

ATCO Gas and Pipelines Ltd.

2014 PBR Capital Tracker True-Up and 2016-2017 PBR Capital Tracker Forecast

April 14, 2016

Alberta Utilities Commission

Decision 20604-D01-2016 ATCO Gas and Pipelines Ltd. 2014 PBR Capital Tracker True-Up and 2016-2017 PBR Capital Tracker Forecast Proceeding 20604

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Calgary, Alberta

ATCO Gas 2014 PBR Capital Tracker True-Up and 2016-2017 PBR Capital Tracker Forecast

Decision 20604-D01-2016 Proceeding 20604

1 Introduction

- 1. On July 10, 2015, ATCO Gas and Pipelines Ltd. (ATCO Gas or AG) filed an application with the Alberta Utilities Commission requesting approval of its 2014 capital tracker true-up and 2016-2017 capital tracker forecast under performance-based regulation (PBR).
- 2. On July 13, 2015, the Commission issued a notice of application that required interested parties to submit a statement of intent to participate (SIP) by July 27, 2015. In their SIPs, parties were to provide a description of their interest in the proceeding, an explanation of their position and submissions as to the process steps required. The Commission received SIPs from the Consumers' Coalition of Alberta (CCA), the Office of the Utilities Consumer Advocate (UCA) and the City of Calgary.
- 3. After reviewing the application and the SIPs, the Commission determined that the application would be considered by way of a *full-process*, as described in Bulletin 2015-09,¹ and among other things, included the filing of information requests (IRs) to ATCO Gas by August 17, 2015, IR responses by September 4, 2015, and intervener evidence by September 18, 2015.
- 4. On September 15, 2015, the UCA filed a motion requesting that the Commission direct ATCO Gas to provide further and better responses to four IRs. On September 25, 2015, the Commission granted the request for further and better responses to AG-UCA-2015AUG17-021(a), AG-UCA-2015AUG17-025(a), and AG-UCA-2015AUG17-026, in whole or in part,² and granted confidential status to the information being requested in one IR response, AG-UCA-2015AUG17-21(a). The Commission also established a revised process schedule for this proceeding with the following timeline:

Process step	Deadline dates
AG submission of the additional IR responses subject to this ruling, including confidential material	October 2, 2015
Intervener evidence	October 6, 2015
IRs to interveners	October 20, 2015
IR responses from interveners	November 3, 2015
Rebuttal evidence	November 17, 2015

Bulletin 2015-09, Performance standards for processing rate-related applications, March 26, 2015.

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² Exhibit 20604-X0052.

Process step	Deadline dates
Oral Hearing	November 30 to December 4, 2015

5. During the oral hearing on December 3, 2015, the CCA requested that four engineering assessments for the steel mains replacement projects completed in 2014 be added to the record. The Chair reserved the panel's decision on the addition of the information to the record and informed parties that a written ruling would be released once the hearing concluded. On December 7, 2015, the Commission issued its ruling,³ finding that it would not direct ATCO Gas to file the engineering assessments on the record this proceeding. The Commission also established the following schedule for the remainder of the proceeding:

Process step	Deadline dates
Questions to ATCO Gas on undertakings provided during the oral hearing	December 10, 2015
Responses on undertakings by ATCO Gas	December 15, 2015
Argument	December 21, 2015
Reply argument	January 15, 2016

- 6. The Commission considers the record for this proceeding to have closed on January 15, 2016.
- 7. In reaching the determinations set out within this decision, the Commission has considered all relevant materials comprising the record of this proceeding, as well as findings in Decision 2012-237, Decision 2013-435, Decision 3267-D01-2015, and the related compliance decisions. Accordingly, references in this decision to specific parts of the records 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 records with respect to a particular matter.

2 Background

2.1 Overview of the capital tracker approach under PBR

8. On September 12, 2012, the Commission issued Decision 2012-237, approving PBR plans for the distribution utility services of certain Alberta electric and gas companies (collectively the distribution utilities), including ATCO Gas. The PBR plans were approved for a

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³ Exhibit 20604-X119.

Decision 2012-237: Rate Regulation Initiative, Distribution Performance-Based Regulation, Proceeding 566, Application 1606029-1, September 12, 2012.

Decision 2013-435: Distribution Performance-Based Regulation 2013 Capital Tracker Applications, Proceeding 2131, Application 1608827-1, December 6, 2013.

Decision 3267-D01-2015: ATCO Gas and Pipelines Ltd.2013 PBR Capital Tracker Refiling and True-up and 2014-2015 PBR Capital Tracker Forecast, Proceeding 3267, Application 1610634-1, March 19, 2015.

five-year term commencing January 1, 2013. PBR replaces traditional cost-of-service regulation as the annual rate-setting mechanism for distribution utility rates.

- 9. As set out in Decision 2012-237, the PBR framework provides a formula mechanism for the annual adjustment of rates for those companies under an approved PBR plan. In general, the rates are adjusted annually by means of an indexing mechanism that tracks the rate of inflation (I), which is relevant to the prices of inputs the companies' use, less an offset (X) to reflect the productivity improvements the company can be expected to achieve during the PBR plan period. As a result, with the exception of specifically approved adjustments, a utility's revenues are no longer linked to its costs. Companies subject to a PBR regime must manage their businesses and service obligations with the revenues derived under the PBR indexing mechanism and adjustments provided for in the formula. The PBR framework is intended to provide incentives for productivity increases and cost savings similar to those operating in competitive markets.
- 10. A company may apply for approval of certain rate adjustments to enable the recovery of specific costs where it can be demonstrated that the costs cannot be recovered under the I-X mechanism and where certain other criteria have been satisfied. These possible adjustments include an adjustment for certain flow-through costs that should be recovered from, or refunded to, customers directly (a Y factor), and an adjustment to account for the effect of material exogenous events for which the company has no other reasonable cost recovery or refund mechanism within the PBR plan (a Z factor). In addition, the Commission determined that a rate adjustment mechanism to fund certain capital-related costs may be required under the approved PBR plans. 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.
- 11. At paragraph 592 of Decision 2012-237, the Commission set out three criteria that any capital project or program would have to satisfy in order to 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.
- 12. 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 or program to receive consideration as a capital tracker.
- 13. The implementation and application of the above capital tracker criteria were considered in the 2013 capital trackers proceeding, leading to Decision 2013-435. The Commission indicated that the implementation methodology established in that decision would be used not

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⁷ Decision 2012-237, paragraph 586.

only to evaluate the capital tracker projects or programs proposed by the parties for 2013, but also for subsequent capital tracker applications throughout the PBR term.⁸

- 14. With respect to the first capital tracker criterion, the Commission concluded that, in general, in order for a capital project or program to be considered outside of the normal course of the company's ongoing operations, the utility would need to demonstrate that the revenue provided under the I-X mechanism in respect of that project or program would be insufficient to recover the entire revenue requirement associated with the prudent capital expenditures for the project or program. Accordingly, the Commission found that the concept of normal course is mainly a financial and accounting consideration, rather than strictly an engineering consideration. The Commission referred to this comparison of revenues as the "accounting test" component of Criterion 1. In addition, the Commission indicated the utility must demonstrate that a project or program proposed for capital tracker treatment is (i) required to provide utility service at adequate levels (also referred to as a need assessment) and, if so, (ii) the scope, level and timing of the project are prudent, and the forecast or actual costs of the project or program are reasonable. The Commission referred to this as the "project assessment" component of Criterