- I think we've told this story here about how the switches will fail when our operators are -- they rarely fail when we're not around. They'll normally fail when there's a fellow at the pole trying to open or close them. So that puts our workers in a direct risk. So when we designed our replacement program for these, we went to those areas that first of all were operated the most often, thereby presenting the highest risk; and, secondly, carried more load current that would result in, you know, bigger arc flashes, things like that, as a failure occurs. So we thought we've gone to the places where the switches are the highest risk to our workers. They typically also tend to be the switches that have been operated more often, potentially putting more stress on the switch and potentially those areas that fail more often. So we

[807] Exhibit 37.01, ATCO Electric application, Appendix B, 70272 business case, pages 2 and 3.
[808] Exhibit 37.01, ATCO Electric application, Appendix B, 70272 business case, page 3.
[809] Transcript, Volume 2, page 328.

> feel we're addressing that subset of the switches that present the greatest risk to our workers.[810]

758. Teshmont suggested that ATCO Electric had not fully considered the alternatives for the project, which could include working with the switch manufacturer to see if a definitive cause of the fractures in the switches could be determined.[811]

759. ATCO Electric responded to Teshmont's criticism by stating that discussions were held with various manufacturers, and also with other utility companies. These discussions identified that the problem was not isolated to ATCO Electric, but did not lead to definitive conclusions on what was causing the failures.[812]

Commission findings

760. The Commission accepts that a high and unacceptable porcelain switch failure rate will have a detrimental impact on the safety and reliability of ATCO Electric's system. However, the Commission considers that additional information is required to demonstrate how ATCO Electric selects the porcelain switches that require replacement. Aside from the description provided by Mr. Howell, little information was provided on the record about the criteria used to determine the necessity of switch replacement. Without this type of information, the Commission is unable to establish whether this project is justified from an engineering perspective.

761. Accordingly, the Commission finds that the porcelain switch replacement project, as filed, does not satisfy the project assessment requirement of Criterion 1.

7.2.1.6 70225 – rebuild and re-conductor 5L214

762. ATCO Electric explained that the purpose of this project is to improve reliability indices on line 5L214, located within the Swan Hills distribution system. In 2010, 5L214 was one of ATCO Electric's worst performing distribution feeders. In addition, ATCO Electric explained that this project will face and accommodate additional capacity requirements created when other assets at Swan River were upgraded at the end of 2012. This upgrade also will address aging conductors by replacing them with conductors of a higher rating, and reduce span lengths to reflect current heavy loading standards. In addition, ATCO Electric indicated that construction of this project eliminated the need to replace poles tagged for replacement under the test and treat maintenance program.[813]

763. ATCO Electric provided most of the supporting calculations for this project, engineering documentation, and an analysis of alternatives in its response to AUC-AE-7.[814] In this analysis, ATCO Electric showed that the service quality metrics for the portion of the distribution system included in the business case were performing below ATCO Electric's performance indices. The detailed information in this additional document provided a breakdown of the cost estimates totalling $1.43 million, which appeared to be a portion, but not all, of the $2.7 million total costs for the project.[815]

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[810] Transcript, Volume 2, page 328.
[811] Exhibit 110.02, UCA evidence of Teshmont, Project 70272, A5.
[812] Exhibit 198.01, ATCO Electric rebuttal evidence to UCA, paragraphs 245 and 246.
[813] Exhibit 37.01, ATCO Electric application, Appendix B, 70225 business case, page 2.
[814] Exhibit 81.01, AUC-AE-7, Attachment 1, pages 1-9.
[815] Total costs provided in Exhibit 37.01, ATCO Electric application, Appendix B, 70225 business case, page 4.

764. Interveners did not comment on the specifics of this project.

Commission findings

765. With respect to the rebuild and re-conductor 5L214 project, the Commission finds that the information provided in AUC-AE-7 was useful in assessing the engineering requirements of the project. However, with respect to the forecast in excess of $1.43 million, the Commission finds that the information provided in AUC-AE-7 was insufficient to allow the Commission to make a determination that this portion of the project is reasonable. Information should be provided to support the full $2.7 million forecast in ATCO Electric's business case. Without all the necessary supporting information on the full scope of the project, the Commission cannot find that the project is justified from an engineering perspective.

766. With respect to the $1.43 million forecast for which information was provided in AUC-AE-7, including a more detailed breakdown of the cost estimates, the Commission has reviewed the business case and considers that the information provided by ATCO Electric supports a finding that the $1.43 million portion of the rebuild and re-conductor 5L214 project is required to maintain service reliability and safety at adequate levels. The Commission finds that the proposed scope, level, timing and forecast cost for this portion of the rebuild and re-conductor 5L214 project, as proposed for 2013, is reasonable.

767. However, in the absence of sufficient information to support the business case for the entire rebuild and re-conductor 5L214 project, the Commission cannot find that the scope, level, timing and forecast for the entire project is reasonable. Accordingly, the Commission finds that the rebuild and re-conductor 5L214 project does not satisfy the project assessment requirement of Criterion 1.

7.2.1.7 70287 – 5L322 voltage unbalance mitigation

768. ATCO Electric explained that this project was required to address poor performance on the portion of its system serving Berry Creek Rural. ATCO Electric stated that the long, low capacity, single phase line feeding Berry Creek Rural has been causing poor voltage levels and voltage unbalance. ATCO Electric explained that the causes of the problems to be the load on the end of the feeder being a long distance from the source, and the small wire size used over a long distance thereby causing significant losses and voltage drop. ATCO Electric explained further that the imbalance on the mainline is above ATCO Electric's guideline of two per cent for time durations of 10 minutes or longer.[816]

769. In its response to AUC-AE-7, ATCO Electric assessed alternative solutions to resolve the problem, including building a three phase line, adding another phase conductor to distribute the single phase load over two phases, and adding a neutral conductor and a 7.2-kilovolt (kV) rural substation. ATCO Electric selected the three phase alternative because it will provide for better load balancing and flexibility in the system and produce what ATCO Electric considered to be a relatively minor cost increase of $153,800. A breakdown was provided for the cost of the selected alternative, which was $2.4 million, although $2.7 million was used in the original business case included with ATCO Electric's application.[817]

[816] Exhibit 81.01, AUC-AE-7, Attachment 1, page 103.
[817] Exhibit 81.01, AUC-AE-7, Attachment 1, pages 108 and 110; and Exhibit 37.01, ATCO Electric application, Appendix B, 70287 business case, page 5.

770. Interveners did not comment on the specifics of this project.

Commission findings

771. The Commission finds that the information provided in AUC-AE-7 for the 5L322 voltage unbalance mitigation project was useful in assessing the engineering requirements of the project. The discussion of alternatives, including supporting calculations for both the selected and rejected alternatives aided in demonstrating that the selected alternative will provide enhanced performance capabilities, with minimal additional costs.

772. The Commission has reviewed the business case for the 5L322 voltage unbalance mitigation project and considers that the information provided by ATCO Electric supports a finding that the 5L322 voltage unbalance mitigation project is required to maintain service reliability, quality and safety at adequate levels. The Commission finds that the proposed scope, level, timing and forecast cost for the project, as proposed for 2013, are reasonable. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

7.2.1.8 74271 – Rycroft tie line

773. ATCO Electric explained that this project was required to improve reliability of the Rycroft area in the event of the failure of the single transformer in the Rycroft substation. There are no other 25 kV sources in the area, and ATCO Electric's contingency plan relating to transformer failure involves installing a mobile substation to replace the failed transformer. Should the Rycroft transformer fail, customers would be without electricity from the grid during the 12 to 14 hours or more required to restore service at Rycroft using the mobile substation and three spare single phase regulators. ATCO Electric's proposed solution was to construct a 30 km tie line between Rycroft and Ksituan River.[818]

774. ATCO Electric supplemented its business case on the project with additional information in its response to AUC-AE-7. ATCO Electric showed that the reliability performance of the Rycroft system had been below the rest of ATCO Electric's system.[819] ATCO Electric also laid out more clearly the alternatives of adding a second transformer at Rycroft and selecting a different tie line between Rycroft and Donnelly, and provided reasons for the selected alternative.[820] ATCO Electric provided some information on the assumptions it used in the economic analysis of the project,[821] but did not actually provide detailed backup calculations showing how it arrived at the $6.5 million forecast for the project ($1.5 million in 2013 and $5.0 million in 2014). In rebuttal evidence, ATCO Electric provided an update on the project and indicated that the need to do additional planning and assessment of route restrictions had delayed the project and, as a result, the project would likely not commence in 2013.[822] ATCO Electric did not propose to update its calculations to remove the project from the 2013 K factor calculations because of offsetting increases to other projects.[823]

775. Interveners did not comment on the specifics of this project.

[818] Exhibit 37.01, ATCO Electric application, Appendix B, 74271 business case, page 2.
[819] Exhibit 81.01, AUC-AE-7, Attachment 1, page 124.
[820] Exhibit 81.01, AUC-AE-7, Attachment 1, page 117.
[821] Exhibit 81.01, AUC-AE-7, Attachment 1, page 137.
[822] Exhibit 197.01, ATCO Electric rebuttal evidence to CCA, paragraph 111.
[823] Exhibit 197.01, ATCO Electric rebuttal evidence to CCA, paragraph 115.

Commission findings

776. The Commission has reviewed the business case and the information provided in response to AUC-AE-07 for the Rycroft tie line project and considers that ATCO Electric has established the need for project given the poor performance that the system has been experiencing. It also appears that ATCO Electric has justifiable reasons for choosing its preferred solution over other alternatives.

777. However, there is not a clear enough breakdown of the costs in the evidence provided to determine whether the cost estimates for this project are reasonable. The Commission notes that, for the rejected alternatives, only a high level forecast was provided. As a result, if there were substantial cost advantages associated with a rejected project, these cost savings might mitigate substantially any performance shortcomings and thereby possibly lead to a different outcome. If ATCO Electric wishes to propose this project for capital tracker treatment, it should provide more information on the costs of the project, as well as information on the costs of any rejected alternatives.

7.2.1.9 70259 – High Prairie sub distribution interconnection

778. ATCO Electric explained that this project involved distribution system changes in the High Prairie area induced by the transmission system upgrade associated with the North Central Transmission Development Projects. The AESO identified the need to upgrade the transmission system within the High Prairie area as part of the North Central Transmission Development System Study. As a result of these upgrades, ATCO Electric determined that the existing 25-kV system in the High Prairie area will need changes. The proposed changes included building eight km of line, converting 182 km 72-kV line to 25 kV, installing underground distribution lines in three areas to allow for construction of transmission line, converting some 7.2-kV customers to 14.4 kV, and installing gang switches and protective devices where required. The total cost of the project was forecast to be $5.9 million ($1.2 million in 2013, $1.5 million in 2014, and $3.2 million in 2015). A customer contribution of $0.9 million was expected to be received.[824]

779. In the business case provided with its application, ATCO Electric identified two alternatives in addition to the proposed solution. The first alternative involved rebuilding the entire line as 25 kV and not converting the 72-kV line, while the second involved salvaging the existing 72-kV circuit and then leaving intact the existing 25-kV circuit located on the same poles. ATCO Electric rejected the first alternative due to cost, and rejected the second alternative due to cost and reliability concerns.[825]

780. ATCO Electric proposed two supplemental business cases in its response to AUC-AE-7.[826] These business cases had forecasts of $2.95 million for the subproject related to High Prairie to Sturgeon salvage and takeover solutions, and $2.6 million for converting 72-kV line to 25-kV line. Each of these business cases provided cost breakdowns for the projects, and the 72 kV to 25-kV business case provided a cost breakdown of one of the rejected alternatives.

781. Interveners did not comment on the specifics of this project.

[824] Exhibit 37.01, ATCO Electric application, Appendix B, 70259 business case, pages 2 and 3.
[825] Exhibit 37.01, ATCO Electric application, Appendix B, 70259 business case, page 4.
[826] Exhibit 81.01, AUC-AE-7, Attachment 1, pages 170-174 and 176-183.

Commission findings

782. The Commission accepts that the High Prairie sub distribution interconnection project is required to provide service in the High Prairie area in response to changes made to the transmission system. The Commission considers that information for the two business cases provided in ATCO Electric's response to AUC-AE-7, which explain the details of the projects and how the cost forecasts were derived, when combined with the original business for this project supports a finding that the project is justified from an engineering perspective.

783. The Commission has reviewed the business cases with respect to ATCO Electric's High Prairie sub-distribution interconnection project, along with the information in AUC-AE-7, and considers that this information supports a finding that the project is required to maintain service reliability, quality and safety at adequate levels. The Commission finds that the proposed scope, level, timing and forecast cost for the project, as proposed for 2013, are reasonable. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

7.2.1.10 70265 – Hanna area distribution system improvement study

784. ATCO Electric explained that this project involved distribution system changes in the Hanna area induced by the transmission system upgrade associated with the Hanna Area Transmission Development Projects. The AESO identified the need to upgrade the transmission system within the Hanna area as part of the Hanna Area Transmission System Study. As a result of these upgrades on the transmission lines, ATCO Electric determined that the existing 25-kV system in the Hanna Area will need changes. The proposed solution included building nine km of line, building five km of 7.2-kV line, converting 50 km 72-kV line to 25 kV, salvaging 50 km of 25-kV line that was understrung on the 72-kV line, installing two km of underground distribution line to allow for construction of transmission line, and installing gang switches and protective devices where required. The total cost of the project was forecast to be $3.3 million ($1.8 million in 2013, $1.5 million in 2014). A customer contribution of $0.7 million was expected to be received.[827]

785. In the business case provided with its application, ATCO Electric identified two alternatives in addition to the proposed solution. The first alternative involved rebuilding the entire line as 25 kV and not converting the 72-kV line, while the second involved not converting the 72-kV line and rebuilding the entire line to 25 kV and salvaging the existing 72-kV circuit and then leaving intact the existing 25-kV circuit located on the same poles. ATCO Electric rejected the first alternative due to cost, and rejected the second alternative due to cost and reliability concerns.[828]

786. ATCO Electric provided additional information on the project in its response to AUC-AE-7.[829] The additional engineering study provided more technical specifications on the proposed alternative, dividing the project into major components. ATCO Electric provided a cost estimate of each of the components, but did not provide information on how it arrived at the cost estimates.[830] In addition, ATCO Electric indicated that one of the rejected alternatives was

[827] Exhibit 37.01, ATCO Electric application, Appendix B, 70265 business case, pages 2 and 3.
[828] Exhibit 37.01, ATCO Electric application, Appendix B, 70265 business case, page 3.
[829] Exhibit 81.01, AUC-AE-7, Attachment 1, pages 184-193.
[830] Exhibit 81.01, AUC-AE-7, Attachment 1, page 191.

$1.1 million higher in cost, but did not provide supporting calculations to show how ATCO Electric arrived at this conclusion.[831]

787. Interveners did not comment on the specifics of this project.

Commission findings

788. The Commission accepts that the Hanna area distribution system improvement study project is needed to provide service in the Hanna area in response to changes made to the transmission system. The Commission considers that ATCO Electric did not provide sufficient information to support the cost forecast for the project. While breaking the project down into subcomponents, explaining the work to be done on each of the components, and providing the forecast for each of those components is useful, additional information is required to show how ATCO Electric determined the forecast for each of the components, including the number of units, the costs-per-unit, and any other assumptions made by the company to arrive at the forecast amount. In addition, ATCO Electric did not provide supporting cost calculations for the alternative that it rejected.

789. In the absence of sufficient information to support the cost estimates in the business case for the Hanna area distribution system improvement study project, the Commission cannot find that the scope, level, timing and forecast for the project is reasonable. Accordingly, the Commission finds that the Hanna area distribution system improvement study project does not satisfy the project assessment requirement of Criterion 1.

7.2.1.11 70266 – Central East distribution system improvement study

790. ATCO Electric explained that this project involved distribution system changes in the Central East area induced by the transmission system upgrade associated with the Central East Area Transmission Development Projects. The AESO identified the need to upgrade the transmission system within the Central East area as part of the Central East Area Transmission System Study. As a result of these upgrades on the transmission lines, ATCO Electric determined that the existing 25-kV system in the Central East area will need changes. The proposed solution included building 14 km of line, converting 212 km 72-kV line to 25 kV, salvaging 187 km of 25-kV line that was understrung on the 72-kV line, installing underground distribution line in seven different areas to allow for construction of transmission line, converting some 7.2-kV customers to 14.4 kV, and installing gang switches and protective devices where required. The total cost of the project was forecast to be $9.2 million ($3.1 million in 2013, $3.1 million in 2014, and $3.0 million in 2015). A customer contribution of $0.5 million was expected to be received.[832]

791. In the business case provided with its application, ATCO Electric identified two alternatives in addition to the proposed solution. The first alternative involved rebuilding the entire line as 25 kV and not converting the 72-kV line while the second involved, not converting the 72-kV line and rebuilding the entire line to 25 kV, and salvaging the existing 72-kV circuit and then leaving intact the existing 25-kV circuit located on the same poles. ATCO Electric

[831] Exhibit 81.01, AUC-AE-7, Attachment 1, page 191.
[832] Exhibit 37.01, ATCO Electric application, Appendix B, 70266 business case, pages 2 and 3.

rejected the first alternative due to cost, and rejected the second alternative due to cost and reliability concerns.[833]

792. ATCO Electric provided additional information on the project in its response to AUC-AE-7.[834] The additional engineering study provided more technical specifications on the proposed alternative, dividing the project into major components. ATCO Electric provided a cost estimate of each of the components, but did not provide information on how it arrived at the cost estimates.[835] In addition, ATCO Electric indicated that one of the rejected alternatives was $4.8 million higher in cost, but did not provide supporting calculations to show how ATCO Electric arrived at this calculation.[836]

Commission findings

793. The Commission accepts that the Central East distribution system improvement study project is needed to provide service in the Central East area in response to changes made to the transmission system. The Commission considers that ATCO Electric did not provide sufficient information to support the cost forecast for the project. While breaking the project down into subcomponents, explaining the work to be done on each of the components, and providing the forecast for each of those components is useful, additional information is required to show how ATCO Electric determined the forecast for each of the components, including the number of units, the costs-per-unit, and any other assumptions made by the company to arrive at the forecast amount.

794. In the absence of sufficient information to support the cost estimates in the business case for the Central East distribution system improvement study project, the Commission cannot find that the scope, level, timing and forecast for the project is reasonable. Accordingly, the Commission finds that the Central East distribution system improvement study project does not satisfy the project assessment requirement of Criterion 1.

7.2.1.12 72XXX – large new extensions

795. ATCO Electric explained that this project, which was made of several subprojects, was required to provide distribution facilities for large oilfield, industrial, and commercial customers. The subprojects were driven by specific customer requests that require major additions to the system, with each addition costing in excess of $1.0 million. The total forecast for the project was $42.0 million in 2013. ATCO Electric identified some projects that have customer commitment, and also identified some projects that did not have customer commitment, but had a very high probability of proceeding. Both the committed and high probability projects were included in the forecast. ATCO Electric did not identify a specific amount of customer contribution attributable to the project, but did forecast customer contributions at $40.5 million for all new extensions, including those outside of the 72XXX project. ATCO Electric explained that average customer contributions for a project were forecast using proposed Maximum Investment Levels.[837]

[833] Exhibit 37.01, ATCO Electric application, Appendix B, 70266 business case, page 3.
[834] Exhibit 81.01, AUC-AE-7, Attachment 1, pages 194-201.
[835] Exhibit 81.01, AUC-AE-7, Attachment 1, page 199.
[836] Exhibit 81.01, AUC-AE-7, Attachment 1, page 199.
[837] Exhibit 37.01, ATCO Electric application, Appendix B, 72XXX business case, page 2.

796. ATCO Electric did not provide the forecast costs for each of the subprojects. Commission counsel inquired about getting a more detailed forecast, and ATCO Electric raised concerns about confidentiality since some projects could be tied to individual customer projects in certain areas. In response to this concern, Commission counsel asked the following question:[838]

> Q. Well, are you able to give us the specific numbers for projects that don't have the confidentiality concern and then an aggregate number for all projects that do?
> A. MR. GOY: We can undertake to take a look at these projects and provide additional detail that won't compromise that confidentiality.

797. ATCO Electric provided the following response to the undertaking:[839]

> The following provides a breakdown of the Large New Extensions appropriation by category. Further breakdown is not possible without revealing confidential details about individual customers and projects.

72xxx Large New Extensions - 2013 Forecast

Number of projects	Sector	$MM
1	Hospital	1.0
2	Oilfield and other	14.0
7	Oilsands	15.8
6	Pipeline	11.2
16	**Total**	**42.0**

798. Teshmont raised concerns about ATCO Electric not providing an engineering study to support the project and not providing alternatives, and came to the conclusion that "the necessity of the capital expenditure has not been demonstrated in the application."[840] When questioned by Commission counsel, Mr. Baker expanded on his concerns about the lack of information:

> Q. Is Teshmont suggesting that ATCO Electric did not provided sufficient details to allow parties to fairly assess the capital projects it has proposed as capital trackers, and if so, what additional information would be required?
> A. MR. BAKER: So I recognize that both projects -- so I'm just looking at 70003, has customer additions in 2013 of 395 projects. And for 72XXX (verbatim), that there is a large number of projects also included in these particular -- in these two projects. And the standardization of, let's say, oil field extension assists in getting the work done quickly and perhaps at good unit cost and a lot of other desirable activities that take place. And the question we ask or the issue that we raise is, is there another way to evaluate these large number of connections and extensions and so on. And again, it was kind of delivered as this is how we do it, and we raise the question: Are there alternative mechanisms for delivering. There may not be. I don't know. But to have a discussion in the document in the business case that says, "yeah, we've looked at, you know, delivery mechanism X, and we recommend that. Delivery mechanism Y has been tried, but it has an issue with sparing or the cost is very high or the delivery is very long or something like that." That would be helpful to understand in terms of being able to say that this is eligible for a capital tracker. Does it sit inside the normal business practice? I believe it

[838] Transcript, Volume 2, page 387.
[839] Exhibit 211.01, ATCO Electric response to undertaking #8.
[840] Exhibit 176.02, UCA supplemental evidence of Teshmont, pages 25-26.

> does. Not to say it's a bad thing, but it doesn't give that kind of information to be able to say, "this is what it should be."[841]

799. ATCO Electric responded to Teshmont's concerns regarding the need to provide supporting documentation for new extension projects:

> The UCA's submissions related to new extensions reinforce that Teshmont does not understand the electrical distribution business and the statutory obligations of Distribution Facility Owners (DFO). New extension projects are driven by third parties, ATCO Electric's customers. ATCO Electric designs and constructs projects to meet the requested voltages, supply locations within right-of-ways identified and approved by our customers and municipalities. As such, engineering studies for these projects do not apply (AUC-AE-7; ATCO Electric Rebuttal to CCA Ex. 0197, para. 268) and consideration of alternatives can only occur within the guidelines and regulations under which ATCO Electric must operate.[842]

Commission findings

800. With respect to the large new extensions project, the Commission finds that, without additional information on how ATCO Electric derived its cost forecasts or which alternatives it considered, the Commission is unable to determine whether the forecast costs for this project are reasonable. The possibility that there may be few alternatives available, as suggested by ATCO Electric, does not obviate the need for ATCO Electric to justify its costs and explain why other alternatives are not feasible. In addition, although ATCO Electric provided a cost forecast for each individual new extensions sub-project, ATCO Electric did not identify the customer contribution attributed to each new extensions subproject to establish the funding needs of each subproject.

801. In the absence of sufficient information to support the cost estimates in the business case for the large new extensions project, the Commission cannot find that the scope, level, timing and forecast for the project is reasonable. Accordingly, the Commission finds that this project does not satisfy the project assessment requirement of Criterion 1.

7.2.1.13 Distribution to transmission contributions

802. ATCO Electric explained that distribution to transmission contributions relate to projects that contribute to the installation of transmission facilities such as a second transformer in a transmission substation and/or the installation of a new point of delivery. These contributions are flowed through to the distribution company as required by the AESO's investment policies and are subject to transmission capital construction schedules.[843]

803. ATCO Electric explained that, while it participates in AESO proceedings with respect to changes to its investment policy, ATCO Electric does not have direct influence over the AESO's decision regarding investment and contribution policy. ATCO Electric noted that, historically, these expenditures have been subject to deferral treatment in ATCO Electric's General Tariff Applications.[844]

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[841] Transcript, Volume 9, pages 1791-1792.
[842] Exhibit 275.01, ATCO Electric reply argument, paragraph 227.
[843] Exhibit 37.01, ATCO Electric application, paragraph 189.
[844] Exhibit 37.01, ATCO Electric application, paragraph 190.

804. ATCO Electric initially forecast the 2013 distribution to transmission contributions, net of contributions from customers, to be $4.2 million. ATCO Electric updated the forecast to $11.9 million in rebuttal evidence due to a new project being added in 2013 and an update to ATCO Electric's contribution levels.[845] ATCO Electric did not provide a breakdown of its forecast into individual projects, and did not identify the corresponding AESO proceedings during which the needs for the projects were determined.

805. The UCA objected to the inclusion of distribution to transmission contribution projects as capital trackers since ATCO Electric has been making similar investments since 2006. As a result, the UCA asserted the projects should not be considered outside of the normal course of operations.[846]

Commission findings

806. The Commission considers that the costs to ATCO Electric's distribution function are beyond the control of the company. In addition, the cost forecasts, and the portion to be assigned to ATCO Electric's distribution function, are assessed in other proceedings. Because of this, the Commission accepts ATCO Electric's position that it is not necessary to provide engineering studies in support of these types of projects in order for these projects to qualify, from an engineering perspective, for capital tracker treatment.[847]

807. However, the Commission notes that ATCO Electric did not provide sufficient information on the forecast costs for the Distribution to transmission contributions project. In addition, ATCO Electric did not provide information on the contributions it has collected from its customers.

808. In the absence of sufficient information to support the cost estimates for the Distribution to transmission contributions project, the Commission cannot find that the scope, level, timing and forecast for the project is reasonable. Accordingly, the Commission finds that this project does not satisfy the project assessment requirement of Criterion 1.

7.2.2 Accounting test

809. In Section 3.1.1 of this decision, the Commission found that in order to satisfy the accounting test and thus demonstrate that a program or project (depending on the approved level of grouping) is outside the normal course of the company's ongoing operations, the associated revenue provided under the I-X mechanism would not be sufficient to recover the entire revenue requirement associated with the prudent capital expenditures for the program or project.

810. In sections 3.1.2 and 3.1.3 of this decision, the Commission determined that ATCO Electric's aggregate investment shortfall approach should not be used to demonstrate the absence of double counting or to determine whether all of the forecast or actual expenditures for a capital project or program are, or a portion is, outside of the normal course of the company's ongoing operations, as required to satisfy Criterion 1. The Commission determined that the accounting test requirement of Criterion 1 cannot be performed when an applicant uses the aggregate investment shortfall approach.

[845] Exhibit 197.01, ATCO Electric rebuttal evidence to CCA, paragraph 112.
[846] Exhibit 268.02, UCA argument, paragraphs 264 and 265.
[847] Exhibit 81.01, AUC-AE-7.

811. Since ATCO Electric's capital tracker application used an aggregate investment shortfall approach, the Commission is unable to determine in this proceeding whether any of ATCO Electric's capital projects proposed for capital tracker treatment satisfy the accounting test requirement of Criterion 1 and are therefore outside the normal course of the company's ongoing operations.

812. In sections 3.1.2 and 3.1.3 of this decision, the Commission determined that the project net cost approach adequately demonstrates that a particular project proposed for capital tracker treatment does not result in double counting and is a reasonable method to identify the extent to which a project is underfunded by the I-X mechanism. Therefore, the Commission finds that the accounting test should be based on a project net cost approach.

813. Accordingly, in its 2013 capital tracker refiling and true-up application, ATCO Electric is directed to demonstrate, based on a project net cost approach, the extent to which each of its projects (at ATCO Electric's proposed level of grouping) proposed for capital tracker treatment is underfunded by the I-X mechanism, thus satisfying the accounting test requirement of Criterion 1.

7.3 Criterion 2 – Ordinarily the project must be for replacement or required by an external party

814. As discussed in Section 3.2.1 of this decision, Criterion 2 requires that in most cases a capital tracker project should be for asset replacement or required by an external party. In that section, the Commission also explained that, in principle, a growth-related project will satisfy the requirements of Criterion 2 when it can be demonstrated that customer contributions together with the incremental revenues allocated to the project on some reasonable basis, when added to the revenue provided under the I-X mechanism, are insufficient to offset the revenue requirement associated with the project in a PBR year.

815. ATCO Electric addressed how projects satisfied the second capital tracker criterion at the program level in its application.

Table 19. ATCO Electric's reasons that project satisfy the second capital tracker criterion

Project	Reason	Exhibit 37.01, ATCO Electric application paragraph
End of life	Replacement and life extension	75
Capacity	Growth	93
Clearance and safety	Third party and safety	116
Reliability	Maintenance for reliability purposes	133
Line move projects	Third party	146-148
Distribution costs associated with transmission projects	Third party	162
New extensions	Growth	185
Distribution to transmission contributions	Third party	199

816. Clearance and safety projects had some third party requirements. However, some of the work was the result of programs that are cyclical in nature and simply involve clearing vegetation on a periodic basis, or, as it grows. Mr. Howell explained:

> [Y]ou know, we're -- we generally feel that that's externally driven because when we build the line and walk away from it, it's in good shape, and we have -- we have the appropriate clearances to those structures. Something is going to come and intervene on that, whether it's vegetation or whether it's buildings or agricultural equipment. You know, any of those factors are going to act upon our lines, and it's certainly not internally driven. So we feel that that's a third-party driven project.[848]

817. The UCA disagreed with Mr. Howell's assertion, stating:

> Thus, ATCO advances a broad interpretation to "third party driven", defining such through the use of a negative. Thus, a project will be considered to be third party driven where the motivation for such is not internally driven. With respect, to classify any project which is not "internally driven" as "third party driven" is clearly in error and does not accord with the restrictive nature of the second criterion.[849]

818. The UCA also objected to the inclusion of ATCO Electric's growth projects. A general discussion of the UCA's objections to growth projects is outlined in Section 3.2.1.

Commission findings

819. The Commission considers that the projects included in ATCO Electric's end of life program generally involve the replacement of existing capital assets, and therefore appear to satisfy Criterion 2. Mr. Howell explained that some of the work is to extend the life of existing assets as opposed to a strict replacement of the assets. However, ATCO Electric considers preventative programs to relate to the replacement of existing assets.[850] In Section 3.2.2, the Commission addressed the issue of life extension projects qualifying as projects involving the replacement of existing capital assets. The Commission found that for the purpose of capital tracker applications, life extension capital projects, as defined by a company's existing capitalization policy, may be considered for capital tracker treatment under Criterion 2, where they satisfy the other capital tracker criteria.

820. The Commission has considered Mr. Howell's comments on why some clearance and safety projects could be classified as third-party driven projects. Based on the record of this proceeding, the Commission considers that clearance and safety projects are not third-party driven. Accordingly, the Commission finds that clearance and safety projects do not satisfy the requirements of Criterion 2, on the basis applied for by ATCO Electric.

821. For all other categories of projects identified in Table 19 above, the Commission considers that ATCO Electric has satisfied Criterion 2.

7.4 Criterion 3 – The project must have a material effect on the company's finances

822. In Section 3.3 of this decision, the Commission determined that a two-tier materiality threshold should be adopted for capital trackers. The first tier of the materiality threshold, the

[848] Transcript, Volume 2, page 226.
[849] Exhibit 268.02, UCA argument, paragraph 145.
[850] Transcript, Volume 2, page 225.

four basis point threshold, will be applied at the level of individual projects or programs proposed for capital tracker treatment (grouped in the manner approved by the Commission). The second tier of the materiality threshold, the 40 basis point threshold, will be applied to the aggregate revenue requirement proposed to be recovered by way of all capital trackers.

823. Based on the Commission's estimates in Table 8 of this decision, the 40 basis point threshold for ATCO Electric in 2013 is $2.238 million and the four basis point threshold is $224,000. Given the Commission's findings with respect to ATCO Electric's grouping of projects, should the groupings remain the same on a refiling, the four basis point threshold will apply to that portion of the revenue requirement associated with each capital tracker program that is not funded under the I-X mechanism. The 40 basis point threshold will apply to the aggregate revenue requirement proposed to be recovered by way of all capital trackers.

824. As noted in sections 3.1.2 and 3.1.3 above, the Commission determined that a project net cost approach is sufficient to satisfy the Commission that all of the forecast expenditures for a capital project or program are, or a portion is, outside the normal course of the company's ongoing operations. However, since ATCO Electric's capital tracker application used an aggregate investment shortfall approach in this proceeding, the Commission is unable to assess materiality with respect to any of ATCO Electric's programs proposed for capital tracker treatment as required under Criterion 3.

7.5 ATCO Electric's 2013 capital trackers and K factor amount

825. In sections 7.2.2. and 7.4 above, the Commission determined that, since ATCO Electric did not use a project net cost approach in its 2013 capital tracker application, the Commission is unable to determine whether its programs proposed for capital tracker treatment satisfy the accounting test requirement of Criterion 1 and the materiality test under Criterion 3. Accordingly, the Commission does not approve any of the projects proposed by ATCO Electric for capital tracker treatment at this time.

826. In Section 4.4 of this decision, the Commission did not approve the K factor calculation methodology resulting from ATCO Electric's aggregate investment shortfall analysis. Accordingly, the Commission is unable to approve a K factor amount for 2013 for ATCO Electric. Therefore, ATCO Electric is directed to retain, in rates, its current K factor placeholder equivalent to 60 per cent of its applied-for 2013 forecast K factor amount.

827. In accordance with the direction set out in Section 10.1 of this decision, ATCO Electric shall file on or before May 15, 2014, a capital tracker refiling and true-up application using 2013 actual capital expenditures for those projects or programs the company proposes for 2013 capital tracker treatment in compliance with the directions set out in this decision. Specifically, ATCO Electric is directed, based on a project net cost approach, to demonstrate that each of its projects and programs proposed for capital tracker treatment satisfies the accounting test requirement of Criterion 1 and the materiality test under Criterion 3. ATCO Electric is also directed to calculate its K factor amount using the project net cost approach in accordance with the Commission-approved method set out in Section 4.4 of this decision. This application should include material sufficient to address the Commission's three capital tracker criteria as explained and applied in this decision.

8 EPCOR

828. EPCOR proposed 23 projects for capital tracker treatment, as set out in Table 6 of Section 2.3. EPCOR identified projects proposed for capital trackers treatment with a positive, negative or zero K factor. EPCOR explained that positive K factors occur when a capital tracker project requires a recovery of incremental revenue requirement from customers. Negative K factors provide refunds to customers when the I-X mechanism provides recovery in excess of the revenue requirement for a particular project.[851] Zero K factors occur when there is no rate impact in the current year, but recognizes projects for which significant capital additions will be required in future years, and for which EPCOR is seeking approval of capital tracker treatment in advance of spending money on the projects.[852]

829. Two negative K factors were proposed, one for the North LRT distribution system relocations and one for regulated default supply. These projects, and the concept of negative K factors in general, are addressed in Section 8.5 below.

830. Zero K factors were proposed for the Walterdale Bridge replacement franchise relocations, the OMS/DMS life cycle replacement, and the north service centre replacement. These projects, and the concept of zero K factors in general, are discussed in Section 8.6.

831. With respect to EPCOR's capital tracker projects, PEG on behalf of the CCA, provided some general comments:

> EPCOR proposes a miscellany of capex types for K factor eligibility. Some of these categories (e.g. life cycle replacement of underground distribution cable and distribution pole and aerial line life cycle replacements) are potentially consistent with Commission eligibility guidelines but many others (e.g. new 15 kV and 25kV Circuit Additions and "New Underground Cable and Aerial Line Reconfigurations and Extensions to Meet Customer Growth") are not. EPCOR notes in its application that "most if not all of the projects in Categories 2 and 3 might be categorized as being within the normal course of EDTI's ongoing operations".[853] (footnote omitted)

832. The UCA retained the services of SMi, specifically Mr. Roberts and Mr. Lessard, to assess capital tracker projects proposed by EPCOR. The opinions of SMi with respect to EPCOR's proposed projects are provided in the discussion below.

8.1 Grouping of projects proposed for capital tracker treatment

833. EPCOR described its approach to grouping, stating it "based its Capital Trackers on the approximately 60 relatively granular capital project categories that EDTI used for purposes of its last three Tariff Applications under COSR [cost-of-service regulation]."[854]

834. In questioning from Commission counsel on whether certain projects could be grouped with similar projects in different geographical locations, but commenced in an earlier period, specifically with respect to the LRT-related relocation projects, Mr. Elford commented:

[851] Exhibit 38.01, EPCOR application, paragraph 296.
[852] Exhibit 38.01, EPCOR application, paragraph 5.
[853] Exhibit 108.01, CCA evidence of PEG, page 60.
[854] Exhibit 263.02, EPCOR argument, paragraph 255.

> Q. So did EPCOR consider -- for example, for relocation projects, if it could, regardless of geographical location, if those projects could be grouped with one another? The example I'm thinking is the south, east, and west LRT with the north LRT relocations. Could those be grouped together?
> A. MR. ELFORD: From our perspective, no. They're two very separate large projects involve a substantial amount of work that don't occur on a regular basis. We would see the north LRT project fairly recently followed by the east, west LRT, but we haven't seen a project of that nature for quite a bit of time before that of that size, scale, scope. So from our prospective, it's very easy to ring-fence that into entire project into something large and substantial and irregular and all the other invitees to the festival of adjectives that we can use to describe it. We can ring-fence that. It's -- very clearly it stands on its own. That was our perspective much like we tracked the north LRT extension in a separate project category under cost of service.[855]

835. The UCA noted that "EDTI approached grouping projects into programs in a different manner and continued the use of narrowly defined groups that were used historically in cost-of-service applications."[856] The UCA's general position on grouping, extending to all companies, was:

> …the UCA would submit that any such grouping must occur in a very restrictive fashion. Projects that can be grouped together will share not only the same driver, but the same project management and engineering considerations. For example, the UCA does not take issue with grouping together similar projects occurring throughout the province, such as pole replacement programs or new extension programs.[857]

Commission findings

836. In Section 3.4 of this decision, the Commission determined that, once a proposed grouping of projects into a program has been approved, the accounting test and the first tier of the materiality test will be applied at the program level. The project assessment will be done on either a program or on a project basis, depending on the particular circumstances. The second tier of the materiality test will be applied at the level of all capital tracker projects, in aggregate. The Commission also determined that the reasonableness of the grouping of capital projects is best assessed on a case-by-case basis for each individual company.

837. The Commission has reviewed the grouping of the components of certain projects into individual projects and the grouping of projects into programs, as proposed by EPCOR for capital tracker treatment. With respect to the LRT-related projects, EPCOR acknowledged that if it had grouped all of its LRT-related projects together, the overall impact on EPCOR's K factor would be the same. The Commission finds that, in EPCOR's case, geographic location is not a sufficient justification to isolate projects from one another, as EPCOR did with its LRT-related projects. Accordingly, for the purpose of this decision, the Commission will group EPCOR's LRT-related projects together into one project.

838. In addition, the Commission considers that all of the projects set out in Table 20 below, including the SE and West LRT distribution system relocation, involve relocations driven by a third party. In the Commission's view, all the relocation projects and programs set out in Table 20 below should be grouped together into a single program.

[855] Transcript, Volume 6, pages 1105-1106.
[856] Exhibit 268.02, UCA argument, paragraph 228.
[857] Exhibit 268.02, UCA argument, paragraph 230.

Table 20. EPCOR relocation-related capital trackers ($ million)[858]

Project description	2013 forecast net capital additions	2013 K factor
SE and West LRT distribution system relocation	3.99	0.18
Queen Elizabeth II Highway and 41Ave interchange distribution system relocations	2.00	0.09
Walterdale Bridge replacement franchise relocations	0.00	0.00
Franchise agreement driven relocations and conversions	5.04	0.20
NLRT distribution system relocations	0.00	(0.10)
Total	**11.03**	**0.37**

839. The Commission also considers that EPCOR's IT projects should be grouped into a single program. These projects include the proposed regulated default supply project, the proposed interval meter data collection and processing project, and the proposed work management system upgrade project. Although the need and purpose for each of the IT projects in this program are somewhat different, the projects are of a sufficiently similar in nature to warrant grouping into a single program for the purposes of the accounting test and the first tier of the materiality test.

Table 21. EPCOR information technology-related capital trackers ($ million)[859]

Project description	2013 forecast net capital additions	2013 K factor
Work management system upgrade	0.38	0.17
Regulated default supply	0.00	(0.21)
Interval meter data collection and processing	1.85	0.18
Total	**2.23**	**0.14**

840. The Commission also considers that EPCOR classified its Poundmaker contributions as a distribution contribution for transmission assets project, and that EPCOR identified other historical distribution contributions for transmission assets in its "2013 Distribution Capital Tracker Model."[860] The Commission considers that for the purposes of the accounting test and the first tier of the materiality test, the historical capital additions for distribution contributions for transmission assets are sufficiently similar in nature to the Poundmaker contributions, and therefore, should be grouped together.

[858] Source of data: Exhibit 38.01, EPCOR Application, Table 1.0-1.
[859] Source of data: Exhibit 38.01, EPCOR Application, Table 1.0-1.
[860] Exhibit 38.39, EPCOR application, Schedule 2, 2012 RR table, lines 99 to 105.

Table 22. EPCOR distribution contributions for transmission assets-related capital trackers ($ million)[861]

Project description	2013 forecast net capital additions	2013 K factor
Poscor shredder substation contribution	0.00	0.00
Summerside substation contribution	0.00	(0.06)
Poundmaker contributions (East Industrial '07-'08)	0.00	0.74
Clover Bar POD addition contribution	0.00	(0.02)
Victoria substation MV breaker purchase	0.00	(0.00)
East industrial contribution	0.00	(0.02)
Total	**0.00**	**0.64**

841. The Commission finds that the grouping of EPCOR's remaining projects appears to be reasonable. The remaining projects, as grouped, are all of a like nature and are consistent with EPCOR's past practice in general rate applications. For the purpose of this decision, the Commission will accept EPCOR's grouping of projects as modified above. Accordingly, the Commission's accounting test and the first tier of its materiality test will be applied to EPCOR's projects and programs proposed for capital tracker treatment as modified by the Commission. For the purpose of the project assessment, the Commission will assess the component projects of EPCOR's programs because, even though individual projects within a program address similar issues, each project requires individual justification.

8.2 Criterion 1 – The project must be outside of the normal course of the company's ongoing operations

842. In Section 3.1.1, the Commission found that, in order to determine if a project or program (depending on the accepted level of grouping) proposed for capital tracker treatment satisfies the requirements of Criterion 1, both a project assessment and an accounting test are necessary.

843. The purpose of the project assessment is to determine whether a project proposed for capital tracker treatment is (i) required to provide utility service at adequate levels and, if so, (ii) that the scope, level and timing of the project are prudent, and the forecast or actual costs of the project are reasonable.

844. The purpose of the accounting test is to determine whether a project or program is outside of the normal course of the company's ongoing operations. As discussed in Section 3.1.1, in order for a capital project or program to be considered outside of the normal course of the company's ongoing operations, the associated revenue provided under the I-X mechanism would not be sufficient to recover the entire revenue requirement associated with the prudent capital expenditures for the project or program.

845. Sections 8.2.1 to 8.2.2 below apply the project assessment and accounting test to EPCOR's programs proposed for capital tracker treatment, as modified by the Commission.

8.2.1 Project assessments

8.2.1.1 Adequacy of information provided in support of EPCOR's projects

846. EPCOR provided business cases to support each of its capital tracker projects that used a standardized format. Each of EPCOR's business cases included: an overview of the project, a

[861] Source of data: Exhibit 38.39, EPCOR application, Schedule 2, 2012 RR table, lines 99 to 105.

detailed description on the work to be undertaken including a separate description for each significant component of the project, an engineering justification for undertaking the project, an analysis of the implications for service quality if the project was not undertaken, supporting technical drawings in circumstances where drawings were applicable, documentation from external parties where directions from those parties are driving the need for the project, a project schedule where one was available, a description of the methodology used to establish the forecast of costs, a breakdown of the forecast of costs into categories, a description of how EPCOR intends to minimize the costs, a description of the alternatives considered, and a recommendation providing reasons for selecting the preferred alternative.

Commission findings

847. Given that EPCOR provided the above in its business cases in support of its capital projects proposed for capital tracker treatment, the Commission finds that EPCOR has provided sufficient information for the Commission to assess adequately whether its capital tracker projects satisfy the project assessment, as required under Criterion 1.

8.2.1.2 EPCOR's capital tracker projects

8.2.1.2.1 Southeast and West light rail transit (LRT) distribution system relocations

848. This project consists of the relocation of EPCOR's distribution infrastructure at the direction of the City of Edmonton pursuant to the terms of EPCOR's franchise agreement with the City of Edmonton to accommodate LRT system expansion. The LRT expansion involves the construction of LRT facilities that will extend from Southeast Edmonton to West Edmonton via downtown. EPCOR forecast 2013 capital additions to be $3.99 million, and the overall project is expected to continue until 2017, with total costs originally estimated in its application at $42.4 million.[862]

849. EPCOR updated the total forecast for the projects at the oral hearing, providing a revised combined forecast for the two projects of $72.3 million. The increase in the forecast was the result of a change in the location of the new downtown LRT terminal.[863] SMi agreed that service quality would be impaired if the proposed work is not completely undertaken.[864] SMi also determined that the cost estimate for the project is in accordance with normal practice[865] In the UCA's argument, it summarized SMi's position, stating that "SMi concluded the project could qualify as a capital tracker."[866]

Commission findings

850. EPCOR's Southeast and West LRT distribution system relocation projects were supported by a single business case. The Commission has reviewed the business case and the evidence of SMi with respect to these projects and accepts the evidence of EPCOR that the Southeast and West LRT distribution system relocation projects are required to satisfy EPCOR's franchise agreement with the City of Edmonton and accordingly the need for these projects has been justified.

[862] Exhibit 38.01, EPCOR application, paragraphs 124 to 126.
[863] Transcript, Volume 6, pages 1126 to 1127.
[864] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 10, A11.
[865] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 11, A13.
[866] Exhibit 268.02, UCA argument, page 61.

851. The evidence of SMi appeared to support the justification for the project. The Commission has reviewed the business case for the Southeast and West LRT distribution system relocations and finds that the information provided by EPCOR supports a finding that the scope, level, timing and forecast costs for the Southeast and West LRT distribution system relocation projects are reasonable as proposed for 2013. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

8.2.1.2.2 Queen Elizabeth II Highway and 41 Ave interchange distribution system relocations

852. EPCOR explained that this project consists of the relocation of a portion of EPCOR's distribution infrastructure to accommodate the construction of a partial cloverleaf interchange at the Queen Elizabeth II Highway and 41 Ave SW in Edmonton. The relocation was undertaken at the direction of the City of Edmonton pursuant to the terms of EPCOR's franchise agreement with the City of Edmonton, and pursuant to EPCOR's crossing agreement with Alberta Transportation. The City of Edmonton requested that the relocations be completed in 2013 to facilitate the planned timing of the construction of the interchange. The capital additions are forecast to be $2 million in 2013.[867]

853. SMi agreed that service quality would be impaired if the proposed work is not performed completely. SMi also determined that the cost estimate for the project is in accordance with normal practice.[868] However, SMi proposed that "with improved management of the peak load and with peak shaving implementation for the area, this improvement would probably eliminate the need for such work," and that a Distribution Management System (DMS) and Operating Management System (OMS), could provide this capability.[869] SMi also suggested that EPCOR should consider using aerial relocations as an alternative.

854. EPCOR responded to SMi's proposal regarding management of peak load by explaining that even with such load reductions, the need for the proposed work would not be eliminated given the capacity requirements in the area. Further, EPCOR argued that it does not have the equipment installed to carry out peak load management.[870] Finally, EPCOR explained that the franchise agreement with the City of Edmonton prohibits the use of aerial infrastructure in the locations identified in the business case.[871]

855. In argument the UCA stated:

> The explanation provided by EDTI regarding the constraints on alternatives satisfied SMi in regard to the costs of the project. SMi accepted that certain of the alternatives were not feasible in this particular project.[872] (footnotes omitted)

Commission findings

856. EPCOR's Queen Elizabeth II Highway and 41 Ave interchange distribution system relocation project was supported by a business case. The Commission has reviewed the business case and the evidence of SMi with respect to Queen Elizabeth II Highway and 41 Ave

[867] Exhibit 38.01, EPCOR application, paragraphs 133 and 134.
[868] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 7, A8.
[869] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 6, A6.
[870] Exhibit 199.01, EPCOR rebuttal evidence, pages 27 to 30, A26.
[871] Exhibit 199.01, EPCOR rebuttal evidence, pages 26 to 28, A25.
[872] Exhibit 268.02, UCA argument, page 60.

interchange distribution system relocation project and accepts the evidence of EPCOR that the project is required to satisfy EPCOR's franchise agreement with the City of Edmonton and accordingly the engineering need for these project has been sufficiently justified.

857. After EPCOR responded to SMi concerns by providing additional information on its lack of ability to perform load shaving, and by providing information on restrictions placed upon EPCOR by its franchise agreement, which limited EPCOR's options for aerial relocations in the replacement process, SMi appeared to support the justification for the project.

858. The Commission has reviewed the business case provided by EPCOR for this project and finds that the information provided by EPCOR supports a finding that the scope, level, timing and forecast costs for the Queen Elizabeth II Highway and 41 Ave interchange distribution system relocation project are reasonable as proposed for 2013. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

8.2.1.2.3 Interval meter data collection and processing

859. EPCOR explained that this project consists of replacing its current interval meter data collection and processing system with a new data collection engine that will comply with pending revisions to Measurement Canada's requirements. Measurement Canada has announced that it intends to implement new specifications for the installation and utilization of electricity meters and their use in establishing processed legal units of measurement. In 2013, capital additions for this project are forecast to be $1.85 million.[873]

860. SMi determined that the cost estimate for the project is in accordance with normal practice.[874] With respect to the need for the project, SMi stated:

> Based on the information provided in Appendix A4 the service quality will be impaired if the proposed work is not performed completely. EDTI revenue metering will not be compliant with the new standards to be imposed by Measurement Canada. This lack of compliance would make the utility subject to penalty or fines and severely compromise the legitimacy of utility billing functions.[875]

861. In response to questioning from Commission counsel, Mr. Elford explained why this particular IT project was different from other IT projects:

> Q. Okay. I know we talked about IT projects a little bit before, but again why is this IT project different from other IT projects you performed in the past?
> A. MR. ELFORD: Because it's a wholesale replacement of the system we have in place. It's a brand-new installation required by a third party that's going to have -- that will meet our materiality threshold, and, therefore, it's unique in that nature. It's not like a base business IT activity where there's simply ongoing upgrades and we're adequately funded by I minus X to do so. This is a new system.[876]

[873] Exhibit 38.01, EPCOR application, paragraphs 141 and 142.
[874] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 14, A24.
[875] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 14, A22.
[876] Transcript, Volume 6, page 1135.

Commission findings

862. EPCOR filed a business case in support of its interval meter data and collection project. The Commission has reviewed the business case and the evidence of SMi with respect to this project and finds that the information provided by EPCOR supports a finding that the project is required to satisfy the pending requirements from Measurement Canada, thereby satisfying the engineering justification for the project.

863. The evidence of SMi appeared to support the justification for the project. The Commission has reviewed the business case provided by EPCOR for this project and finds that the information provided by EPCOR supports a finding that the scope, level, timing and forecast costs for the interval meter data and collection project are reasonable as proposed for 2013. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

8.2.1.2.4 Life cycle replacement of paper insulated lead covered (PILC) cable systems

864. EPCOR explained that this new program consists of the planned replacement of EPCOR's medium voltage PILC underground distribution cables and PILC cable accessories, including terminations, splices and potheads, which have reached the end of their useful lives. EPCOR described these cable systems as "aging cables that are performing poorly and are prone to failure." EPCOR considers that the current condition of its underground PILC cable system requires that a proactive replacement strategy be implemented or EPCOR will experience a significant decline in overall system reliability. In 2013, capital additions are forecast to be $1.03. EPCOR expects that this will be a multi-year program, with forecast expenditures of $5.5 million over the 2013 to 2017 time period.[877]

865. SMi commented that "the assessment for the capital expenditure justification provided for this project is within the expected expenditure for PILC cable replacement."[878] SMi agreed that service quality would be impaired if the proposed work is not performed, and proposed that the cost estimate for the program is in accordance with normal practices. However, SMi commented that additional information, including the assessment of an alternative involving aerial distribution lines, to allow for a more detailed analysis of the capital costs would have allowed SMi to provide a better assessment of the costs.[879]

866. EPCOR responded to SMi's comments by stating that "EDTI selected the 'like for like' underground cable replacement alternative on the basis that it will minimize the level of capital expenditures required to achieve the purpose of this capital tracker project."[880]

Commission findings

867. The Commission has reviewed the business case and the evidence of SMi with respect to EPCOR's life cycle replacement of PILC cable systems program and finds that the information provided by EPCOR supports a finding that the program is required to maintain service reliability and safety at adequate levels. The evidence of SMi appeared generally to support the engineering justification for the program. The Commission accepts EPCOR's explanation with respect to the consideration of alternatives that it provided in response to SMi's concerns. The

[877] Exhibit 38.01, EPCOR application, paragraphs 149 to 153.
[878] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 16, A27.
[879] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 16, A28 and A30.
[880] Exhibit 199.01, EPCOR rebuttal evidence, page 39, A39.

Commission accepts that the cable is performing below acceptable standards and, therefore, needs to be replaced.

868. The Commission has reviewed the business case provided by EPCOR for the life cycle replacement of PILC cable systems project and finds that the information provided by EPCOR supports a finding that the scope, level, timing and forecast costs for the life cycle replacement of PILC cable systems project are reasonable as proposed for 2013. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

8.2.1.2.5 Life cycle replacement and extension of underground distribution cable

869. EPCOR explained that this program consisted of the life cycle replacement or refurbishment of approximately 40 km of underground cable per year on EPCOR's distribution system to maintain reliability. This is an ongoing life cycle replacement program, which started in 2005, consisting of refurbishing and replacing aged underground cables to maintain reliability. EPCOR explained cable failures are a leading cause of outages on EPCOR's distribution system and have accounted for an average of 20 per cent of EPCOR's customer hours of interruption from 2007 to 2011. EPCOR concluded that if it were to pursue a purely reactive approach to cable failures, its distribution system would experience a significant reduction in service quality over time. EPCOR and its external engineering consultant estimated that without this program, the frequency of outages due to cable failures would likely double within 10 years. In 2013 capital additions for the life cycle replacement and extension of underground distribution cable program are forecast to be $10.20 million.[881]

870. SMi agreed that service quality will be impaired if the project is not undertaken, that all reasonable alternatives were considered, and that EPCOR selected the most cost effective solution. SMi also stated that the cost estimate for the program is in accordance with normal practice.[882]

Commission findings

871. The Commission has reviewed the business case and the evidence of SMi with respect to EPCOR's life cycle replacement and extension of underground distribution cable program for 2013 and finds that the information provided by EPCOR supports a finding that the project is required to maintain service reliability and safety at adequate levels.

872. The evidence of SMi appears to support the justification of this program. EPCOR provided a table showing capital additions for this replacement program since 2004.[883] The program has been accelerating in size since its inception, and the 2013 forecast additions represent an increase over the $8.50 million spent in 2011 and the $7.15 million approved for 2012. EPCOR explained the increasing trend, saying "EDTI, as approved by the Commission, has been required to increase its spending on this program over the last few years as an increasing amount of previously installed underground cables reaches the end of its useful life and must be replaced."[884] The Commission finds that the 2013 forecast is consistent with the general trend for this program, and therefore finds that the scope of the 2013 additions appears to be reasonable.

[881] Exhibit 38.01, EPCOR application, paragraphs 192 to 197.
[882] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 20, A42 to A45.
[883] Exhibit 38.01, EPCOR application, Table 2.1.1-1
[884] Exhibit 38.01, EPCOR application, paragraph 35.

873. The Commission has reviewed the business case for this program provided by EPCOR and finds that the information provided by EPCOR supports a finding that the scope, level, timing and forecast costs for the Life Cycle Replacement and Extension of Underground Distribution Cable program are reasonable as proposed for 2013. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

8.2.1.2.6 New 15-kV and 25-kV circuit additions

874. EPCOR explained that this project consists of constructing new distribution circuits. EPCOR stated that the purpose of this project is to maintain the reliability of EPCOR's system and to ensure sufficient capacity to provide for customer growth in EPCOR's service area. EPCOR explained that new circuits are only installed when it is no longer possible or practical to transfer load among existing circuits within a local area to maintain circuit loads within their design limits. In 2013, capital additions are forecast to be $4.61 million. EPCOR also identified another proposed circuit addition to be undertaken in 2014. The two circuits to be installed in 2013 and 2014 will have a total forecast cost of $7.10 million.[885]

875. SMi agreed that service quality will be impaired if the proposed work is not performed.[886] However, SMi raised some concerns with respect to the solution proposed by EPCOR when it commented:

> In our experience, the cost estimate relevant to the activities identified in Appendix A9 needs to be reviewed. More consideration should be made for overhead line design of the feeder addition. With regards to another solution by means of peak shaving, a completely new approach is available on the electricity market and should be considered in such a proposal. In recent years, distribution companies in North America are increasing their load capability by implementing a smarter grid facility which allows flexibility and reduces cost infrastructure.[887]

876. In response to SMi's concerns EPCOR stated:

> Even if EDTI were to be in a position to implement peak shaving, load management, VAR [volt-amp reactive] compensation, and energy accumulation, these activities would reduce the loading on a circuit by less than 10% of the circuit's capacity. This will not free up enough capacity to meet the load growth in either the Waste Management Center area or the southwest 25 kV area of Edmonton.
>
> In any event, EDTI notes that it does not have the equipment installed on its distribution system or company procedures necessary to consider smart grid technology as an alternative to the proposed circuits. In order to consider smart grid technology as an alternative, EDTI would at a minimum need to install AMI meters, full Distribution Automation and OMS/DMS.[888]

Commission findings

877. The Commission has reviewed the business case for this project provided by EPCOR and the evidence of SMi with respect to the new 15-kV and 25-kV circuit additions project and finds

[885] Exhibit 38.01, EPCOR application, paragraphs 203 to 208.
[886] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 21, A48.
[887] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 21, A50.
[888] Exhibit 199.01, EPCOR rebuttal evidence, page 45, A48.

that the information provided by EPCOR supports a finding that the project is required to maintain service reliability and safety at adequate levels.

878. The evidence of SMi generally appeared to support the engineering justification for the project. The Commission finds that EPCOR satisfactorily responded to the concerns raised by SMi regarding peak shaving.

879. The Commission has reviewed the business case for this project provided by EPCOR and finds that the information provided by EPCOR supports a finding that the scope, level, timing and forecast cost for the new 15-kV and 25-kV circuit additions project are reasonable as proposed for 2013. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

8.2.1.2.7 New underground cable and aerial line reconfigurations and extensions to meet customer growth

880. EPCOR explained that this program consists of expansions and modifications to its distribution system to meet load growth and maintain reliability in EPCOR's service area. Included in the forecast for this program is a combination of specific known projects, as well as general types of recurring projects. In some cases, EPCOR was able to identify specific reconfigurations and extensions that are required on its system at the time it prepared its forecast. However, there are types of projects included in this program that consistently occur every year. EPCOR was unable to identify their locations at the time it prepared its forecast. In 2013, capital additions for new underground cable and aerial line reconfigurations and extensions to meet customer growth are forecast to be $8.08 million.[889]

881. SMi agreed that service quality will be impaired if the proposed work is not performed, and that the cost estimate is "adequate."[890] However, SMi considered that the information provided on the program is incomplete because there is "no mention of peak shaving possibility, load management with proper equipment, VAR compensation, energy accumulation, etc…. With the new technology available on the market it is possible to do significant peak shaving load with regards to load type."[891]

882. EPCOR responded to SMi concerns with the same argument provided in response to SMI's concerns with respect to the new 15-kV and 25-kV circuit additions project. EPCOR stated:

> The implementation of peak shaving, load management, VAR compensation, and energy accumulation would reduce the loading on a circuit by less than 10% of the circuit's capacity. If EDTI were able to implement these actions on all applicable circuits there would not be enough capacity freed up to alleviate existing overload conditions and properly restore N-1 capability to the west end of Edmonton.
>
> In any event, EDTI notes that it does not have the equipment installed on its distribution system or company procedures necessary to consider smart grid technology as an alternative to the proposed circuits. In order to consider smart grid technology as an

[889] Exhibit 38.01, EPCOR application, paragraphs 214 to 217.
[890] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 23, A53 and A55.
[891] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 23, A54.

alternative, EDTI would at minimum need to install AMI meters, full Distribution Automation and OMS/DMS (all at substantial cost).[892]

Commission findings

883. The Commission has reviewed the business case provided by EPCOR for the new underground cable and aerial line reconfigurations and extensions to meet customer growth and the evidence of SMi and finds the information provided by EPCOR supports a finding that the projects are required to maintain service reliability and safety at adequate levels.

884. The evidence of SMi generally appears to support the engineering justification of the program. The Commission finds that EPCOR satisfactory responded to the concerns raised by SMi regarding peak shaving.

885. EPCOR had a combination of known and unspecified general projects in its forecast for this program. The Commission observes that the portion of the forecast that is unspecified is not significant. Accordingly, the Commission finds that the general forecast provided by EPCOR is sufficient for project assessment purposes. However, EPCOR will need to provide supporting documentation for all projects in this program as part of the 2013 true-up process to satisfy fully the project assessment requirements of Criterion 1.

886. The Commission has reviewed the business case provided by EPCOR and finds that the information provided by EPCOR supports a finding that the scope, level, timing and forecast costs for the new underground cable and aerial line reconfigurations and extensions to meet customer growth program are reasonable as proposed for 2013. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

8.2.1.2.8 Distribution pole and aerial line life cycle replacements

887. EPCOR explained that this ongoing program is based on EPCOR's aerial inspection program and condition-based assessments. In addition, the program includes the conversion of 5-kV distribution circuits to 15-kV distribution circuits when a significant number of distribution poles on a particular five-kV circuit were being replaced. When poles are identified as requiring replacement of 5-kV circuits, EPCOR follows the practice of upgrading these circuits to 15 kV in conjunction with the pole replacements to minimize overall costs. In 2013, capital additions for life cycle replacement of distribution poles, conductors and associated equipment are forecast to be $5.60 million.[893]

888. SMi agreed that service quality will be impaired if the proposed work is not performed, and that the cost estimate is adequate.[894] SMi had some concerns about additional alternatives that could have been considered, stating there was "no mention of different types of poles which could be used for replacement that could increase the life expectancy, or of other more efficient equipment such as smart switches."[895]

889. In response to SMi's concerns over alternatives to consider when doing pole replacements, EPCOR stated that "[w]hen deciding on the type of medium voltage equipment it

[892] Exhibit 199.01, EPCOR rebuttal evidence, page 48, A54.
[893] Exhibit 38.01, EPCOR application, paragraphs 223 to 228.
[894] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 24, A58 and A60.
[895] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 24, A59.

will use to replace a piece of equipment that has reached the end of its useful life, EDTI does not simply replace equipment on a like-for-like basis, but looks at available options and takes into account new technology and such factors as circuit loading." In addition, "EDTI primarily uses three types of replacement poles: pressure treated natural wood, engineered laminated wood and fiberglass poles. When deciding on which type of replacement pole to use, EDTI uses the least cost option taking into consideration the life expectancy of the pole and the environmental conditions at the pole location, as well as type of equipment that the pole will have to support over its life."[896]

Commission findings

890. The Commission has reviewed the business case and the evidence of SMi with respect to EPCOR's distribution pole and aerial line life cycle replacements program and finds that the information provided by EPCOR supports a finding that the program is required to maintain service reliability and safety at adequate levels.

891. The evidence of SMi generally appeared to support the justification for the program. The Commission finds that EPCOR satisfactorily responded to the concerns raised by SMi regarding the need to consider replacing assets with different technology.

892. The Commission considers that the technical information provided in EPCOR's pole and line life cycle replacement business case was useful in understanding the processes that EPCOR uses to identify and replace deteriorated poles and aerial lines.[897] In addition, the Commission considers that Ms. Hull adequately explained the annual fluctuations that occur in the forecast for pole and aerial line replacements.[898] This information assisted the Commission in determining that the 2013 forecast costs for the program are reasonable.

893. The Commission has reviewed the business case provided by EPCOR and finds that the information provided by EPCOR supports a finding that the scope, level, timing and forecast costs for the distribution pole and aerial line life cycle replacements program are reasonable as proposed for 2013. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

8.2.1.2.9 Aerial and underground distribution transformers - new services and life cycle replacement

894. EPCOR explained that this project consists of bringing new aerial and underground distribution transformers into service. EPCOR stated that new transformers are needed due to the failure of transformers in the field or to meet customer growth. EPCOR indicated that it attempts to ensure that the most economic transformer is installed at each site by using the lowest cost transformer that will safely and reliability meet the electrical requirements of the site. In 2013, capital additions for aerial and underground distribution transformers are forecast to be $4.76 million.[899]

[896] Exhibit 199.01, EPCOR rebuttal evidence, pages 23 to 24.
[897] Exhibit 38.17, Appendix A-11, Pole and line life cycle replacement business case.
[898] Transcript, Volume 6, page 1012 to 1016.
[899] Exhibit 38.01, EPCOR application, paragraphs 234 to 237.

Commission findings

895. The Commission has reviewed the business case for EPCOR's aerial and underground distribution transformers - new services and life cycle replacement project and finds that the information provided by EPCOR supports a finding that the project is required to maintain service reliability and safety at adequate levels. The Commission notes that SMi did not oppose the project from an engineering perspective.

896. EPCOR provided data showing capital additions for aerial and underground distribution transformers in the business case for the project, both in terms of units and dollars.[900] The Commission has reviewed this information. The Commission finds that the forecast scope for the project proposed by EPCOR for 2013 is reasonable when compared to the scope of work completed in prior years. The Commission also finds the forecast costs to be reasonable when compared to the actual costs in prior years.

897. Given the above, the Commission finds that the information provided by EPCOR supports a finding that the scope, level, timing and forecast cost of the aerial and underground distribution transformers - new services and life cycle replacement project are reasonable as proposed for 2013. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

8.2.1.2.10 Franchise agreement driven relocations and conversions

898. EPCOR explained that this program consists of the relocation and/or conversion of EPCOR's aerial and underground facilities at the request of the City of Edmonton pursuant to the provisions of the franchise agreement between the parties. The franchise agreement requires that EPCOR relocate its distribution facilities and perform any other work on its distribution facilities as may be required by the city to accommodate any relocation, installation, modification, repair, construction, upgrading or removal of city facilities. The need for these relocations and conversions arises from road-widening or other types of construction, development and improvements undertaken by the city and its contractors, or third-party developers under city-approved development plans. In 2013, capital additions for franchise agreement driven relocations and conversions is forecast to be $5.04 million.[901]

899. SMi proposed that because the expenditures are driven by the City of Edmonton and its franchise agreement with EPCOR, the costs cannot reasonably be avoided by EPCOR and service quality will be impaired if the proposed work is not performed.[902] In addition, SMi considered that "the cost estimate relevant to the activities identified in Appendix A13 is adequate." However, SMi determined that "there are insufficient details for the estimate provided to be able to give a more accurate appreciation of the work to be performed."[903]

900. EPCOR responded to SMi's concerns regarding insufficient details on the estimate provided, stating that the forecast 2013 expenditures were based on the City of Edmonton's implementation plan of the transportation master plan. EPCOR also commented that the forecast

[900] Exhibit 38.24, Appendix A-12, Aerial and underground distribution transformers – new services and life cycle replacement, Table 3.2-4 and Table 3.2-5.
[901] Exhibit 38.01, EPCOR application, paragraphs 243 to 244.
[902] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 12, A16 and A17.
[903] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 12, A19.

is subject to true-up, and that EPCOR will provide sufficient information to permit a prudence review of its completed capital tracker projects.[904]

Commission findings

901. The Commission has reviewed the business case provided by EPCOR and the evidence of SMi with respect to EPCOR's franchise agreement driven relocations and conversions program and finds that the information provided by EPCOR supports a finding that the program is required to maintain service reliability and safety at adequate levels.

902. The evidence of SMi generally appeared to support the engineering justification for the program. The Commission accepts EPCOR's response to SMi's concerns regarding insufficient details on the estimate. The Commission has reviewed the additional information provided by EPCOR with respect to how the 2013 forecast was developed and the Commission is satisfied that the forecast is reasonable.

903. The Commission finds that because the relocations are required pursuant to EPCOR's franchise agreement with City of Edmonton, the need for the program has been justified. Given the above, the Commission finds that the information provided by EPCOR supports a finding that the scope, level, timing and forecast cost of the franchise agreement driven relocations project are reasonable as proposed for 2013. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

8.2.1.2.11 Capitalized underground system damage

904. EPCOR explained that this program consists of the replacement of failed underground distribution infrastructure such as switching cubicles, underground cables, transformers and manholes resulting from third party damage, weather events, vehicle collisions, vandalism, wildlife contacts, and the like. In 2013, capital additions for capitalized underground system damage are forecast to be $2.97 million.[905]

905. SMi agreed that service quality will be impaired if the proposed work is not performed, and that EPCOR considered all reasonable alternatives and selected the most effective solution. SMi stated that EPCOR's cost estimate for this project is adequate.[906]

Commission findings

906. The Commission has reviewed the business case provided by EPCOR and the evidence of SMi with respect to EPCOR's capitalized underground system damage program and finds that the information provided by EPCOR supports a finding that that the program is required to maintain service reliability and safety at adequate levels. The evidence of SMi appears to support the justification for the program.

907. EPCOR provided data showing capital additions for underground system damage in the business case for the program in terms of dollars.[907] The Commission has reviewed this information. The Commission finds the total annual cost forecast to be reasonable when

[904] Exhibit 199.01, EPCOR rebuttal evidence, page 36, A35.
[905] Exhibit 38.01, EPCOR application, paragraphs 250 to 252.
[906] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 25, A63 to A65.
[907] Exhibit 38.26, Appendix A-14, Capitalized underground system damage, Table 3.2-1.

compared to the total actual annual cost for capitalized underground system damage in prior years.

908. Given the above, the Commission finds that the information provided by EPCOR supports a finding that the scope, level, timing and forecast costs for the capitalized underground system damage project are reasonable as proposed for 2013. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

8.2.1.2.12 Vehicles - growth and life cycle replacements

909. EPCOR explained that this project consists of the addition of new vehicles and related equipment to EPCOR's distribution function fleet. EPCOR stated that this project was required to support its operations and capital projects because of the increasing volume of work related to EPCOR's distribution system, and the life cycle replacement of existing distribution function vehicles, trailers and fleet equipment that have reached the end of their useful lives. The project consisted of four new vehicles to support the increasing volume of work, the replacement of 14 existing vehicles because they had reached the end of their service lives, and the replacement of two cable reel trailers that were damaged in 2012. In 2013, capital additions for vehicles are forecast to be $2.91 million.[908]

910. SMi agreed that service quality will be impaired if the proposed work is not performed, and stated that the cost estimate was adequate.[909] However, SMi proposed that EPCOR had not considered all reasonable alternatives. SMi stated:

> As per the description in section 4 of this document and the Appendix A15 information provided for this project, we consider that the proposed replacement program does not consider other alternatives or alternative factors. With respect to the new technology available in a smart grid environment, the use of powerful tools such as GIS and OMS with AMI infrastructure would reduce the number of crews required to perform maintenance and reduce fleet vehicles accordingly. This factor should be taken into consideration by EDTI.[910]

911. EPCOR considered that SMi's remarks were of little relevance, and addressed them by stating that work in new distribution service areas often requires longer travel distances. EPCOR added that additional vehicles are required to support the increasing volume of work, much of which is required due to aging infrastructure. Finally, EPCOR stated that it does not have the equipment to implement smart grid features.[911]

Commission findings

912. The Commission has reviewed the business case and the evidence of SMi with respect to EPCOR's vehicles - growth and life cycle replacements project and finds that the information provided by EPCOR supports a finding that the project is required to maintain service reliability and safety at adequate levels.

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[908] Exhibit 38.01, EPCOR application, paragraphs 258 to 261.
[909] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 26, A68 and A70.
[910] Exhibit 109.04, UCA evidence of SMi Faciliop on EPCOR, page 26, A69.
[911] Exhibit 199.01, EPCOR rebuttal evidence, pages 41 and 42, A44.

913. The evidence of SMi generally appeared to support the engineering justification for the project. The Commission accepts EPCOR's response to SMi proposal regarding the use of smart grid technology.

914. The Commission has considered the justifications provided by EPCOR to support the four new vehicles in 2013,[912] and also the information provided by EPCOR showing the characteristics of the vehicles it plans to replace in 2013.[913] Based on this information the Commission finds the scope of the project for 2013 to be reasonable.

915. Given the above, the Commission finds that the information provided by EPCOR supports a finding that the scope, level, timing and cost forecast of the vehicles - growth and life cycle replacements project are reasonable as proposed for 2013. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

8.2.1.2.13 New underground and aerial service connections for commercial, industrial, multifamily and miscellaneous customers

916. EPCOR explained that this ongoing program consists of the engineering and installation of distribution facilities necessary to connect new industrial, commercial, multi-family, unmetered secondary and rural customers to EPCOR's distribution system. This program also includes increasing the capacity of, and upgrading, existing service connections when requested by these types of customers. In 2013, capital additions for new underground and aerial service connections for commercial, industrial, multifamily and miscellaneous customers are forecast to be $8.73 million.[914]

Commission findings

917. The Commission has reviewed the business case with respect to EPCOR's new underground and aerial service connections for commercial, industrial, multifamily and miscellaneous customers program and finds that the information provided by EPCOR supports a finding that the program is required to maintain service reliability and safety at adequate levels. The Commission also notes that SMi did not oppose the program from an engineering perspective.

918. EPCOR provided data showing capital additions for aerial and underground distribution transformers in the business case for the program, both in terms of units and dollars.[915] The Commission has reviewed this information. The Commission finds that the forecast scope for the program proposed by EPCOR for 2013 is reasonable when compared to the scope of work completed in prior years. The Commission also finds the forecast costs to be reasonable when compared to the actual costs in prior years.

919. Given the above, the Commission finds that the information provided by EPCOR supports a finding that the scope, level, timing and forecast cost for the new underground and aerial service connections for commercial, industrial, multifamily and miscellaneous customers

[912] Exhibit 38.27, Appendix A-15, Vehicles and fleet equipment purchases business case, paragraphs 7 to 10.
[913] Exhibit 38.27, Appendix A-15, Vehicles and fleet equipment purchases business case, Table 2.1-3.
[914] Exhibit 38.01, EPCOR application, paragraphs 267 to 271.
[915] Exhibit 38.28, Appendix A-16, New underground and aerial service connections business case, Table 3.2-1 and Table 3.2-2.

program are reasonable as proposed for 2013. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

8.2.1.2.14 Underground residential distribution (URD) servicing - rebates, acceptance inspections and terminations

920. EPCOR explained that the purpose of this program is to provide the distribution infrastructure necessary to connect new customer sites to EPCOR's system. The program includes development rebates paid to land developers who construct underground primary and secondary distribution infrastructure for new residential lot development within EPCOR's service area. The program also includes the cost of acceptance inspections of newly installed URD infrastructure. In addition, the program includes terminating and tying-in new URD infrastructure into EPCOR's existing distribution system. In 2013, capital additions for URD servicing - rebates, acceptance inspections and terminations are forecast to be $12.13 million.[916]

Commission findings

921. The Commission has reviewed the business case with respect to EPCOR's URD servicing - rebates, acceptance inspections and terminations program and finds that the information provided by EPCOR supports a finding that the program is required to maintain service reliability and safety at adequate levels. The also notes that SMi did not oppose the program from an engineering perspective.

922. EPCOR provided data showing capital additions for URD servicing - rebates, acceptance inspections and terminations in the business case for the program, both in terms of units and dollars.[917] The Commission has reviewed this information. The Commission finds that the forecast scope for the program proposed by EPCOR for 2013 is reasonable when compared to the scope of work completed in prior years. The Commission notes that there has been a significant escalation of costs for the program. EPCOR explained this escalation is due to the approval of increases to the URD rebate amount from $1,155 per lot to $2,487 per lot in 2012 in Decision 2012-272.[918] Because the increase was approved by the Commission in a previous decision, the Commission finds the forecast costs to be reasonable when compared to the actual costs in prior years.

923. Given the above, the Commission finds that the information provided by EPCOR supports a finding that the scope, level, timing and forecast costs of the URD servicing - rebates acceptance inspections and terminations project are reasonable as proposed for 2013. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

8.2.1.2.15 Capital tools and instrument purchases

924. EPCOR explained that this ongoing project includes the purchase of tools and instruments to replace those that have reached the end of their useful lives, and the purchase of new tools and instruments as necessary to meet new requirements based on new testing standards specified for distribution equipment. The majority of tools and instruments purchased are for the

[916] Exhibit 38.01, EPCOR application, paragraphs 278 to 282.
[917] Exhibit 38.29, Appendix A-17, URD servicing – rebates, acceptance inspections and terminations business case, Table 3.2-2.
[918] Exhibit 38.29, Appendix A-17, URD servicing – rebates, acceptance inspections and terminations business case, paragraph 3.

life cycle replacement of tools and instruments that have reached the end of their useful lives. EPCOR explained that a small portion of tools purchased are for performance enhancement purposes, and to allow EPCOR field staff to complete their work in a safer or more efficient manner. In 2013, capital additions for tools and instrument purchases are forecast to be $1.36 million.[919]

Commission findings

925. The Commission has reviewed the business case with respect to EPCOR's capital tools and instrument purchases project and finds that the information provided by EPCOR supports a finding that the project is required to maintain service reliability and safety at adequate levels. The Commission also notes that SMi did not oppose the project from an engineering perspective.

926. EPCOR explained the need for a number of specialized instruments and tools in the business case it provided to the support the project.[920] The Commission has reviewed EPCOR's explanations and finds the justification for the project to be reasonable.

927. Given the above, the Commission finds that the information provided by EPCOR supports a finding that the scope, level, timing and forecast costs for the capital tools and instrument purchases project are reasonable as proposed for 2013. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

8.2.1.2.16 EPCOR's Category 3 capital tracker projects

928. EPCOR explained that Category 3 capital trackers are required because the application of the mid-year convention in the calculation of EPCOR's 2012 going-in year return and depreciation is one of the factors that causes the shortfall in capital funding under the PBR formula. EPCOR stated that, in effect, the application of the mid-year convention results in EPCOR only recovering the capital costs on half of the rate base additions approved for EDTI in 2012 in each year of the five-year PBR term. Therefore, EPCOR included capital trackers that are composed of projects added to rate base in 2012 for which there is a shortfall in return and depreciation under the PBR formula due to the mid-year convention, and which result in a K factor adjustment that surpasses the $0.1 million materiality threshold proposed by EPCOR.[921]

929. The issue of the impact of the mid-year convention on the 2012 capital additions is discussed in further detail in Section 4.1.

930. For the most part, the projects included in EPCOR's Category 3 capital trackers are a continuation of projects that were approved in Decision 2012-272, EPCOR's 2012 Phase I and II Distribution Tariff.[922] Business cases from this previous application were provided by EPCOR in this proceeding.

8.2.1.2.16.1 Poundmaker contributions (East Industrial '07-'08)

931. This capital tracker was related to EPCOR's Poundmaker customer contribution project where EPCOR's distribution function was required to make a customer contribution to its transmission function for a new point of delivery at its Poundmaker substation in west

[919] Exhibit 38.01, EPCOR application, paragraphs 288 to 291.
[920] Exhibit 38.30, Appendix A-18, Capital tool and instrument purchases business case, paragraphs 5 to 25.
[921] Exhibit 38.01, EPCOR application, paragraphs 302 to 303.
[922] Decision 2012-272, EPCOR 2012 Phase I and II Distribution Tariff, October 5, 2012, Section 4.1.2.

Edmonton. The Poundmaker customer contribution project was approved by the Commission in Decision 2012-272. In circumstances where transmission facilities must be modified, upgraded or expanded to maintain reliable distribution service, EPCOR's distribution function may be required to make a customer contribution with respect to the required modifications, upgrades and expansions. Customer contributions are calculated in accordance with the customer contribution provisions of the AESO's terms and conditions in effect on the date at which the Commission issues the necessary *Hydro and Electric Energy Act* permit and licence for the project. In 2013, capital additions were forecast to be $0 because the capital additions requiring capital tracker treatment were made in 2012.[923]

8.2.1.2.16.2 Poundmaker feeders

932. The Poundmaker feeders project involved the construction of four feeders from EPCOR's new point of delivery at its Poundmaker substation located in West Edmonton. The Poundmaker feeder project was approved by the Commission in Decision 2012-272. The purpose of the Poundmaker feeders project was to ensure sufficient capacity to meet customer growth in West Edmonton, and maintain the safety and reliability of EPCOR's system. In 2013, capital additions were forecast to be $0 because the capital additions requiring capital tracker treatment were made in 2012.[924]

8.2.1.2.16.3 Work management system upgrade

933. The purpose of this project is to upgrade EPCOR's work management system, referred to as "IVARA," to a vendor supported version, as well as a version that is Windows 7 compatible, and to address certain limitations in the system. The IVARA system enhancements life cycle replacement project is expected to be completed in 2014; however, the majority of the capital additions related to it were added to EPCOR's rate base in 2012. The 2012 capital additions associated with this project were approved in Decision 2012-272. In 2013, capital additions were forecast to be $0.38 million, and an additional business case was provided by EPCOR to support the 2013 capital additions.[925]

8.2.1.2.16.4 Commission findings on Category 3 capital trackers

934. The Commission has reviewed the business cases with respect to EPCOR's Category 3 capital tracker projects and finds that the information provided by EPCOR supports a finding that the projects are required to maintain service reliability and safety at adequate levels. The forecast costs for the Poundmaker projects were approved by the Commission in Decision 2012-272, where the Commission found these cost estimates to be reasonable. The 2012 forecast costs for the work management system upgrade project were also approved in Decision 2012-272. The Commission has reviewed EPCOR's business case supporting the 2013 costs of $0.38 million for phase two of the work management system upgrade and finds the forecast costs to be reasonable.

935. Accordingly, the Commission finds that the information provided by EPCOR supports a finding that the scope, level, timing and forecast cost of each of the Category 3 projects, are reasonable. Accordingly, the Commission finds that each of EPCOR's Category 3 projects proposed for capital tracker treatment satisfies the project assessment requirement of Criterion 1.

[923] Exhibit 38.01, EPCOR application, paragraphs 303 to 311.
[924] Exhibit 38.01, EPCOR application, paragraphs 318 to 320.
[925] Exhibit 38.01, EPCOR application, paragraphs 327 to 332.

8.2.2 Accounting test

936. In Section 3.3.1 of this decision, the Commission found that in order to satisfy the accounting test and thus demonstrate that a program or project (depending on the approved level of grouping) is outside the normal course of the company's ongoing operations, the associated revenue provided under the I-X mechanism would not be sufficient to recover the entire revenue requirement associated with the prudent capital expenditures for the program or project.

937. In sections 3.1.2 and 3.1.3 of this decision, the Commission determined that the project net cost approach adequately demonstrates that a particular project proposed for capital tracker treatment does not result in double counting and is a reasonable method to identify the extent to which a project is underfunded by the I-X mechanism. Accordingly, the Commission determined that the accounting test should be based on a project net cost approach.

Commission findings

938. EPCOR used a project net cost approach to demonstrate that its proposed capital tracker projects and programs merit capital tracker treatment. The Commission has reviewed EPCOR's schedules[926] that make up its project net cost analysis and is satisfied that EPCOR's forecast revenue provided under the I-X mechanism is not sufficient to provide the entire revenue requirement associated with the forecast capital expenditures for each of the company's capital tracker projects and programs in 2013, as demonstrated in these schedules, thereby satisfying the accounting test under Criterion 1.

939. Specifically, with respect to EPCOR's Category 3 projects, in Section 4.1, the Commission determined that any costs incurred for a capital project in 2012 will be considered for capital tracker treatment, if it can be demonstrated, using the mid-year convention in combination with the accounting test described in sections 3.1.2 and 3.1.3 of this decision, that the associated 2013 revenue requirement is not adequately funded under the I-X mechanism, and the project satisfies the balance of the Commission's three criteria. Using the project net cost approach, EPCOR applied its accounting test to these projects demonstrating that the I-X mechanism will not fully fund the revenue requirement associated with its proposed Category 3 capital tracker projects.

940. Accordingly, the Commission finds that each of EPCOR's projects and programs proposed for capital tracker treatment satisfies the accounting test requirement of Criterion 1. The reasonableness of the 2013 forecast capital expenditures for EPCOR's projects and programs proposed for capital tracker treatment in 2013 was determined in the above project assessments. For these reasons, the Commission finds that, for the purposes of this decision, EPCOR's proposed capital tracker projects and programs are outside the normal course of the company's ongoing operations, thereby satisfying Criterion 1.

8.3 Criterion 2 – Ordinarily the project must be for replacement or required by an external party

941. As discussed in Section 3.2.1 of this decision, Criterion 2 requires that in most cases a capital tracker project should be for asset replacement or required by an external party. In that section, the Commission also explained that, in principle, a growth-related project will satisfy the requirements of Criterion 2 when it can be demonstrated that customer contributions together

[926] Exhibit 38.39, EPCOR application, Schedule 2.

with the incremental revenues allocated to the project on some reasonable basis, when added to the revenue provided under the I-X mechanism, are insufficient to offset the revenue requirement associated with the project in a PBR year.

942. Throughout EPCOR's application, as it assessed each capital tracker project or program, it identified the reasons it considered the project or program satisfied the second capital tracker criterion. The Commission has summarized the reasons provided by EPCOR in the table below:

Table 23. EPCOR's reasons that project satisfy the second capital tracker criterion

Project	Reason	Exhibit 38.01, EPCOR application paragraph
SE and West LRT expansion distribution system franchise relocations	Third party	130
QE II highway and 41 Avenue SW interchange distribution system relocations	Third party	137
Interval meter data collection and processing system replacement	Third party	146
Life cycle replacement of PILC cable	Replacement	157
Walterdale bridge replacement distribution system franchise relocations	Third party	167
OMS/DMS life cycle replacement	Replacement	176
North service centre replacement	Replacement	186
Life cycle replacement and extension of underground distribution cable	Growth and replacement	200
New 15 kV and 25-kV circuit additions	Growth	211
New underground cable and aerial line reconfigurations and extensions to meet customer growth	Growth	220
Pole and line life cycle replacement	Replacement and refurbishment	231
Aerial and underground distribution transformers – new services and life cycle replacement	Replacement and growth	240
Franchise agreement driven relocations and conversions	Third party	247
Underground system damage	Replacement	255
Vehicles and fleet equipment purchases	Replacement and volume of work	264
New underground and aerial service connections for commercial, industrial, multi-family and miscellaneous customers	Growth	275
URD servicing – rebates, acceptance inspections and terminations	Growth	285
Capital tool and instrument purchases	Replacement and growth	294
Poundmaker customer contribution	Growth	316
Poundmaker feeders	Growth	325
Work management system upgrades	Replacement	337

Commission findings

943. The Commission has reviewed the evidence and the reason provided by EPCOR for each of its projects and programs proposed for capital tracker treatment. The Commission agrees that EPCOR's proposed capital tracker projects and programs are either for asset replacement or refurbishment, are driven by external parties or are growth related. Accordingly, the Commission finds that these projects satisfy the requirements of Criterion 2.

8.4 Criterion 3 – The project must have a material effect on the company's finances

944. EPCOR applied a materiality threshold of $0.1 to that portion of a revenue requirement associated with a project or program proposed for capital tracker treatment, that was not funded under the I-X mechanism. EPCOR stated that this "materiality threshold of $0.10 million creates

efficiency incentives while ensuring that service quality is maintained, provides EDTI with a reasonable opportunity to recover its prudently incurred costs including a fair rate of return, and reduces regulatory burden."[927]

945. There were some exceptions to EPCOR's application of a materiality threshold. EPCOR applied for some zero K factor capital trackers that were forecast to have capital expenditures in 2013, but no capital additions, and therefore did not require K factor recovery in 2013. Zero K factors are discussed in more detail in Section 8.6.

946. EPCOR also applied for recovery of Category 1 capital trackers that did not have revenue requirements over $0.1 million in 2013. These projects were the Queen Elizabeth II Highway and 41Ave interchange distribution system relocation project, which had a K factor of $0.09 million in 2013, and the life cycle replacement of PILC cable systems project, which had a K factor of $0.05 million in 2013. Mr. Elford explained that in "the case of our Category 1 trackers, there are K factor adjustments that are less than $100,000 being requested because those trackers are ~~a~~[A,] Category 1 capital trackers; and B, were only in the first year of those programs, and over the life of the PBR, the K factor adjustment would be well in excess of that amount."[928]

947. The evidence of Mr. Bell discussed the K factor adjustments of $90,000 and $50,000 for the above-noted projects. Mr. Bell stated "[c]learly these projects are not material, and as such, do not meet the third criteria for a capital tracker."[929]

Commission findings

948. In Section 3.3 of this decision, the Commission determined that a two-tier materiality threshold should be adopted for capital trackers. The first tier of the materiality threshold, the four basis point threshold, will be applied at the level of individual projects or programs proposed for capital tracker treatment (grouped in the manner approved by the Commission). The second tier of the materiality threshold, the 40 basis point threshold, will be applied to the aggregate revenue requirement proposed to be recovered by way of all capital trackers.

949. Based on the Commission's estimates in Table 8 of this decision, the first tier of the materiality threshold for EPCOR in 2013 is $102,000. Given the Commission's findings with respect to EPCOR's grouping of projects the first tier of the materiality threshold will apply to the portion of forecast revenue requirement associated with each project or program, as grouped by the Commission, that is not funded under the I-X mechanism.

950. The Commission notes that the 2013 forecast K factor for the Queen Elizabeth II Highway and 41 Ave interchange distribution system relocation project was $0.09 million, and this amount does not exceed the Commission's threshold for the first tier of the materiality test. However, once this project is grouped with other relocation projects, as directed in Section 8.1, the aggregate amount for all relocations exceeds the first tier of the materiality threshold.

951. The Commission notes that the 2013 forecast revenue requirement portion of the life cycle replacement of PILC cable systems project that is not funded under the I-X mechanism, is $0.05 million. This amount does not exceed the four basis point threshold for the first tier of the

[927] Exhibit 86.01, AUC-EDTI-2(a).
[928] Transcript, Volume 6, page 1000.
[929] Exhibit 111.03, UCA evidence of Mr. Bell, page 17.

materiality test. Accordingly, the Commission finds that the lifecycle replacement of PILC cable systems does not qualify for capital tracker treatment.

952. The portion of the revenue requirement not funded under the I-X mechanism for each of EPCOR's proposed capital tracker projects or programs, as filed by EPCOR, is set out in Table 6 from Section 2.3. The Commission observes that each of these amounts, with the exception of the projects noted in the preceding paragraphs, exceeds the first tier of the materiality threshold.

953. With respect to the second tier of the materiality threshold, based on the Commission's estimates in Table 8 of this decision, the second tier materiality threshold for EPCOR in 2013 is $1.017 million. The total amount of revenue requirement not funded under the I-X mechanism for EPCOR's projects and programs that satisfy the first two criteria for capital trackers, in aggregate, is set out in Table 8 from Section 2.3. The Commission observes that this amount exceeds the second tier of the materiality threshold.

954. Accordingly, the Commission finds that EPCOR's capital tracker projects and programs set out in Table 8 from Section 2.3, with the exception of the lifecycle replacement of PILC cable systems, satisfy the requirements of Criterion 3, for 2013.

8.5 Negative K factors

955. EPCOR was the only utility to include a negative K factor in its capital tracker application. The purpose of a negative K factor, as explained in EPCOR's application, is:

> [F]or certain Trackers, EDTI will recover a higher amount of return and depreciation under the PBR Formula than it will incur. As such, these Trackers result in K factor adjustments that are negative (i.e., they reduce EDTI's PBR rates rather than increase them). The negative K factor adjustment occurs in relation to these Trackers because they are previously completed one-off projects that were outside of the ordinary course of EDTI's business operations. The negative K factor adjustment arises from the fact that the net book value associated with the original rate base addition for the project in question is declining on EDTI's books every year due to the effects of depreciation (i.e., the return of capital). Again, EDTI has included the Trackers which surpass the $0.1 million K factor adjustment threshold.[930]

956. The two projects proposed by EPCOR for negative K factor treatment are the North LRT distribution system relocations project and the regulated default supply project with proposed K factor adjustments of negative $0.10 million and negative $0.21 million, respectively.

957. During the hearing, EPCOR's witness, Mr. Elford, stated that the negative K factors were to account for the two projects on which EPCOR was "over-collecting."[931]

958. AltaGas stated that it "developed a K Factor to recover the return, depreciation and taxes associated with qualifying capital replacement programs" and under this approach "the K Factor cannot be negative, since the purpose of the K factor is to recover the investment shortfall."[932]

[930] Exhibit 38.01, EPCOR application, paragraph 296.
[931] Transcript, Volume 6, page 1072, lines 16 to 17.
[932] Exhibit 267.01, AUI argument, paragraph 152.

959. The ATCO companies argued their approach would not result in a negative K factor because "the significant growth in rate base that ATCO expects will continue to occur over the term of the PBR Plan, which will result in the funding requirements associated with the annual growth in rate base exceeding that which can be addressed through the indexed revenue."[933]

960. Fortis commented that:

> … all available depreciation-generated dollars are required for and are attributed to funding the Sustainment project investments, so none remain to be attributable to non-Sustainment. Thereby, in FortisAlberta's approach, there are neither unattributed depreciation generated dollars, nor is there double recovery.[934]

961. The UCA did not support the inclusion of negative K factors. While recognizing there may be a benefit to consumers, the UCA noted that a negative K factor represents the type of savings that PBR was designed to encourage.[935] The UCA stated:

> …if a utility has increased productivity and efficiency such that they are "overcollecting" under the I minus X mechanism, this is precisely the result which a PBR regime is intended to encourage. Utilizing a negative K Factor to account for these "overcollections", would effectively eliminate the incentives to Utilities to improve efficiencies, such being a driving force behind the implementation of a PBR regime.[936]

962. In argument, the CCA commented that negative K factors could be of use when capital growth is unusually slow. However, the CCA did not find that such a measure would provide much protection for customers because of the existence of information disparity, which would enable the company to counter the suspicion of slow capital growth with an exaggerated forecast.[937]

963. Calgary made no comment on the issue of negative K factors.

Commission findings

964. In implementing a PBR regime for the distribution utilities in Alberta, the Commission acknowledged, in Decision 2012-237 at paragraph 17, that:

> Establishing prices in this way during the term of a PBR plan creates stronger incentives for the companies to improve their efficiency through cost reductions and other actions because they are able to retain the increased profits generated by those cost reductions longer than they would under cost of service regulation, especially with rates under cost of service regulation that are re-set every two years. At the same time, under a PBR regulatory framework, customers automatically share in the expected efficiency gains because they are built into rates through the X factor regardless of the actual performance of the companies. In addition, the X factor in a PBR plan is often increased by a stretch factor so as to capture efficiency gains that should be immediately realizable as the regulatory system changes from cost of service to PBR.[938]

[933] Exhibit 265.01, ATCO Gas argument, paragraph 171.
[934] Exhibit 262.01, Fortis argument, paragraph 141.
[935] Exhibit 268.02, UCA argument, paragraph 372.
[936] Exhibit 268.02, UCA argument, paragraph 374.
[937] Exhibit 270.02, CCA argument, paragraph 56.
[938] Decision 2012-237, paragraph 17.

965. Therefore, any reduction in capital spending on projects funded under the I-X mechanism are to be retained by the company to preserve the incentive to seek productivity gains under PBR. If a company were required to return any savings resulting from productivity gains, it would have an adverse effect on the incentive properties of PBR. This position was supported by the UCA.[939]

966. As described in the excerpt from Decision 2012-237 above, the benefits to customers arise from the expected productivity gains inherent in the X factor. Any capital savings realized during the PBR term for projects funded under the I-X mechanism will be passed on to customers at the time of the rebasing, when base rates are re-established. The impact of a negative K factor would be to "claw back" any capital savings realized by the company for projects funded under the I-X mechanism prior to rebasing, thereby reducing the regulatory lag. Because it is the regulatory lag that gives rise to the incentives of the PBR plan, as described in Section 1.1, the Commission finds that a negative K factor is contrary to the incentives that PBR is intended to promote.

967. Accordingly, the Commission finds that negative K factor amounts are not to be included in the calculation of the K factor. The inclusion of negative K factors in EPCOR's application is denied.

8.6 Zero K factors

968. EPCOR included three projects in its Category 1 capital trackers that have no associated 2013 K factor adjustment. The three zero K factor projects are the Walterdale Bridge replacement distribution system franchise relocations, the outage management system/distribution management system (OMS/DMS) life cycle replacement and the North service center replacement.

969. Although these projects began in 2013, they do not yet have any capital additions associated with them because the expenditures will be recorded as construction work in progress.[940] EPCOR stated that, in the future, these projects will require significant levels of capital additions.

970. The Walterdale Bridge replacement distribution system franchise relocation project has an estimated total capital expenditure of $7 million dollars with an expected completion date at the end of 2015.[941] The annual capital expenditures forecast by EDTI for 2014, 2015 and 2016 are $0.27, $6.63 and $0.10 million, respectively.[942] The project is required pursuant to the City of Edmonton franchise agreement. EPCOR stated this project was "beyond the scope of the nature and cost" of typical franchise relocation projects.[943] Both a business case and an engineering study for the Walterdale Bridge project accompanied the application.

971. The OMS/DMS life cycle replacement project is forecast to require $10.24 million in capital expenditures until the end of 2015. The forecast expenditures for 2014 and 2015 are

[939] Exhibit 268.02, UCA argument, paragraph 374.
[940] Volume 6, Transcript, page 1111, lines 3-12.
[941] Exhibit 38.01, EDTI application, paragraph 163.
[942] Exhibit 38.01, EDTI application, Table 3.1.2.1-1.
[943] Exhibit 38.01, EDTI application, paragraph 166.

$7.42 and $2.82 million, respectively.[944] EPCOR's application included both a business case and an engineering assessment in support of the OMS/DMS project.

972. The forecast capital expenditure associated with the replacement of EPCOR's North service center is $123.78 million, which will be added to rate base in 2015.[945] A business case and engineering study in support of this project were submitted in EPCOR's application.

973. EPCOR included these projects in its capital tracker application to seek "approval of these projects as Trackers in this Application to ensure that EDTI has Commission approval prior to commencing these projects and incurring significant expenditures on them."[946]

974. EDTI stated that the concept of zero K factors is consistent with paragraphs 614 and 615 of Decision 2012-237.[947] These paragraphs of the decision stated:

> 614. The Commission recognizes that superior efficiency incentives would be created if the companies were required to make capital investment decisions and undertake the investment prior to applying for recovery of their costs by way of a capital tracker. However, the Commission recognizes that parties and the Commission have very little experience with capital trackers and, therefore, will not require that this approach be used by the companies during the first PBR term.
>
> 615. Accordingly, unless a company chooses to undertake investment prior to applying for recovery of its costs by way of a capital tracker, the company will be expected to provide a forecast with its capital tracker application. The company will only be permitted to collect the forecast amounts for the capital tracker on an interim basis, and a true-up to the actual amount of the capital tracker will occur after the capital expenditures have been made. As a result, these companies will still have some efficiency incentives due to the risk of regulatory disallowances in the true-up process if expenditures are not prudently incurred.[948]

975. While none of the other companies put forth zero K factors for capital tracker treatment in this proceeding, they all indicated in their respective arguments that they support such a mechanism.[949] The utilities all argued that they would benefit from increased certainty regarding capital projects before the costs are incurred.

976. The UCA argued that zero K factors cannot, in principle, meet the Commission's third criterion as they are not material.[950] Furthermore, the UCA did not support the premature consideration of projects for which there is no K factor.[951]

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944 Exhibit 38.01, EDTI application, Table 3.1.2.2-1.
945 Exhibit 38.01, EDTI application, Table 3.1.2.3-1.
946 Exhibit 38.01, EDTI application, paragraph 5.
947 Exhibit 38.01, EDTI application, paragraph 5.
948 Decision 2012-237, paragraphs 614 to 615.
949 Exhibit 262.01, Fortis argument, paragraph 142; Exhibit 267.01, AltaGas argument, paragraph 155; Exhibit 265.01, ATCO companies argument, paragraph 172.
950 Exhibit 268.02, UCA argument, paragraph 376.
951 Exhibit 268.02, UCA argument, paragraph 378.

977. During the hearing, the UCA's witness, Mr. Bell suggested instead that:

> …In 2015 when the project is complete and it has an impact on rates, it should include the whole project. Just because it took three years to build and commission or two and a half years, or whatever the project was, I don't think you should hinder the utility from getting recovery of costs just because they have spread it out. But it's still contingent upon them demonstrating materiality and demonstrating that it meets the other two criteria.
> Q. So it may not qualify in 2013 or '14 if you looked at it for those years, but you're suggesting that in 2015 they can take into account all the capital dollars spent in '13, '14, and '15 and apply for recovery of the entire amount?
> A. MR. BELL: I think that would be the only way to be fair to the utility, yes.[952]

978. In reply argument, the UCA argued that any certainty "does not mimic the efficiency incentives of competitive markets" and carrying out the project with no prior approval establishes whether the project was necessary to prevent deterioration in service quality and safety.[953]

Commission findings

979. In paragraphs 614 and 615 of Decision 2012-237, the Commission determined that it would not require companies to undertake an investment prior to applying for a capital tracker, although the Commission recognized that requiring companies to do so would produce superior incentives. The Commission found that, in the first PBR term, capital trackers would be applied for on a forecast basis and subsequently trued-up to actuals following a prudency review.

980. The Commission, however, also recognizes that approving a capital tracker in advance of it being material enough to qualify for capital tracker treatment would negatively impact the incentives of the PBR regime. A forecast for expenditures three years in advance is not likely to be accurate. Further, if advance approval of the forecast is given, there is an incentive for the company to spend to meet the approved forecast. Providing certainty in advance that a capital project will likely qualify for capital tracker treatment reduces the incentives of PBR. The companies are not likely to undertake projects that are unnecessary, and potentially not required, if pre-approval for collection of a capital tracker is not granted, and there is a risk of disallowance. In any event, the Commission cannot determine whether the proposed zero K factor projects are outside the normal course of the company's ongoing operations since an accounting test and materiality test cannot be undertaken. This is because the value of the I-X index is unavailable for the years when the capital additions are expected to occur.

981. Accordingly, EPCOR's proposed zero K factors are denied. However, the Commission is making no ruling on EPCOR's business cases associated with zero K factors. EPCOR is not precluded from applying for capital tracker treatment for these projects in the year when the capital additions are expected to occur.

8.7 EPCOR's 2013 approved capital trackers and K factor amount

982. In sections 8.2 to 8.4, the Commission determined those capital projects and programs proposed by EPCOR for capital tracker treatment that satisfy the Commission's three criteria.

[952] Transcript, Volume 11, page 2123, line 16 to page 2124, line 4.
[953] Exhibit 274.02, UCA reply argument, paragraphs 345-346.

Accordingly, the Commission approves capital tracker treatment for those projects and programs in 2013.

983. The Commission had reviewed EPCOR's K factor calculations and finds that, generally, they align with the K factor calculation methodology approved by the Commission in Section 4.4 of this decision, with the following exceptions.

984. First, in Section 8.1, the Commission provided EPCOR with guidance on the grouping of projects proposed for capital tracker treatment, including the regrouping of some of its relocation projects, IT projects and distribution contribution to transmission asset projects.

985. Second, in Section 8.4, the Commission determined that EPCOR's life cycle replacement of PILC cable systems project should not be afforded capital tracker treatment, on the basis of materiality.

986. Third, in Section 8.5, the Commission determined that negative K factors are not required to be included in the K factor calculation.

987. Fourth, as discussed in Section 4.3.2 of this decision, to calculate the amount of revenue provided under the I-X mechanism in 2013 for each of its capital tracker projects or programs, EPCOR increased the going-in revenue for each project or program by I-X plus a 0.54 per cent "G factor," which represented the impact on revenues arising from the change in billing determinants.[954] The Commission determined that multiplying the I-X index by the percentage change in billing determinants is a more accurate approach, since it reflects the combined impact of the percentage change in prices (measured by I-X) and the percentage change in quantities (measured by relevant billing determinants). Accordingly, the Commission directs EPCOR to use this method in its K factor calculation at the time of its 2013 capital tracker refiling and true-up application.

988. The Commission considers that the following table reflects most of the modifications required to EPCOR's 2013 forecast K factor, with the exception of the adjustment to how the growth factor is applied.

[954] Exhibit 38.39, EPCOR application, Schedule 2, tab 3; and, Exhibit 38.43, EPCOR application, Schedule 6, tab 3.1.

Table 24. EPCOR's approved forecast capital trackers*[955]

Project description	2013 forecast net capital additions ($ million)	2013 K factor ($ million)
Relocation-related capital trackers, comprised of:		
SE and West LRT distribution system relocation	3.99	0.18
Queen Elizabeth II Highway and 41Ave interchange distribution system relocations	2.00	0.09
NLRT distribution system relocations	0.00	(0.10)
Franchise agreement driven relocations and conversions	5.04	0.20
IT-related capital trackers, comprised of:		
Work management system upgrade	0.38	0.17
Interval meter data collection and processing	1.85	0.18
Regulated default supply	0.00	(0.21)
Distribution contributions to transmission assets (including Poundmaker contributions (East Industrial '07-'08), and other historical contributions)	0.00	**0.64**
Life cycle replacement and extension of underground distribution cable	10.20	0.76
New 15-kV and 25-kV circuit additions	4.61	0.23
New underground cable and aerial line reconfigurations and extensions to meet customer growth	8.08	0.44
Distribution pole and aerial line life cycle replacements	5.60	0.32
Aerial and underground distribution transformers - new services and life cycle replacement	4.76	0.22
Capitalized underground system damage	2.97	0.15
Vehicles - growth and life cycle replacements	2.90	0.23
New underground and aerial service connections for commercial, industrial, multi-family and misc. Customers	8.73	0.37
Underground residential distribution (URD) servicing – rebates, acceptance inspections & terminations	12.13	0.60
Capital tools and instrument purchases	1.36	0.11
Poundmaker feeders	0.00	0.29
~~**Life cycle replacement of PILC cable systems**~~	~~**0.00**~~	~~**0.00****~~
~~**Walterdale Bridge replacement franchise relocations**~~	~~**0.00**~~	~~**0.00**~~
~~**OMS/DMS life cycle replacement**~~	~~**0.00**~~	~~**0.00**~~
~~**North service centre replacement**~~	~~**0.00**~~	~~**0.00**~~
Total	**74.62**	**4.87**

* Modifications to EPCOR's original proposal are identified by bold typeface.
** K factor was $0.05 in EPCOR's application, but was removed due to the amount not meeting the first tier of the materiality threshold.

989. Despite the modifications to EPCOR's 2013 K factor directed above, and given that the amounts are minimal, the Commission will not require a refiling. The Commission directs EPCOR to make the necessary modifications to its K factor calculation at the time of its 2013 capital trackers true-up application and its subsequent capital tracker filings. The Commission approves EPCOR's 2013 K factor of $4.87 million to be recovered from customers on an interim basis. As determined at paragraphs 615 and 974 of Decision 2012-237, EPCOR will be permitted to collect the approved forecast amounts for the approved capital tracker projects and programs on an interim basis only, subject to a prudence review and true-up to actual costs in respect of these projects and programs, to be undertaken following completion of the 2013 projects.

990. EPCOR is directed to file an application for an adjustment to Rate Rider DJ to collect, on an interim basis, the 2013 K factor amount in excess of the 60 per cent K factor placeholder amount that was included in EPCOR's 2013 PBR rates. This amount is to be recovered by

[955] Source of data: Exhibit 38.01, EPCOR application, Table 1.0-1; Exhibit 88.02, UCA-EDTI-1Attachment 1.

December 31, 2014. EPCOR's 2014 K factor placeholder proposed in its 2014 annual PBR rate adjustment filing is not to be modified to account for the 2013 K factor amount.

9 Fortis

991. An overview of Fortis' proposal was provided in Section 2.4. In summary, Fortis' capital tracker application included three programs proposed for capital tracker treatment totaling approximately $266 million of capital expenditures in 2013.

992. In sections 3.1.2 and 3.1.3 of this decision, the Commission determined that Fortis' overall approach to capital trackers, including its "investment shortfall analysis," should not be used for the purposes of demonstrating the absence of double counting and quantifying the investments outside the normal course of the company's ongoing operations, as required to satisfy Criterion 1. In Section 4.4, the Commission also did not accept the K factor calculation methodology under the aggregate investment shortfall approach utilized by Fortis.

993. Accordingly, the Commission does not approve any of the projects proposed by Fortis for capital tracker treatment, at this time. Nonetheless, the Commission has considered in the sections that follow, for purposes of providing additional guidance on the programs and projects applied for, whether these programs and projects are properly grouped and comply with the requirements of the project assessment component of Criterion 1 and the requirement of Criterion 2. With respect to the accounting test component of Criterion 1 and the Criterion 3 materiality test, the Commission has provided Fortis with certain directions as set out in Section 9.2.2 and 9.4 below.

9.1 Grouping of projects proposed for capital tracker treatment

994. As discussed in Section 2.4 of this decision, the following table summarizes the projects proposed by Fortis for capital tracker treatment. Fortis identified three programs: customer growth, externally driven and other capital trackers. A variety of smaller groupings comprise the externally driven program. In addition, Fortis has provided the dollar values for each program, the dollar values for the smaller groupings, any associated customer contributions and the resulting K factor amount. Each capital tracker program was supported by at least one business case.

Table 25. Fortis' proposed capital trackers[956]

	2013 forecast	K factor
	($million)	
Customer growth		
Customer growth	175.4	
Customer contributions	(33.4)	
Subtotal	**142.0**	**9.3**
Externally driven		
AESO contributions	54.6	
Substation associated upgrades	38.3	
IPP interconnections	-	
Distribution line moves	25.3	
Customer contributions	(9.1)	
Subtotal	**109.1**	**12.2**
Other capital trackers		
DCC/SCADA	**15.8**	**2.8**
Total	**266.9**	**24.3**

Minor variances due to rounding.

995. Fortis stated that the customer growth program is ongoing and "involves thousands of separate customer projects."[957]

996. The externally driven program is disaggregated into four smaller groups including AESO contributions, substation associated upgrades, IPP interconnections and distribution line moves.

997. The other capital tracker category includes only one project, the DCC/SCADA project. Forties pointed out that the DCC portion of the DCC/ SCADA project "was approved in Decision 2012-108 as part of the Negotiated Settlement Agreement for FortisAlberta's 2012 Distribution Tariff Application."[958]

998. The UCA stated only that Fortis did not discuss "the actual procedure of grouping specific capital projects into programs, as per the discussion in the Decision regarding the third criterion."[959] No other party commented on Fortis' proposed grouping of its projects.

Commission findings

999. In Section 3.4 of this decision, the Commission determined that, once a proposed grouping of projects into a program has been approved, the accounting test and the first tier of the materiality test will be applied at the program level. The project assessment will be done on either a program or on a project basis, depending on the particular circumstances. The second tier of the materiality test will be applied at the level of all capital tracker projects, in aggregate. The Commission also determined that the reasonableness of the grouping of capital projects is best assessed on a case-by-case basis for each individual company.

[956] Exhibit 35.07, Fortis application, Table 2 and Table 3.
[957] Exhibit 75.02, AUC-FAI-2(a).
[958] Exhibit 262.01, Fortis argument, paragraph 9.
[959] Exhibit 274.02, UCA reply, paragraph 265.

1000. The Commission finds that, unlike the DCC/SCADA project and the customer growth program, Fortis did not separate its externally driven program into categories that allow a meaningful application of either the accounting test, using the project net cost approach, or the first tier of the materiality test.

1001. In the Commission's view, the externally driven category should be disaggregated into the following individual programs for capital tracker treatment: AESO contributions, substation associated upgrades, IPP inter connection and distribution line moves, because the projects in these individual programs would be of a similar nature and are consistent with historical project classifications in cost-of-service applications. Additionally, this grouping would allow for a more meaningful application of the accounting test and materiality test.

1002. The Commission finds that the customer growth program provides sufficiently disaggregated information on the projected costs for each of the following customer growth categories: residential, farm, irrigation, general service/oil and gas, to allow for a reasonable assessment of the forecast capital expenditures for 2013 in the customer growth program. Additionally, the evidence provided by Fortis suggests that the nature of the capital additions, in each customer growth category, are sufficiently similar to be grouped together. Accordingly, the Commission will accept the customer growth program, for the purposes of this decision.

1003. With respect to the DCC/SCADA project, the Commission finds that this is a unique and substantial project and, accordingly, the Commission will accept the grouping of this project for the purpose of this decision.

1004. Accordingly, the grouping of the customer growth program and the DCC/SCADA program is approved. The grouping of the externally driven program on the aggregated basis proposed by Fortis is denied.

1005. For the purpose of the project assessment, the Commission will assess each of the following programs proposed for capital tracker treatment: customer growth, AESO contributions, substation associated upgrades, IPP inter connection, distribution line moves and DCC/SCADA, commensurate with the level and detail of the information provided in support of these program.

9.2 Criterion 1 – The project must be outside of the normal course of the company's ongoing operations

1006. In Section 3.1.1, the Commission found that, in order to determine if a project or program (depending on the accepted level of grouping) proposed for capital tracker treatment satisfies the requirements of Criterion 1, both a project assessment and an accounting test are necessary.

1007. The purpose of the project assessment is to determine whether a project proposed for capital tracker treatment is (i) required to provide utility service at adequate levels and, if so, (ii) that the scope, level and timing of the project are prudent, and the forecast or actual costs of the project are reasonable. The Commission's project assessment is set out in Section 9.2.1.

1008. The purpose of the accounting test is to determine whether a project or program is outside of the normal course of the company's ongoing operations. As discussed in Section 3.1.1, in order for a capital project or program to be considered outside of the normal course of the company's ongoing operations, the associated revenue provided under the I-X mechanism would

not be sufficient to recover the entire revenue requirement associated with the prudent capital expenditures for the project or program.

9.2.1 Project assessments

9.2.1.1 Adequacy of information provided in support of Fortis' projects

1009. In Section 3.1.4, the Commission has considered concerns about the format and preparation of business cases and engineering studies, including Fortis' view on projects driven by third parties or operating conditions. Fortis stated:

> The need for Customer Growth projects is not determined by an engineering study, but rather by the request for service by a customer. Well-accepted and established engineering standards are applied to fulfil requests, and Commission-approved investment policies are applied. Engineering "studies" broader than those which have existed to date are neither required nor would be appropriate going forward.[960]

1010. Fortis argued that it had provided engineering studies when it "made sense to do so" but also proposed that, while "engineering studies can undoubtedly play a useful role in tracker assessments, thought and judgment must be applied as to when and why. As well, what an 'engineering study' needs to be, in any given context, should be considered."[961]

Commission findings

1011. Fortis provided business cases for the following projects: customer growth, AESO contributions, distribution line moves, substation associated upgrades and DCC/SCADA. The business cases generally provided information identifying how Fortis generated its forecast costs. For those projects where Fortis considered it "made sense to do so," the company provided engineering studies.

1012. In Section 3.1.4 of this decision, the Commission found that it is not necessary for the companies to engage external engineers to provide an assessment in support of their capital tracker projects. The companies may rely on internal engineers and resources.

1013. The Commission accepts the format of the business cases and engineering support provided by Fortis. The Commission will undertake its project assessment on the basis of the supporting information provided by Fortis.

9.2.1.2 Customer Growth

1014. As part of its business case for the customer growth program, Fortis identified numerous projects that comprised the $175.4 million of forecast expenditures for 2013. In 2012, Fortis spent an estimated $174.8 million on its customer growth program.[962] The forecast expenditure, after deducting the incremental revenue, is $141.2 and $142.0 million for 2012 and 2013, respectively.[963]

[960] Exhibit 262.01 Fortis argument, paragraph 63.
[961] Exhibit 262.01, Fortis argument, paragraph 62.
[962] Exhibit 35.07, paragraph 81.
[963] Exhibit 35.07, Fortis application, paragraph 81.

1015. Fortis also indicated that "there is a portion of incremental revenue associated with that growth"[964] and reduced the K factor by the estimated impact of the incremental revenue. Fortis proposed to "reduce the forecast Customer Growth capital expenditures reflected in the related tracker by 29%."[965]

1016. Fortis stated that customer growth projects "are driven by FortisAlberta's obligation to serve new customers who request electricity service."[966]

1017. Fortis submitted that it did not conduct engineering studies for customer growth projects. As Mr. Delaney testified:

> Customer growth really doesn't lend itself, I think, to an engineering study. When I think of engineering study, I think of -- you know, there are alternatives. There are different ways to do things. We think customer growth -- we have an obligation to serve. So there is no alternative not to do that. Now, when it comes down to the actual construction of the facilities to accommodate customer growth, the way engineering is involved there is that we have a set of engineered standards that are stamped. We call them a structure list.[967]

1018. Fortis utilized the following three step process to forecast customer capital growth:

1. Forecast the number of New Service Locations;
2. Forecast the Unit Cost per New Service Location; and
3. Calculate the Customer Growth forecast (New Service Locations x Unit Cost per New Service Location.)[968]

1019. Fortis forecast new service locations using a combination of "Alberta housing starts, GDP growth and historical trends for each rate class, with the exception of large General Service customers" which are based on discussions with customers.[969] The unit cost per new service location is calculated using the "rolling 12-month average. Unit Cost per New Service Location for each customer category is calculated and escalated by inflation for 2013."[970]

1020. SMi stated that "failure to connect new customers will cause Fortis Alberta to abrogate their responsibility as a regulated utility and impair the quality of service" and that "there are few alternatives to consider with respect to the work required." SMi found the "unit costing for customer connection appears in the range of utility costs we are familiar with."[971]

Commission findings

1021. The Commission agrees with Fortis and SMi that Fortis must perform the work outlined in the business case to satisfy the company's obligation to serve and its obligation to maintain

[964] Exhibit 35.07, Fortis application, paragraph 90.
[965] Exhibit 35.07, Fortis application, paragraphs 91 and 92, Table 6.
[966] Exhibit 35.07, Fortis application, paragraph 83.
[967] Transcript, Volume 8, pages 1558-1559, lines 16-25 and line 1.
[968] Exhibit 35.07, Fortis application, paragraph 85 summarizing Exhibit 35.02, Customer Growth Capital Tracker Report in Appendix 2.
[969] Exhibit 35.02, Fortis application, Appendix 2, Customer Growth Capital Tracker Report, paragraph 9.
[970] Exhibit 35.02, Fortis application, Appendix 2, Customer Growth Capital Tracker Report, paragraph 12.
[971] Exhibit 109.05, SMi evidence, page 17.

service quality at adequate levels. Accordingly, the Commission accepts the need for the customer growth program in 2013.

1022. The Commission has reviewed the business case provided by Fortis for this program. The Commission considers that the information provided in Fortis' three step forecasting method was useful in assessing the assumptions made by Fortis in generating its forecast. As part of this forecasting method, Fortis identified how it derived the forecast units and cost per unit for each customer growth category, allowing the Commission to assess whether the forecasting assumptions were reasonable. In addition, the Commission notes that SMi found the unit costs provided by Fortis to be "in the range of utility costs we are familiar with."[972]

1023. Given this information for each customer growth category, the Commission finds that the proposed scope, level, timing and forecast cost of the customer growth program, as proposed for 2013, are reasonable. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

9.2.1.3 AESO contributions

1024. Fortis stated that it "is required to provide contributions to the AESO for the construction of new transmission facilities to serve customers in FortisAlberta's service territory"[973] and that these contributions "are required by a third party and are material."[974]

1025. Fortis forecast AESO contributions to be $83.1 million in 2012 and $54.6 million in 2013.[975] Fortis stated that the "AESO Contributions for 2013 are a placeholder based on the investment levels currently approved in the AESO tariff until a Decision on Proceeding ID No. 1162 is issued."[976] Fortis provided copies of the need-for-development projects filed by the AESO with the Commission and "involving contributions to the AESO in 2013."[977]

1026. The UCA quoted SMi's comments that "the engineering rationale presented for the AESO projects is simplistic and based on explaining a preferred course of action rather than documenting a decision process."[978]

1027. Fortis quoted[979] Decision 2010-309 which stated "[t]he Commission rejects the CCA's submission that FAI should be required to provide business cases on the AESO contributions for each project. The Commission agrees with FAI's submission that the AESO already has an approved investment policy and the CCA's proposal would be duplicative."

1028. Fortis also stated that "[f]ive of the seven transmission projects associated with AESO Contributions addressed by SMi, and included as 2013 Capital Trackers, have already been tested and approved by the AUC." Fortis argued that, given "that these projects are already approved, to re-test them in this Proceeding is unnecessary and duplicative."[980]

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[972] Exhibit 109.05, SMi evidence, page 17.
[973] Exhibit 35.07, Fortis application, paragraph 100.
[974] Exhibit 35.07, Fortis application, paragraph 100.
[975] Exhibit 35.07, Fortis application, paragraph 99.
[976] Exhibit 35.07, Fortis application, paragraph 104.
[977] Exhibit 35.03, Appendix 3, AESO contributions, PDF page 4.
[978] Exhibit 268.02, UCA argument, paragraph 332 citing Exhibit 109.05, evidence of SMi, page 9.
[979] Exhibit 262.02, Fortis argument, paragraph 83.
[980] Exhibit 262.01, Fortis argument, paragraph 81 and 82.

Commission findings

1029. The Commission considers that Fortis' cross-referencing of the forecast for AESO contributions against the need-for-development projects filed by the AESO was useful. This allows the Commission to consider whether the forecast scope and timing of AESO contributions is reasonable.

1030. The Commission has reviewed the business case and the evidence of SMi with respect to Fortis' AESO contribution program and considers that the information provided by Fortis supports a finding that this program is required to maintain service reliability, quality and safety at adequate levels.

1031. The Commission finds that the proposed scope, level, timing and forecast cost for the project, as proposed for 2013, are reasonable. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

9.2.1.4 Substation associated upgrades

1032. Fortis forecast that the expenditures for the substation associated upgrades program would cost $38.3 million in 2013. Within the program, Fortis identified 15 projects, ranging in size from $47,000 to $7.6 million. Fortis provided a detailed description and supporting documentation for each project that exceeded $300,000.

1033. Fortis stated that when "new transmission facilities are constructed by the TFO to serve FortisAlberta's customers … those facilities must be connected to the distribution system to make the transmission facilities used and useful."[981] Fortis stated that these costs "are required by a third party and are material" and "they are outside the normal course for which rates have been set."[982] Fortis stated that the "2013 Forecast is based on specific projects required to connect the existing distribution system to new substation facilities."[983] Fortis provided a summary of these projects in its appendix describing substation associated upgrades.[984]

1034. SMi reviewed the forecast projects and concluded that the "decision basis for many of the projects proposed is reasonably comprehensive and complete" and that "the cost estimates relevant to the activities identified in appendix 5 [substation associated upgrades] are within a range of normal expectations in our experience" and last that "service quality will be impaired if the proposed work is not performed completely."[985]

Commission findings

1035. The Commission accepts that Fortis must respond to transmission system developments that require changes to its distribution system facilities. The Commission has evaluated the alternatives considered in the business case for the substation associated upgrades program provided by Fortis and is satisfied that the engineering need for this program has been justified.

1036. Fortis provided sufficient information to justify the forecast costs for each project in this program that exceeded $300,000. Included in this information was an overview of the project, a

[981] Exhibit 35.07, Fortis application, paragraph 106.
[982] Exhibit 35.07, Fortis application, paragraph 106.
[983] Exhibit 35.05, Fortis application, Appendix 5, Substation associated upgrades, paragraph 4.
[984] Exhibit 35.05, Fortis application, Appendix 5, Substation associated upgrades.
[985] Exhibit 109.05, evidence of SMi, pages 13 and 14.

load forecast for the area affected by the substation, a detailed cost breakdown of each subcomponent of the project, a description of the alternatives considered, an implementation plan for the project and technical drawings for the project.

1037. The Commission notes that SMi reviewed the forecast projects comprising the substation associated upgrades program and concluded that the "decision basis for many of the projects proposed is reasonably comprehensive and complete" and that "the cost estimates relevant to the activities […] are within a range of normal expectations in our experience" and that "service quality will be impaired if the proposed work is not performed completely."[986]

1038. The Commission has reviewed the business case and the evidence of SMi with respect to Fortis' substation associated upgrades program and considers that the information provided by Fortis supports a finding that this program is required to maintain service reliability, quality and safety at adequate levels.

1039. The Commission finds that the proposed scope, level, timing and forecast cost for the project, as proposed for 2013, are reasonable. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1.

9.2.1.5 Distribution line moves

1040. Fortis stated that "Distribution Line Moves are required to fulfill requests from third parties for the relocation of distribution lines. While the costs are within FortisAlberta's purview as a distribution utility operating in the Province of Alberta, they are outside the normal course for which rates have been set"[987] and, therefore, require capital tracker treatment. Fortis indicated that these costs result from "(i) work initiated by Alberta Transportation and various municipal governments, (ii) the need to re-route distribution lines to accommodate new or re-routed transmission lines approved by the AUC, or (iii) requests from customers."[988] Fortis based its forecast of 2013 costs "on the three-year average of expenditures between 2010 and 2012, escalated to 2013 dollars."[989]

1041. Citing the evidence of SMi, the UCA noted that, while individual distribution line move project work was "not typically outside the normal course of operation," there were "some potential exclusions (i.e. twinning of Highway 63 to Fort McMurray)."[990] SMi indicated that"there is no data provided that would identify the extent or nature of this work [Highway 63] and the cost involved, beyond some general descriptions and typical photos."[991]

Commission findings

1042. Fortis based its forecast of 2013 costs principally "on the three-year average of expenditures between 2010 and 2012, escalated to 2013 dollars."[992] The Commission acknowledges that distribution line moves are required on an annual basis to satisfy third party requests and franchise agreement obligations. However, without sufficient supporting

[986] Exhibit 109.05, evidence of SMi, pages 13 and 14.
[987] Exhibit 35.07, Fortis application, paragraph 109.
[988] Exhibit 35.07, Fortis application, paragraph 110.
[989] Exhibit 35.07, Fortis application, paragraph 113.
[990] Exhibit 268.02, UCA argument, paragraph 341 citing evidence evidence of SMi, Exhibit 109.05, pages 15 and 16.
[991] Exhibit 109.05, evidence of SMi, page 16.
[992] Exhibit 35.07, Fortis application, paragraph 110.

documentation on the forecast timing, costs and scope of the program, the Commission cannot determine the reasonableness of the proposed program. Therefore, the Commission was unable to undertake a project assessment with respect to the distribution line moves program.

1043. Accordingly, the Commission finds that the distribution line moves program, as filed, does not satisfy the project assessment requirement of Criterion 1.

9.2.1.6 IPP interconnections

1044. Fortis described this program as being "for interconnection by IPP, and involves the construction of new facilities or upgrades to existing facilities, including system protection and voltage regulators, to accommodate the safe interconnection of IPP distribution generation to FortisAlberta's distribution system."[993]

1045. Fortis forecasts that the 2013 costs in this category will be covered by customer contributions; however, "…if IPP investment is required by the Company, FortisAlberta will include those amounts as Capital Trackers."[994]

1046. Neither the UCA nor the CCA addressed this category of capital trackers.

Commission findings

1047. The Commission considers that, since capital tracker treatment was not requested in 2013 for this program, a determination on the project assessment is not required in this decision.

9.2.1.7 Distribution control center (DCC)/supervisory control and data acquisition facilities (SCADA)

1048. Fortis stated that, in 2012, it began implementation of its DCC/SCADA project. The DCC portion of the project was approved in Decision 2012-108 as part of the negotiated settlement agreement (NSA) for Fortis' 2012 distribution tariff application.[995] Fortis indicated that the DCC/SCADA project includes an update to the 2012 approved expenditure forecast and costs associated with the SCADA portion of the project. Fortis stated "the DCC/SCADA project is a material, new investment that is outside the normal course of historical operations for FortisAlberta. It will replace antiquated, manual systems that rely on customer calls to identify and troubleshoot power outages with an automated Outage Management System (OMS)."[996]

1049. SMi reviewed the project and concluded that, while service quality would not "necessarily be impaired if the proposed work does not proceed … service quality would undoubtedly improve as a result of the systems proposed."[997] SMi stated that it was unable to comment on the cost of the building as "no details are provided for the size of addition or the number of staff it will accommodate."[998]

[993] Exhibit 35.07, Fortis application, paragraph 114.
[994] Exhibit 35.07, Fortis application, paragraph 115.
[995] Exhibit 35.07, Fortis application, paragraph 120.
[996] Exhibit 35.07, Fortis application, paragraph 122.
[997] Exhibit 109.05, evidence of SMi, page 11.
[998] Exhibit 109.05, evidence of SMi, page 11.

1050. The CCA, drawing on the testimony of Dr. Lowry, indicated that the DCC/SCADA system would be a good candidate project for capital tracker treatment should "the Commission wish to stretch its eligibility guidelines to accommodate some additional revenue growth."[999]

Commission findings

1051. Although the DCC portion of the DCC/SCADA project was approved in Decision 2012-108, the Commission notes that the forecast costs for the DCC component project were approved as part of a negotiated settlement agreement. Accordingly, the Commission finds that it cannot rely on the costs approved in Decision 2012-108 for the purposes of a project assessment.

1052. The Commission has reviewed the business case for DCC/SCADA project and considers that the information provided by Fortis supports a finding that this project is required to maintain service reliability, quality and safety at adequate levels. However, the Commission considers that there was insufficient supporting documentation for the forecast costs in the business case for the DCC/SCADA project.

1053. Without sufficient supporting documentation on how the forecast costs in the business case were calculated, the Commission cannot determine the reasonableness of the costs. Therefore, the Commission was unable to undertake a project assessment with respect to the DCC/SCADA project. Accordingly, the Commission finds that the DCC/SCADA project, as filed, does not satisfy the project assessment requirement of Criterion 1.

9.2.2 Accounting test

1054. In Section 3.1.1 of this decision, the Commission found that in order to satisfy the accounting test and thus demonstrate that a program or project (depending on the approved level of grouping) is outside the normal course of the company's ongoing operations, the associated revenue provided under the I-X mechanism would not be sufficient to recover the entire revenue requirement associated with the prudent capital expenditures for the program or project.

1055. In sections 3.1.2 and 3.1.3 of this decision, the Commission determined that Fortis' aggregate investment shortfall approach should not be used to demonstrate the absence of double counting or to determine whether all of the forecast or actual expenditures for a capital project or program are, or a portion is, outside of the normal course of the company's ongoing operations, as required to satisfy Criterion 1. The Commission determined that the accounting test requirement of Criterion 1 cannot be performed when an applicant uses the aggregate investment shortfall approach.

1056. Since Fortis' capital tracker application used an aggregate investment shortfall approach, the Commission is unable to determine in this proceeding whether any of Fortis' projects proposed for capital tracker treatment satisfy the accounting test requirement of Criterion 1 and are therefore outside the normal course of the company's ongoing operations.

1057. In sections 3.1.2 and 3.1.3 of this decision, the Commission determined that the project net cost approach adequately demonstrates that a particular project proposed for capital tracker treatment does not result in double counting and is a reasonable method to identify the extent to which a project is underfunded by the I-X mechanism. Therefore, the Commission finds that the accounting test should be based on a project net cost approach.

[999] Exhibit 270.02, CCA argument, paragraph 27.

1058. Accordingly, in its 2013 capital tracker refiling and true-up application, Fortis is directed to demonstrate, based on a project net cost approach, the extent to which each of its projects (at Fortis' proposed level of grouping) proposed for capital tracker treatment is underfunded by the I-X mechanism, thus satisfying the accounting test requirement of Criterion 1.

9.3 Criterion 2 – Ordinarily the project must be for replacement or required by an external party

1059. As discussed in Section 3.2.1 of this decision, Criterion 2 requires that in most cases a capital tracker project should be for asset replacement or required by an external party. In that section, the Commission also explained that, in principle, a growth-related project will satisfy the requirements of Criterion 2 when it can be demonstrated that customer contributions together with the incremental revenues allocated to the project on some reasonable basis, when added to the revenue provided under the I-X mechanism, are insufficient to offset the revenue requirement associated with the project in a PBR year.

1060. Projects comprising customer growth and externally driven capital programs were classified by Fortis as being required by an external party. In its argument, Fortis discussed its DCC/SCADA project as an example of other types of projects that are not related to capital asset replacement, are not required by external parties, and are not growth- related but should nonetheless be eligible for capital tracker treatment.[1000]

Commission findings

1061. Fortis' externally driven projects are required by an external party and, therefore, satisfy the requirements of Criterion 2. With respect to Fortis' customer growth program, the Commission determined in Section 3.2.1 that a growth-related project will satisfy the requirements of Criterion 2 when it can be demonstrated that customer contributions together with the incremental revenue allocated to the project on some reasonable basis, when added to the revenue provided under the I-X mechanism, are insufficient to offset the revenue requirement associated with the project in a PBR year. However, as discussed in Section 9.2.2 above, since Fortis' capital tracker application used an aggregate investment shortfall approach, the Commission is unable to determine whether Fortis' customer growth program satisfies the requirements of Criterion 2 at this time.

1062. In Section 3.2.4, the Commission determined that the inclusion of the word "ordinarily" in Criterion 2 means that the criterion does not necessarily restrict capital tracker treatment to projects that fall into one of the categories of asset replacement, externally driven, and growth-related. Capital projects may arise during the PBR term that do not precisely fit into any of these three categories, but may still be eligible for capital tracker treatment where it can be demonstrated that a project is not adequately funded under the I-X mechanism, and is sufficiently important to the company, so that its ability to provide utility service at adequate levels would be compromised if the expenditures are not undertaken.

1063. Given that the Commission accepted the need for the DCC/SCADA project, the Commission considers that this project will satisfy the requirements of Criterion 2, if it can be demonstrated, based on a project net cost analysis, that it is not adequately funded under the I-X mechanism. However, as in the case of the Fortis customer growth program, since Fortis' capital tracker application used an aggregate investment shortfall approach, the Commission is unable to

[1000] Exhibit 262.01, Fortis argument, paragraphs 84-89.

determine whether Fortis' DCC/SCADA project is not adequately funded under the I-X mechanism and, therefore, satisfies the requirements of Criterion 2 at this time.

9.4 Criterion 3 – The project must have a material effect on the company's finances

1064. In Section 3.3 of this decision, the Commission determined that a two-tier materiality threshold should be adopted for capital trackers. The first tier of the materiality threshold, the four basis point threshold, will be applied at the level of individual projects or programs proposed for capital tracker treatment (grouped in the manner approved by the Commission). The second tier of the materiality threshold, the 40 basis point threshold, will be applied to the aggregate revenue requirement proposed to be recovered by way of all capital trackers.

1065. Based on the Commission's estimates in Table 8 of this decision, the 40 basis point threshold for Fortis in 2013 is $3.356 million and the four basis point threshold is $336,000. Given the Commission's findings with respect to Fortis' grouping of projects, should the groupings remain the same on a refiling, the four basis point threshold will apply to that portion of the revenue requirement associated with each capital tracker program that is not funded by the I-X mechanism. The 40 basis point threshold will apply to the aggregate revenue requirement proposed to be recovered by way of all capital trackers.

1066. As noted in sections 3.1.2 and 3.1.3 of this decision, the Commission determined that a project net cost approach is sufficient to satisfy the Commission that all of the forecast expenditure for a capital project or program are, or a portion is, outside the normal course of the company's ongoing operations. However, since Fortis' capital tracker application used an aggregate investment shortfall approach in this proceeding, the Commission is unable to assess materiality with respect to any of Fortis' programs proposed for capital tracker treatment as required under Criterion 3.

9.5 Fortis' 2013 capital trackers and K factor amount

1067. In sections 9.2.2 and 9.4 above, the Commission determined that, since Fortis did not use a project net cost approach in its 2013 capital tracker application, the Commission is unable to determine whether its programs proposed for capital tracker treatment satisfy the accounting test requirement of Criterion 1 and the materiality test under Criterion 3. Accordingly, the Commission does not approve any of the projects proposed by Fortis for capital tracker treatment at this time.

1068. In Section 4.4 of this decision, the Commission did not approve the K factor calculation methodology resulting from Fortis' aggregate investment shortfall approach. Accordingly, the Commission is unable to approve a K factor amount for 2013 for Fortis. Therefore, Fortis is directed to retain, in rates, its current K factor placeholder equivalent to 60 per cent of its applied-for 2013 forecast K factor amount.

1069. In accordance with the direction set out in Section 10.1 of this decision, Fortis shall file on or before May 15, 2014, a capital tracker refiling and true-up application using 2013 actual capital expenditures for those projects or programs the company proposes for 2013 capital tracker treatment in compliance with the directions set out in this decision. Specifically, Fortis is directed, based on a project net cost approach, to demonstrate that each of its projects and programs proposed for capital tracker treatment satisfies the accounting test requirement of Criterion 1 and the materiality test under Criterion 3. Fortis is also directed to calculate its K factor amount using the project net cost approach in accordance with the Commission-

approved method set out in Section 4.4 of this decision. This application should include material sufficient to address the Commission's three capital tracker criteria as explained and applied in this decision.

10 Instructions for future capital tracker applications

10.1 Submission timelines

1070. This section provides direction to the companies with respect to the filing of capital tracker true-up applications and capital tracker applications on a going forward basis. Decision 2012-237 provided guidance on the timing for annual capital tracker applications:

> A single application must be filed by March 1st of the current year with respect to all projects which may qualify for capital tracker treatment to be commenced in the upcoming year. The timing of the application is intended to provide sufficient time for processing of the application and inclusion of approved amounts as a K factor in the September 10th annual PBR rate adjustment filing. All of the capital trackers for each company will be collected in a pool that comprises a single K factor in the PBR formula for the company. As discussed in Section 7.3.3.2, the process for filing upcoming projects and associated K factor amounts is only to establish interim K factor rate adjustments. Interim amounts will be subject to true-up to actual costs as part of a prudence review following completion of the project.
>
> …In addition, the March 1st capital tracker application shall true-up the costs of projects that have been completed since the prior year's capital tracker filing together with sufficient information to permit a prudence review of these completed projects. To facilitate a prudence review of a project, the company must submit information showing that it has completed the project in the most cost effective manner possible. This information will include the results of competitive bidding processes, comparisons of in-house resources to external resources, and any other evidence that may be of assistance in demonstrating the prudence of the expenditures.[1001]

1071. The Commission extended the March 1, 2013, date for filing 2014 capital tracker applications on several occasions in recognition of the importance to parties of receiving the decision on the 2013 capital trackers prior to filing an application for 2014 capital trackers. In a letter dated July 10, 2013, responding to requests from the companies to delay the 2014 capital tracker applications, the Commission stated that it would determine a filing date for the 2014 capital tracker applications in its decision on the 2013 capital tracker applications.[1002]

1072. The Commission notes that all of the companies have included a placeholder for their 2014 capital trackers in their 2014 annual PBR rate adjustment filings.[1003] These placeholders

[1001] Decision 2012-237, paragraphs 974 and 975.

[1002] Exhibit 222.01, AUC letter regarding request for deadline extension for the 2014 capital tracker filings, July 10, 2013.

[1003] Proceeding ID No. 2823, Exhibit 1, EPCOR 2014 annual PBR rate adjustment filing, Section 2.7; Proceeding ID No. 2824, Exhibit 1, ATCO Electric 2014 annual PBR rate adjustment filing, Section 3.5; Proceeding ID No. 2825, Exhibit 12, Fortis 2014 annual PBR rate adjustment filing, Section 2.2.3; Proceeding ID No. 2826, Exhibit 1, ATCO Gas 2014 annual PBR rate adjustment filing, Section 3.5; Proceeding ID No. 2831, Exhibit 4, AltaGas 2014 annual PBR rate adjustment filing, Section 2.4.2.

were largely based on the capital tracker amounts applied for in 2013, and utilized the 60 per cent K factor placeholder approved in Decision 2013-072.[1004]

1073. Whereas this decision is being released close to the end of 2013, and the ATCO companies and Fortis have been directed to refile their 2013 capital tracker applications to reflect a project net cost approach using actual 2013 capital expenditures, and a date for filing 2014 capital tracker applications has not yet been determined, and in the normal course capital tracker applications for 2015 would be filed on March 1, 2014, and 2013 actual capital expenditures may not be publically available in advance of the AUC Rule 005[1005] filings in May 2014, the Commission makes the following directions:

(a) the companies shall each file on or before March 1, 2014, a single application for capital trackers proposed for 2014 and 2015;

(b) ATCO Gas, ATCO Electric and Fortis shall file on or before May 15, 2014, a capital tracker refiling and true-up application using 2013 actual capital expenditures for those projects the company proposes for 2013 capital tracker treatment in compliance with the directions set out in this decision. This application should include material sufficient to address the Commission's three capital tracker criteria as explained in this decision;

(c) EPCOR and AltaGas shall file on or before May 15, 2014, an application to true-up the costs of 2013 capital tracker projects that have been completed in accordance with the directions provided in this decision. For all approved 2013 capital tracker projects that have not been completed by December 31, 2013 as forecast, the companies shall file actual expenditures to December 31, 2013 and a revised forecast to completion.

1074. Given that annual actual capital expenditure information may not be publically available until the May AUC Rule 005 filings, the Commission is modifying the direction set out in paragraph 975 of Decision 2012-237 requiring the inclusion of a true-up of the costs of capital tracker projects that have been completed since the prior year's capital tracker filing in the annual March 1 capital tracker application. Commencing in 2015, the companies shall file by May 15th in each year a separate application to true-up the costs of capital tracker projects that have been completed since the prior year's capital tracker filing. For all capital tracker projects that have not been completed, the companies shall also file actual expenditures to December 31 of the prior year and a forecast to completion. The companies shall continue to file their capital tracker applications for the upcoming year by March 1 of the preceding year.

1075. In sections 5.5 and 8.7 of this decision, AltaGas and EPCOR were directed to submit rate rider applications to collect, on an interim basis, the difference between the 60 per cent K factor placeholder approved in Decision 2013-072 and the K factor approved for 2013 in this decision. These rate rider applications are to be filed separately from the annual capital tracker filings, on or before February 1, 2014.

10.2 Minimum filing requirements for capital tracker applications

1076. To ensure the incentive properties of a PBR regime are maintained to the greatest extent possible, the UCA argued that it is necessary that any projects proposed for capital tracker

[1004] Decision 2013-072, 2012 Performance-Based Regulation Compliance Filings, paragraph 41.
[1005] Rule 005: *Annual Reporting Requirements of Financial and Operational Results* (Rule 005).

treatment "be subject to a comprehensive, rigorous analysis."[1006] The UCA recommended the use of minimum filing requirements for capital tracker applications to foster consistency among applications and reduce the regulatory burden on the Commission and parties in considering applications.[1007]

1077. The UCA submitted that the Commission should require a thorough analysis of any proposed capital trackers, which includes, at a minimum, the following information:

> At a minimum, the information necessary will include an assessment of the current capital in place (if any), analyses and quantification of risk, safety, reliability and service quality, a technical viability study (if the project is a pilot or untested project) and detailed cost estimates for the proposed project. In addition, the engineering study should provide clear reasoning regarding the driving criteria for decision making in the individual project.[1008]

1078. In its argument, the UCA also referred to the views that its engineering expert, Mr. Baker from Teshmont, provided at the oral hearing on the elements that a typical engineering study would contain:

> 1. Description of the project including the purpose, the drivers and the affected parties;
> 2. Explanation of test criteria and assumptions made;
> 3. Test of the proposed capital tracker and alternatives;
> 4. Evaluation of the alternatives and conclusion referencing the test criteria.[1009]

1079. In addition, Mr. Bell, on behalf of the UCA, provided the following recommendation in his evidence:

> As this is the first series of capital tracker Applications, it is appropriate to address the accounting for revenues and costs of capital trackers. In order to ensure proper matching of revenues and costs of each capital tracker, each utility must create processes and set up separate accounts and sub ledgers to track the capital costs, retirements, salvage, depreciation expense, accumulated depreciation, interest cost, income taxes and return on equity. As will [sic] the revenues for each capital tracker must be tracked separately. The revenues and costs for each capital tracker must be reported in such a way that the annual return that is calculated, and used for off ramps and reopeners, accurately reflects a proper matching of costs and revenues.[1010]

1080. In its evidence, PEG, on behalf of the CCA, noted that utilities seeking capital trackers are often subject to minimum filing requirements, or "foundational filings," which assist in the determination of the general need for high capital expenditures and capital tracker treatment. PEG noted that these foundational filings may be updated during the term of the capital tracker treatment to account for updated economic conditions and changes in the plans. By way of example, PEG pointed to the use of distribution system improvement charges (DSICs) for water utilities in New Jersey, which PEG characterized as a capital tracker-type mechanism. PEG

[1006] Exhibit 268.02, UCA argument, paragraph 357.
[1007] Exhibit 274.02, UCA reply argument, paragraphs 92 and 337.
[1008] Exhibit 268.02, UCA argument, paragraph 47.
[1009] Exhibit 268.02, UCA argument, paragraph 48 with reference to Transcript, Volume 9, page 1745, line 21 to page 1747, line 16.
[1010] Exhibit 111.03, evidence of R. Bell, page 24, lines 2-11.

quoted the relevant sections of New Jersey's Administrative Code outlining the foundational filing requirements for the DSIC projects:

> 1. An engineering evaluation report of the water utility's distribution system that:
>   i. Identifies the rationale for the work needed to be accelerated for the water utility to properly sustain its water distribution network;
>   ii. Demonstrates that the plan proposed to accelerate the renewal of the distribution network is the most cost effective plan;
>   iii. To the extent that elements of the distribution network are failing, identifies what mechanisms are causing the failures; and
>   iv. Identifies what is being done to extend the life of the water utility's distribution network assets;
>
> 2. DSIC project information for the upcoming DSIC period that includes the following:
>   i. A list of projects, DSIC-eligible asset class, or category;
>   ii. The nature, location, estimated duration of project work (including estimated in-service dates), and a description and reason for project necessity;
>   iii. Aggregate information capturing blanket-type, DSIC-eligible infrastructure, to be rehabilitated or replaced (that is, number of valves, hydrants, or service lines) and the estimated annual cost of such blanket-type replacement programs;
>   iv. Vintage, condition, or other similarly relevant, reasonably available information about the eligible infrastructure that is being rehabilitated or replaced;
>   v. Estimated project costs;
>   vi. Project identification numbers, so DSIC projects can be easily tracked; and
>   vii. Other such information, as is relevant and appropriate, in order to provide adequate information to make an informed decision regarding any given project;[1011]

1081. PEG also provided the examples of "foundational filings" imposed by a regulator on Potomac Electric Power for its proposed reliability investment recovery mechanism, which PEG also characterized as a capital tracker-type mechanism.[1012]

1082. AltaGas proposed, at the time of future capital tracker applications, to file details of forecast capital tracker additions for the upcoming year which would include business cases supported by engineering studies specifying quantities and unit prices for work to be completed.[1013] AltaGas further noted that its internal engineering studies include the following core elements:

- description of the nature, location, timing and cost of the project;
- the historical context of the project in terms of past, present and expected future costs;
- qualitative, and to the extent possible, quantitative description of the service quality and safety risks addressed by the project;
- discussion of reasonable alternatives, if any, including rationale for recommending the proposed solution;
- support for project timing and prioritization in terms of risk assessment and cost-effectiveness considerations for various project components; and

[1011] Exhibit 108.01, PEG evidence, pages 15-16, with reference to the New Jersey Administrative Code, N.J.A.C. 14:9-10.4.
[1012] Exhibit 108.01, PEG evidence, pages 17-18.
[1013] Exhibit 267.01, AltaGas argument, paragraphs 146-148.

- detailed costs for the project, or representative project component, evidencing compliance with good practice in the industry.[1014]

1083. The ATCO companies expressed their view that additional filing requirements are not necessary and they would not result in regulatory efficiency. The ATCO companies contended that their respective evidence satisfies the filing requirements established by the Commission in Decision 2012-237. According to the ATCO companies, additional filing requirements would hinder regulatory efficiency while adding little value. However, in the event that the Commission views that additional filing requirements are necessary for a capital tracker application, the ATCO companies submitted that the Commission should implement such a change on a prospective basis only.[1015]

1084. The ATCO companies also expressed concerns with respect to the UCA's submission that the companies adapt their accounting methodologies to track revenues and costs for projects approved for capital tracker treatment. Specifically, the ATCO companies stated that they can only track the revenues recovered for the K factor in total, if a separate rider is used. The ATCO companies did not intend to establish a separate rider for each capital tracker program in each year since it would be confusing to customers.[1016] ATCO Electric and ATCO Gas also noted that the companies do not obtain separate financing for individual capital projects, nor do they pay income tax on an individual capital project basis.

1085. The ATCO companies concluded that the recommendations of Mr. Bell would require significant investment in the information systems of the companies and increased administration which would be "counter-intuitive to the intent of PBR in addition to being unnecessary."[1017] The ATCO companies argued that their proposed methods to determine, ring-fence and track the costs related to each of the capital tracker programs are adequate for this purpose and nothing more should be required.

> ATCO Electric is able to identify and track the capital related costs, contributions and timing of capitalization associated with each of the capital trackers through the use of Project Accounting in the Oracle Financial System. ATCO Electric will use the capital additions to calculate the mid-year rate base and the corresponding revenue requirement in a separate Excel workbook. The utility income will be calculated using the latest approved Weighted Average Cost of Capital (WACC) similar to the calculation of AFUDC [allowance for funds used during construction]. The depreciation and amortization of contributions will be calculated using the latest approved depreciation rates for the account groups. The income tax will be calculated using the appropriate CCA [capital cost allowance] rates.[1018]

1086. EPCOR submitted that there is no need at this point for the Commission to issue formal minimum filing requirements for future capital tracker applications. EPCOR contended that this proceeding has shown that the scope and level of information provided in its application was "sufficient for the Commission and interested parties to understand and test EDTI's proposed

[1014] Exhibit 267.01, AltaGas argument, paragraph 53.
[1015] Exhibit 265.01, ATCO argument, paragraph 169.
[1016] Exhibit 195.02, ATCO Gas rebuttal evidence to the UCA, paragraph 65(b) and Exhibit 198.01, ATCO Electric rebuttal evidence to the UCA, paragraph 73(b).
[1017] Exhibit 195.02, ATCO Gas rebuttal evidence to the UCA, paragraph 67 and Exhibit 198.01, ATCO Electric rebuttal evidence to the UCA, paragraph 75.
[1018] Exhibit 83.01, UCA-AE-24(d). ATCO Gas provided a similar response in Exhibit 76.01, UCA-AG-19(d).

Capital Trackers and K factor adjustments."[1019] EPCOR submitted that at most, the Commission may find it helpful to provide additional guidance on aspects of the companies' applications where the Commission believes additional information is required.

1087. Fortis stated that the capital trackers sought by the company for 2013 are of a nature that, if approved, will form the basis for future applications in 2014 and beyond. This will minimize the regulatory burden for future Fortis capital tracker applications.[1020] With respect to the UCA's proposal that the companies adapt their accounting methodologies to track revenues and costs for capital trackers under PBR, Fortis contended that its proposed methodology "would properly track matters as required for capital tracker purposes."[1021]

1088. Calgary did not comment on the issue of minimum filing requirements in its argument and reply argument.

Commission findings

1089. With respect to the UCA's proposal that the companies adapt their accounting methodologies to track both revenues and costs for projects approved for capital tracker treatment, the Commission finds that although the companies are required to track costs for projects approved for capital tracker treatment in order to satisfy the true-up requirements, it would be onerous to be required to track revenues for capital tracker projects. In this regard, the Commission agrees with the view of the ATCO companies that such a requirement would likely necessitate a significant investment in the information systems of the companies and result in increased administration and regulatory burden, which would be "counter-intuitive to the intent of PBR."[1022] Any incremental revenues associated with growth-related projects or projects that result in incremental capacity will be accounted for in accordance with the approach approved in Section 4.3 of this decision.

1090. The Commission is satisfied that the companies' existing accounting practices and information systems, together with the Commission-approved K factor calculation methodology set out in Section 4.4 of this decision, will result in a reasonable tracking of costs for projects approved for capital tracker treatment.

1091. On the issue of minimum filing requirements, the Commission agrees with the UCA, and Dr. Lowry of PEG, that minimum filing requirements will assist the Commission in its assessment of the need for capital tracker treatment for certain capital expenditures. As part of its capital tracker application, the Commission directs the companies to file a set of Microsoft Excel® schedules setting out all the elements of the accounting test, materiality test and the resulting K factor calculation as directed in this decision, for each of the programs or projects proposed for capital tracker treatment. As discussed in Section 4.4, if a company's accounting records do not permit identification of the portion of the going-in rate base associated with a type of capital expenditure similar to a project or program proposed for capital tracker treatment, as required for the accounting test and the resulting K factor calculation, then the schedules provided must demonstrate how the calculation of these amounts was performed. In addition, the company is required to explain any assumptions and simplifications used in their calculation.

[1019] Exhibit 263.02, EPCOR argument, paragraph 272.
[1020] Exhibit 262.01, Fortis argument, recommendation 10.1 on page 52.
[1021] Exhibit 276.01, Fortis reply argument, paragraph 86.
[1022] Exhibit 195.02, ATCO Gas rebuttal evidence to the UCA, paragraph 67 and Exhibit 198.01, ATCO Electric rebuttal evidence to the UCA, paragraph 75.

1092. In Section 3.1.4 of this decision, outlining the project assessment under Criterion 1, the Commission determined that each program or project proposed for capital tracker treatment must generally be supported by a business case and an engineering study. However, the Commission recognized that in some circumstances an engineering study may not be required. Based on the submissions of AltaGas, PEG, and the UCA, the Commission finds that for the purpose of the project assessment, a program or project proposed for capital tracker treatment typically should address the following:

a. The rationale for the project, including the nature, scope, location, timing and cost of the project.
b. Any context for the project, which may include related past, present and future plans (e.g., for multi-year capital expenditures).
c. Evidence demonstrating that in the absence of the proposed capital expenditures, deterioration in service quality and safety would result.
d. Qualitative and, to the extent possible, quantitative descriptions of the service quality and safety risks addressed by the project.
e. Evidence that the capital project could not have been undertaken in the past as part of a prudent capital maintenance and replacement program.
f. A discussion of any reasonable alternatives, including the rationale for recommending the proposed solution.
g. A detailed forecast of costs for the project or project components, in sufficient detail to allow an evaluation of the reasonableness of the forecast.
h. A comparison of actual expenditures to forecast expenditures on similar projects over at least the previous five years, if available, including an explanation of any differences.
i. With respect to proposed capital trackers, an explanation of any differences between the forecast costs of projects proposed for capital tracker treatment and the actual or updated forecast costs of similar projects undertaken in the prior year. This explanation should provide a breakdown of the project costs that includes both units and costs-per-unit on a forecast and actual or updated forecast basis.
j. With respect to the true-up of capital tracker projects, an explanation of any differences between the forecast costs of projects approved for capital tracker treatment and the actual cost of these projects undertaken in the prior year. This explanation should provide a breakdown of the project costs that includes both units and costs-per-unit on a forecast and actual basis.

11 Conclusions on capital trackers

1093. In Decision 2012-237 the Commission established a PBR regime commencing January 1, 2013 for the following electric and gas distribution utilities in Alberta: AltaGas, ATCO Electric, ATCO Gas, EPCOR and Fortis. The purposes of moving from the traditional cost-of-service regulatory framework to a PBR framework were stated in Decision 2012-237 as follows:

> The first is to develop a regulatory framework that creates incentives for the regulated companies to improve their efficiency while ensuring that the gains from those improved efficiencies are shared with customers. The second purpose is to improve the efficiency of the regulatory framework and allow the Commission to focus more of its attention on both prices and quality of service important to customers.[1023]

[1023] Decision 2012-237, paragraph 15, quoting Exhibit 1.01, AUC letter of February 26, 2010, page 1.

1094. Decision 2012-237 described the parameters of the PBR plans approved for the participating Alberta distribution companies. The going-in rates for the PBR regime were established using a traditional cost-of-service approach. The going-in rates were based on a 2012 test year and were reflective of the entire forecast revenue requirement of a company for the test year, including the allowed rate of return. These going-in rates are adjusted in each year of the five year PBR term by a rate of inflation (I) reflecting changes in the prices of inputs the companies use less an offset (X) to reflect the rate of change in the long term productivity of the utility distribution industry. The Commission considered that it was reasonable to expect that Alberta distribution utilities would be able to achieve this utility distribution industry productivity growth during the PBR term. The Commission also included a stretch factor to recognize that the companies should be able to achieve productivity gains more readily at the outset of PBR, as a result of the transition from cost-of-service regulation to PBR.

1095. As the Commission explained in Section 1.1 of this decision, under PBR, a company normally will have a reasonable opportunity to recover its prudently incurred costs, including its allowed rate of return, if it limits its input cost increases to the broad index of input price changes in the Alberta economy, as measured by the Commission-approved I factor, and achieves productivity growth equal to the Commission-approved X factor. This is because applying the I-X index to the prior year's rates will provide a company with revenues sufficient to recover its prudently incurred costs, including its allowed return on capital invested prior to the PBR term, and its allowed return on capital additions during the PBR term that grow in line with the company's historical rate of capital growth. Under PBR, it is the I-X mechanism applied to the previous year's rates, rather than the company's forecast, that determines the following year's revenue for a company in normal circumstances.

1096. Decision 2012-237 recognized, however, that the I-X mechanism would not provide sufficient revenue to the companies in all circumstances. The approved plans incorporated Z factor and Y factor rate adjustments to provide the companies additional revenue to recover certain costs that are outside the control of management. In addition, during the PBR proceeding, some of the parties expressed concern with the ability of an I-X mechanism to provide sufficient revenue to fund prudently incurred capital costs with respect to accelerated system modernization projects, externally driven projects, and capital expenditures required for a rapidly expanding distribution system. The capital tracker mechanism was included in the approved PBR plans by the Commission in response to this concern. This mechanism is intended to provide a company with additional revenue through a K factor adjustment to rates for the portion of a qualifying capital project's costs that would not be funded under the I-X mechanism.

1097. Decision 2012-237 established the following three criteria that the company is required to satisfy before it can qualify a project for capital tracker treatment and receive additional revenue through a K factor adjustment to PBR rates.

(1) The project must be outside of the normal course of the company's ongoing operations.

(2) Ordinarily the project must be for replacement of existing capital assets or undertaking the project must be required by an external party.

(3) The project must have a material effect on the company's finances.[1024]

[1024] Decision 2012-237, paragraph 592.

1098. In this decision, the Commission reviewed and considered the proposed grouping of projects for capital tracker treatment on a company by company basis. Approved groupings of projects were then assessed against each of the capital tracker criteria. All three capital tracker criteria must be satisfied before a proposed project or group of projects will be accepted for capital tracker treatment. The Commission determined that a project would satisfy Criterion 1 if it passes the accounting test based on the use of the net cost project approach described in sections 3.1.2 and 3.1.3 and it satisfies the requirements of the project assessment described in Section 3.1.4. A project would satisfy Criterion 2 if it is for the replacement of existing capital assets or is required by an external party. In addition, a growth-related project would satisfy Criterion 2 when it can be demonstrated that the customer contributions together with incremental revenue allocated to the project on some reasonable basis, when added to the revenue provided under the I-X mechanism, are insufficient to offset the revenue requirement associated with the project in a PBR year. Finally, each project must satisfy the first tier of the materiality test of Criterion 3 on an individual basis and all approved capital trackers collectively, must satisfy the second tier of the materiality test of Criterion 3, as described in Section 3.3.

1099. Since the capital tracker mechanism is intended to deal with specific capital requirements outside the I-X mechanism, projects approved for capital tracker treatment are separated from other costs of the company and regulated on a cost-of-service basis. A company may apply for capital tracker treatment for a project on either a forecast or actual basis. In either case, should a project be approved for capital tracker treatment, the resulting K factor adjustment will provide the company with additional revenue equal to the portion of the revenue requirement for that project that is not funded under the I-X mechanism in a PBR year. A K factor adjustment is approved by the Commission on an interim basis, because costs for projects approved for capital tracker treatment on a forecast basis will be trued up to actual costs approved following a prudence review upon completion of the capital tracker project.

1100. The Commission considers that the interpretation and application of the capital tracker criteria set out in this decision provide each of the companies sufficient additional revenue to fund the revenue requirement associated with its prudently incurred capital expenditures in those instances where the I-X mechanism has been demonstrated to provide insufficient revenues in a PBR year.

1101. The Commission has approved in the PBR plans a number of mechanisms, including Z factors, Y factors and K factors that allow for adjustments to rates outside of the I-X mechanism. In addition, the Commission has included a reopener provision in each PBR plan to address any significant problem with the design or operation of a PBR plan that may arise as the PBR plan unfolds and that may have a material effect on either the company or its customers that cannot be addressed through other features of the PBR plan. The Commission is satisfied that the capital tracker mechanism, when combined with these other elements of the approved PBR plans, provides each company with a reasonable opportunity to recover its prudently incurred costs, including the allowed rate of return, while at the same time, preserving the superior efficiency incentives that PBR is designed to provide.

1102. This PBR framework provides an alternative to the traditional cost-of-service regulatory framework. As the Commission explained in Decision 2012-237, the cost-of-service regulatory framework provides few incentives for efficiency and creates some incentives to be less

productive.[1025] PBR is a regulatory framework that "provides incentives for efficiency"[1026] and fixes rates "that are intended to result in cost savings or other benefits to be allocated" between a company and its customers.[1027] This alternative continues to provide each company with a reasonable opportunity to recover its prudent costs incurred to provide safe and reliable utility services to customers, but does so "in a manner that minimizes the cost of regulation and provides incentives for efficiency."[1028]

1103. The Commission finds that the PBR plans benefit both the companies and their customers by providing a reasonable opportunity for the companies to recover their prudently incurred costs while creating incentives to reduce costs and reducing the regulatory burden, subject to safeguards to maintain service quality. In addition, under the PBR framework, the customers are guaranteed to automatically share in the productivity gains built into rates through the X factor regardless of the actual performance of the companies.

12 Order

1104. It is hereby ordered that:

(1) Each of AltaGas Utilities Inc., ATCO Electric Ltd., ATCO Gas and Pipelines Ltd., EPCOR Distribution & Transmission Inc. and FortisAlberta Inc. shall file on or before March 1, 2014, a single application for capital trackers proposed for 2014 and 2015. This application should include material sufficient to address the Commission's three capital tracker criteria as explained in this decision.

(2) Each of ATCO Electric Ltd., ATCO Gas and Pipelines Ltd. and FortisAlberta Inc. shall file on or before May 15, 2014, a capital tracker refiling and true-up application using 2013 actual capital expenditures for those projects the company proposes for 2013 capital tracker treatment in compliance with the directions set out in this decision. This application should include material sufficient to address the Commission's three capital tracker criteria as explained in this decision.

(3) Each of AltaGas Utilities Inc. and EPCOR Distribution & Transmission Inc. shall file on or before May 15, 2014, an application to true-up the costs of 2013 capital tracker projects that have been completed, in accordance with the directions provided in this decision. For all approved 2013 capital tracker projects that have not been completed by December 31, 2013 as forecast, the companies shall file actual expenditures to December 31, 2013 and a revised forecast to completion.

(4) AltaGas Utilities Inc. shall file an application for an adjustment to Rate Rider F to collect, on an interim basis, the difference between the 60 per cent K factor placeholder approved in Decision 2013-072 and the K factor approved for 2013 in this decision. This rate rider application should be filed separately from the annual capital tracker filing, on or before February 1, 2014.

[1025] Decision 2012-237, paragraphs 10-11.
[1026] *Electric Utilities Act*, SA 2003, c. E-5.1, Section 121(3).
[1027] *Gas Utilities Act*, RSA 2000, c. G-5, Section 45.
[1028] *Electric Utilities Act*, Section 5(h).

(5) EPCOR Distribution & Transmission Inc. shall file an application for an adjustment to Rate Rider DJ to collect, on an interim basis, the difference between the 60 per cent K factor placeholder approved in Decision 2013-072 and the K factor approved for 2013 in this decision. This rate rider application should be filed separately from the annual capital tracker filing, on or before February 1, 2014.

Dated on December 6, 2013.

The Alberta Utilities Commission

(original signed by)

Mark Kolesar
Vice-Chair

(original signed by)

Neil Jamieson
Commission Member

(original signed by)

Henry van Egteren
Commission Member

Appendix 1 – Proceeding participants

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FortisAlberta Inc. (Fortis or FAI) J. Walsh

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Appendix 2 – Oral hearing – registered appearances

Name of organization (abbreviation) counsel or representative	Witnesses
AltaGas Utilities Inc. (AltaGas or AUI) N. McKenzie	N. Lesage G. Johnston R. Retnanandan M. Stock
ATCO Utilities L. Keough K. Illsey	ATCO Electric Ltd. and ATCO Gas J. Makholm G. Feltham M. Bayley D. Wilson B. Goy B. Howell
EPCOR Distribution & Transmission Inc. (EPCOR or EDTI) J. Liteplo	D. Weisman J. Baraniecki K. Hull J. Elford K. Sorenson G. Wagner
FortisAlberta Inc. (Fortis or FAI) T. Dalgleish, QC S. Nagina	I. Lorimer P. Delaney C. Eck
The City of Calgary (Calgary D. I. Evanchuk S. D. Parker	
Consumers' Coalition of Alberta (CCA) J. A. Wachowich	M. Lowry
Office of the Utilities Consumer Advocate (UCA) C. R. McCreary N. J. Parker	R. Baker R. Bell J. Shah N. Tehsin G. Roberts Y. Lessard

The Alberta Utilities Commission

Commission Panel
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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 had reviewed AltaGas' K factor calculations and finds that they comply with the K factor calculation methodology approved by the Commission in Section 4.4 of this decision, with one exception. As discussed in Section 4.2, AltaGas proposed to include cash working capital as a component of rate base in the calculation of its K factor. However, the Commission found that cash working capital should not be included in K factor calculations. Nevertheless, given that the amount of cash working capital included in this application is minimal, the Commission will not require a refiling to exclude the cash working capital component included in AltaGas' K factor calculation at this time. The Commission directs AltaGas to exclude cash working capital from its K factor calculation at the time of its 2013 capital trackers true-up application and in its subsequent capital tracker filings. ..... Paragraph 599

2. AltaGas is directed to file an application for an adjustment to Rate Rider F to collect, on an interim basis, the 2013 forecast K factor amount in excess of the 60 per cent K factor placeholder amount that was included in AltaGas' 2013 PBR rates. This amount is to be recovered by December 31, 2014. AltaGas' 2014 K factor placeholder proposed in its 2014 annual PBR rate adjustment filing is not to be modified to account for the 2013 K factor amount. ..... Paragraph 601

3. Accordingly, in its 2013 capital tracker refiling and true-up application, ATCO Gas is directed to demonstrate, based on a project net cost approach, the extent to which each of its projects (at ATCO Gas' proposed level of grouping) proposed for capital tracker treatment is underfunded by the I-X mechanism, thus satisfying the accounting test requirement of Criterion 1. ..... Paragraph 692

4. In Section 4.4 of this decision, the Commission did not approve the K factor calculation methodology resulting from ATCO Gas' aggregate investment shortfall approach. Accordingly, the Commission is unable to approve a K factor amount for 2013 for ATCO Gas. Therefore, ATCO Gas is directed to retain, in rates, its current K factor placeholder equivalent to 60 per cent of its applied-for 2013 forecast K factor amount. . Paragraph 702

5. In accordance with the direction set out in Section 10.1 of this decision, ATCO Gas shall file on or before May 15, 2014, a capital tracker refiling and true-up application using 2013 actual capital expenditures for those projects or programs the company proposes for 2013 capital tracker treatment in compliance with the directions set out in this decision. Specifically, ATCO Gas is directed, based on a project net cost approach, to demonstrate that each of its projects and programs proposed for capital tracker treatment satisfies the accounting test requirement of Criterion 1 and the materiality test under Criterion 3. ATCO Gas is also directed to calculate its K factor amount using the project net cost approach in accordance with the Commission-approved method set out in Section 4.4 of this decision. This application should include material sufficient to address the Commission's three capital tracker criteria as explained and applied in this decision. ..... Paragraph 703

6. Accordingly, in its 2013 capital tracker refiling and true-up application, ATCO Electric is directed to demonstrate, based on a project net cost approach, the extent to which each of its projects (at ATCO Electric's proposed level of grouping) proposed for capital tracker treatment is underfunded by the I-X mechanism, thus satisfying the accounting test requirement of Criterion 1. ..... Paragraph 813

7. In Section 4.4 of this decision, the Commission did not approve the K factor calculation methodology resulting from ATCO Electric's aggregate investment shortfall analysis. Accordingly, the Commission is unable to approve a K factor amount for 2013 for ATCO Electric. Therefore, ATCO Electric is directed to retain, in rates, its current K factor placeholder equivalent to 60 per cent of its applied-for 2013 forecast K factor amount. ..... Paragraph 826

8. In accordance with the direction set out in Section 10.1 of this decision, ATCO Electric shall file on or before May 15, 2014, a capital tracker refiling and true-up application using 2013 actual capital expenditures for those projects or programs the company proposes for 2013 capital tracker treatment in compliance with the directions set out in this decision. Specifically, ATCO Electric is directed, based on a project net cost approach, to demonstrate that each of its projects and programs proposed for capital tracker treatment satisfies the accounting test requirement of Criterion 1 and the materiality test under Criterion 3. ATCO Electric is also directed to calculate its K factor amount using the project net cost approach in accordance with the Commission-approved method set out in Section 4.4 of this decision. This application should include material sufficient to address the Commission's three capital tracker criteria as explained and applied in this decision. ..... Paragraph 827

9. Fourth, as discussed in Section 4.3.2 of this decision, to calculate the amount of revenue provided under the I-X mechanism in 2013 for each of its capital tracker projects or programs, EPCOR increased the going-in revenue for each project or program by I-X plus a 0.54 per cent "G factor," which represented the impact on revenues arising from the change in billing determinants. The Commission determined that multiplying the I-X index by the percentage change in billing determinants is a more accurate approach, since it reflects the combined impact of the percentage change in prices (measured by I-X) and the percentage change in quantities (measured by relevant billing determinants). Accordingly, the Commission directs EPCOR to use this method in its K factor calculation at the time of its 2013 capital tracker refiling and true-up application. ..... Paragraph 987

10. Despite the modifications to EPCOR's 2013 K factor directed above, and given that the amounts are minimal, the Commission will not require a refiling. The Commission directs EPCOR to make the necessary modifications to its K factor calculation at the time of its 2013 capital trackers true-up application and its subsequent capital tracker filings. The Commission approves EPCOR's 2013 K factor of $4.87 million to be recovered from customers on an interim basis. As determined at paragraphs 615 and 974 of Decision 2012-237, EPCOR will be permitted to collect the approved forecast amounts for the approved capital tracker projects and programs on an interim basis only, subject to a prudence review and true-up to actual costs in respect of these projects and programs, to be undertaken following completion of the 2013 projects. ..... Paragraph 989

11. EPCOR is directed to file an application for an adjustment to Rate Rider DJ to collect, on an interim basis, the 2013 K factor amount in excess of the 60 per cent K factor

placeholder amount that was included in EPCOR's 2013 PBR rates. This amount is to be recovered by December 31, 2014. EPCOR's 2014 K factor placeholder proposed in its 2014 annual PBR rate adjustment filing is not to be modified to account for the 2013 K factor amount. ..... Paragraph 990

12. Accordingly, in its 2013 capital tracker refiling and true-up application, Fortis is directed to demonstrate, based on a project net cost approach, the extent to which each of its projects (at Fortis' proposed level of grouping) proposed for capital tracker treatment is underfunded by the I-X mechanism, thus satisfying the accounting test requirement of Criterion 1. ..... Paragraph 1058

13. In Section 4.4 of this decision, the Commission did not approve the K factor calculation methodology resulting from Fortis' aggregate investment shortfall approach. Accordingly, the Commission is unable to approve a K factor amount for 2013 for Fortis. Therefore, Fortis is directed to retain, in rates, its current K factor placeholder equivalent to 60 per cent of its applied-for 2013 forecast K factor amount. ..... Paragraph 1068

14. In accordance with the direction set out in Section 10.1 of this decision, Fortis shall file on or before May 15, 2014, a capital tracker refiling and true-up application using 2013 actual capital expenditures for those projects or programs the company proposes for 2013 capital tracker treatment in compliance with the directions set out in this decision. Specifically, Fortis is directed, based on a project net cost approach, to demonstrate that each of its projects and programs proposed for capital tracker treatment satisfies the accounting test requirement of Criterion 1 and the materiality test under Criterion 3. Fortis is also directed to calculate its K factor amount using the project net cost approach in accordance with the Commission-approved method set out in Section 4.4 of this decision. This application should include material sufficient to address the Commission's three capital tracker criteria as explained and applied in this decision. ..... Paragraph 1069

15. On the issue of minimum filing requirements, the Commission agrees with the UCA, and Dr. Lowry of PEG, that minimum filing requirements will assist the Commission in its assessment of the need for capital tracker treatment for certain capital expenditures. As part of its capital tracker application, the Commission directs the companies to file a set of Microsoft Excel® schedules setting out all the elements of the accounting test, materiality test and the resulting K factor calculation as directed in this decision, for each of the programs or projects proposed for capital tracker treatment. As discussed in Section 4.4, if a company's accounting and/or information system does not permit identification of the portion of the going-in rate base associated with a type of capital expenditure similar to a project or program proposed for capital tracker treatment, as required for the accounting test and the resulting K factor calculation, then the schedules provided must demonstrate how the calculation of these amounts was performed. In addition, the company is required to explain any assumptions and simplifications used in their calculation. ..... Paragraph 1091

Appendix 4 – Draft proceeding issues list (April 25, 2013)

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Proceeding ID No. 2131
2013 PBR Capital Tracker Filings
Draft Issues List

At paragraph 592 of Decision 2012-237, the Commission adopted the following criteria for the assessment of capital projects proposed for capital tracker treatment:

(1) The project must be outside of the normal course of the company's ongoing operations.

(2) Ordinarily the project must be for replacement of existing capital assets or undertaking the project must be required by an external party.

(3) The project must have a material effect on the company's finances.

This proceeding will consider how to implement and apply the Commission's capital tracker criteria in the evaluation of specific capital tracker proposals. Pursuant to Decision 2012-237, the issues relevant to this proceeding include the following:

1. Criterion 1: The project must be outside of the normal course of the company's ongoing operations.

This proceeding will consider each of the following issues in determining how to implement and apply the first capital tracker criterion.

1.1 Double counting. At paragraph 594 of Decision 2012-237, the Commission stated:

> 594. The first criterion is required to avoid double-counting between capital related costs that should be funded by way of a capital tracker and those that should be funded through the I-X mechanism….

In this context, the Commission will examine various methodologies for determining if funding a project through a capital tracker could result in double counting. This examination will include, among other considerations, an examination of whether the methodologies employed by some companies, including using either a 2013 capital investment shortfall analysis or a 2013 total revenue shortfall analysis, demonstrate the absence of double counting.

1.2 Importance of project in providing service. At paragraph 594 of Decision 2012-237, the Commission stated:

> 594. …This criterion is also required to ensure that capital tracker projects are of sufficient importance that the company's ability to provide utility service at adequate levels would be compromised if the expenditures are not undertaken. Projects that do not carry this level of importance are likely subject to a reasonable level of management discretion, therefore allowing special treatment for this type of capital would eliminate the incentive for the company to examine all alternatives….

1.3 Engineering studies. At paragraph 594 of Decision 2012-237, the Commission stated:

> 594. …this criterion would require that an engineering study be filed to justify the level of capital expenditures being proposed. That is, the company must demonstrate that the capital expenditures are required to prevent deterioration in service quality and safety, and that service quality and safety cannot be maintained by continuing with O&M and capital spending at levels that are not substantially different from historical levels….

This proceeding will examine issues related to engineering studies, including the position of some companies that engineering studies are not practicable in all circumstances for projects that would otherwise be outside of the normal course of the company's ongoing operations

1.4 Historical spending levels. At paragraph 594 of Decision 2012-237, the Commission stated:

> 594. …the company must demonstrate that the capital expenditures are required to prevent deterioration in service quality and safety, and that service quality and safety cannot be maintained by continuing with O&M and capital spending at levels that are not substantially different from historical levels….

At paragraph 600 of Decision 2012-237, the Commission stated:

> 600. …While the obligations to perform the work exist for the companies, the Commission considers that a company must demonstrate that such costs are significantly different than historical trends to qualify for capital tracker treatment, otherwise there is a likelihood for double-counting.

This proceeding will examine what historical capital expenditure levels should be used in assessing if the proposed 2013 capital tracker costs are "substantially different than historical trends."

- In examining the historical expenditure levels, should the comparison be done based on an average or based on a trend?
- The relevant time period to be used for historical comparisons.

1.5 Historical maintenance and replacement practices. At paragraph 594 of Decision 2012-237, the Commission stated:

> 594. …The company will also be required to demonstrate that the capital project could not have been undertaken in the past as part of a prudent capital maintenance and replacement program.

2. Criterion 2: Ordinarily the project must be for replacement of existing capital assets or undertaking the project must be required by an external party.

This proceeding will consider each of the following issues in determining how to implement and apply the second capital tracker criterion.

2.1 Asset replacement. How should the Commission deal with projects that replace existing capital assets with assets that exceed the capacity of the assets to be replaced?

2.2 Driven by external party. On what basis should the Commission make a finding that a project is required by an external party?

2.3 Ordinarily. Are there other types of projects that cannot be funded under the I-X mechanism that should be subject to capital tracker treatment? For example, are there growth-related projects that cannot be funded under the I-X mechanism and/or through incremental revenues that should be subject to capital tracker treatment?

3 Criterion 3: The project must have a material effect on the company's finances.

This proceeding will consider each of the following issues in determining how to implement and apply the third capital tracker criterion.

3.1 Materiality threshold. This proceeding will determine the level of materiality required to extend capital tracker treatment to a particular project. Different possibilities include:

- materiality threshold based on regulatory burden of assessing each tracker[1029]
- materiality threshold based on the impact on the company's ROE (i.e., ROE threshold similar to how a Y or Z factor materiality is determined)
- AUC Rule 005 materiality thresholds
- other approaches to establishing a materiality threshold for capital trackers

3.2 Grouping. In paragraph 601 of Decision 2012-237, the Commission stated:

> 601. …it would not be suitable to group together several dissimilar projects into a single large project to give the appearance of materiality. However, a number of smaller related items required as part of a larger project might qualify for capital tracker treatment.

This proceeding will determine the acceptable grouping of proposed capital tracker projects.

4. Capital trackers arising from 2012.

Given that some companies have proposed using changes from the forecast 2012 mid-year rate base to the forecast 2013 mid-year rate base in the determination of their capital tracker amounts, should the Commission consider the extent to which a company incurred capital project costs in 2012 which may have otherwise satisfied the capital tracker criteria, but may not be adequately accounted for in going-in rates (for example, EPCOR's Poundmaker project[1030])? If so, should capital tracker treatment be extended in 2013 to all or a portion of those capital expenditures?

[1029] Exhibit 37.01, Appendix A, Evidence of Dr. Makholm, page 8, lines 25-26.
[1030] Exhibit 38.01, EPCOR application, paragraph 57.

5. Assessing the reasonableness of capital forecasts.

Projects that satisfy the capital tracker criteria must also be assessed for reasonability, as would be the case in a of cost of service rate application. Typical issues examined are:

- testing the reasonableness of forecast project costs
- adequacy of forecast methodologies
- consideration of project alternatives
- timing of the project
- scope of the project
- Other issues relevant to assessing the reasonableness of capital forecasts, as usually undertaken in testing a cost of service application.

6. Determination of invested capital and the calculation of the K factor amounts.

At paragraph 977 of Decision 2012-237, the Commission stated:

> 977. The calculation of the K factor rate adjustments will be similar to revenue requirement calculations under cost of service, except that the calculation will be limited to the depreciation, taxes and return associated with the incremental rate base for the expenditures that form the capital tracker. The weighted average cost of capital rate to be used in calculating the revenue requirements associated with capital trackers will be based on current rates established in the most recent GCOC proceeding rather than using the rates that were in place at the start of the PBR term. The most recent forecast of billing determinant information along with the Phase II methodologies in place, as discussed in Section 15.1.5 below, will establish the K factor rate adjustments associated with revenue requirements by rate class.

This proceeding will consider each of the following issues in determining how to calculate the K factor rate adjustment resulting from the approved capital tracker amounts.

6.1. Portion of project costs that are to be recovered through a capital tracker. To the extent that a specific project satisfies the capital tracker criteria, the Commission must determine the portion of the project capital costs to be recovered by way of a capital tracker. Considerations:

- Full revenue requirement amount associated with the project for the forecast year (subject to the mid-year convention considerations discussed below).
- Only the incremental revenue requirement amount associated with the project above the historical average or trend levels.
- The extent to which, if any, increased revenues, operating cost savings, or incremental operating costs arising from a capital tracker project should be considered in the determination of the K factor.

6.2 Mid-year convention considerations. Should the mid-year convention be applied in the calculation of the K factor rate adjustment resulting from the approved capital tracker amounts? Alternatives:

(i) using 2012 forecast mid-year rate base and 2013 forecast mid-year rate base associated with capital tracker projects as proposed by the companies
(ii) using 2013 forecast mid-year capital tracker expenditures only, with no consideration of the 2012 year-end capital account balances
(iii) using 2013 full year forecast capital tracker expenditures only, with no consideration of the 2012 year-end capital account balances

6.3 K factor rate calculation. The application of billing determinants and Phase II methodologies in determining rate adjustments associated with revenue requirement by rate class.

Appendix 5 – Final proceeding issues list (May 15, 2013)

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Proceeding ID No. 2131
2013 PBR Capital Tracker Filings
Final Issues List

At paragraph 592 of Decision 2012-237, the Commission adopted the following criteria for the assessment of capital projects proposed for capital tracker treatment:

> (4) The project must be outside of the normal course of the company's ongoing operations.
>
> (5) Ordinarily the project must be for replacement of existing capital assets or undertaking the project must be required by an external party.
>
> (6) The project must have a material effect on the company's finances.

This proceeding will consider how to implement and apply the Commission's capital tracker criteria in the evaluation of specific capital tracker proposals. Having considered the submissions of parties and having regard to the scope of this proceeding and pursuant to Decision 2012-237, the Commission considers the issues relevant to this proceeding include the following:

1. Criterion 1: The project must be outside of the normal course of the company's ongoing operations.

This proceeding will consider each of the following issues in determining how to implement and apply the first capital tracker criterion.

1.1 Double counting. At paragraph 594 of Decision 2012-237, the Commission stated:

> 594. The first criterion is required to avoid double-counting between capital related costs that should be funded by way of a capital tracker and those that should be funded through the I-X mechanism….

In this context, the Commission will examine various methodologies for determining if funding a project through a capital tracker could result in double counting. Possible methodologies include the following:

1.1.1 Historical spending levels. Can historical capital expenditure levels be used to assess if the proposed 2013 capital tracker costs are "substantially different than historical level"[1031] and thus demonstrate the absence of double counting?

- In examining the historical expenditure levels, should the comparison be done based on an average or based on a trend?
- The relevant time period to be used for historical comparisons, including how these time periods should relate to the useful lives of the underlying capital assets.

[1031] Decision 2012-237, paragraph 594.

1.1.2 Investment shortfall analysis. Can a 2013 capital investment shortfall analysis or a 2013 total revenue shortfall analysis be used to demonstrate the absence of double counting? If so, to what extent should operating cost savings or incremental operating costs be included in the investment shortfall analysis?

1.1.3 Other methodologies. Are there any other methodologies that could be used to demonstrate the absence of double counting?

1.2 Importance of project in providing service. At paragraph 594 of Decision 2012-237, the Commission stated:

> 594. …This criterion is also required to ensure that capital tracker projects are of sufficient importance that the company's ability to provide utility service at adequate levels would be compromised if the expenditures are not undertaken. Projects that do not carry this level of importance are likely subject to a reasonable level of management discretion, therefore allowing special treatment for this type of capital would eliminate the incentive for the company to examine all alternatives….

1.3 Engineering studies. At paragraph 594 of Decision 2012-237, the Commission stated:

> 594. …this criterion would require that an engineering study be filed to justify the level of capital expenditures being proposed. That is, the company must demonstrate that the capital expenditures are required to prevent deterioration in service quality and safety, and that service quality and safety cannot be maintained by continuing with O&M and capital spending at levels that are not substantially different from historical levels….

This proceeding will examine issues related to engineering studies, including the position of some companies that engineering studies are not practicable in all circumstances for projects that would otherwise be outside of the normal course of the company's ongoing operations.

1.4 Historical maintenance and replacement practices. At paragraph 594 of Decision 2012-237, the Commission stated:

> 594. …The company will also be required to demonstrate that the capital project could not have been undertaken in the past as part of a prudent capital maintenance and replacement program.

2. Criterion 2: Ordinarily the project must be for replacement of existing capital assets or undertaking the project must be required by an external party.

This proceeding will consider each of the following issues in determining how to implement and apply the second capital tracker criterion.

2.1 Asset replacement. How should the Commission deal with projects that replace existing capital assets with assets that exceed the capacity of the assets to be replaced?

2.2 Driven by external party. On what basis should the Commission make a finding that a project is required by an external party?

2.3 Ordinarily. Are there other types of projects that cannot be funded under the I-X mechanism that should be subject to capital tracker treatment? For example, are there growth-related projects that cannot be funded under the I-X mechanism and/or through incremental revenues that should be subject to capital tracker treatment?

3 Criterion 3: The project must have a material effect on the company's finances.

This proceeding will consider each of the following issues in determining how to implement and apply the third capital tracker criterion.

3.1 Materiality threshold. This proceeding will determine the level of materiality required to extend capital tracker treatment to a particular project. Different possibilities include:

- materiality threshold based on regulatory burden of assessing each tracker[1032]
- materiality threshold based on the impact on the company's ROE (e.g., ROE threshold similar to how a Y or Z factor materiality is determined)
- AUC Rule 005 materiality thresholds
- other approaches to establishing a materiality threshold for capital trackers

3.2 Grouping. In paragraph 601 of Decision 2012-237, the Commission stated:

> 601. …it would not be suitable to group together several dissimilar projects into a single large project to give the appearance of materiality. However, a number of smaller related items required as part of a larger project might qualify for capital tracker treatment.

This proceeding will determine the acceptable grouping of proposed capital tracker projects.

4. Capital trackers arising from 2012.

Should the Commission consider for possible capital tracker treatment in 2013, capital costs incurred in 2012 in respect of unique company projects that did not continue into 2013 and which would have satisfied the capital tracker criteria (e.g., EPCOR's Poundmaker project[1033])?

[1032] Exhibit 37.01, Appendix A, evidence of Dr. Makholm, page 8, lines 25-26.
[1033] Exhibit 38.01, EPCOR application, paragraph 57.

5. Assessing the reasonableness of capital forecasts.

Projects that satisfy the capital tracker criteria must also be assessed for reasonability, as would be the case in a cost of service rate application. Typical issues examined are:

- testing the reasonableness of forecast project costs
- adequacy of forecast methodologies
- consideration of project alternatives
- timing of the project
- scope of the project
- other issues relevant to assessing the reasonableness of capital forecasts, as usually undertaken in testing a cost of service application

6. Determination of invested capital and the calculation of the K factor.

At paragraph 977 of Decision 2012-237, the Commission stated:

> 977. The calculation of the K factor rate adjustments will be similar to revenue requirement calculations under cost of service, except that the calculation will be limited to the depreciation, taxes and return associated with the incremental rate base for the expenditures that form the capital tracker. The weighted average cost of capital rate to be used in calculating the revenue requirements associated with capital trackers will be based on current rates established in the most recent GCOC proceeding rather than using the rates that were in place at the start of the PBR term. The most recent forecast of billing determinant information along with the Phase II methodologies in place, as discussed in Section 15.1.5 below, will establish the K factor rate adjustments associated with revenue requirements by rate class.

This proceeding will consider each of the following issues in determining how to calculate the K factor resulting from the approved capital tracker amounts.

6.1. Portion of project costs that are to be recovered through a capital tracker. To the extent that a specific project satisfies the capital tracker criteria, the Commission must determine the portion of the project capital costs to be recovered by way of a capital tracker. Considerations:

- Full revenue requirement amount associated with the project for the forecast year (subject to the mid-year convention considerations discussed below).
- Only the incremental revenue requirement amount associated with the project above the historical average or trend level.
- The extent to which increased revenues for capital tracker projects related to growth should be considered in the determination of the K factor.

6.2 Mid-year convention considerations. Should the mid-year convention be applied in the calculation of the K factor resulting from the approved capital tracker amounts? Possible approaches include:

(i) using 2012 forecast mid-year rate base and 2013 forecast mid-year rate base associated with capital tracker projects as proposed by the companies
(ii) using 2013 forecast mid-year capital tracker expenditures only, with no consideration of the 2012 year-end capital account balances
(iii) using 2013 full year forecast capital tracker expenditures only, with no consideration of the 2012 year-end capital account balances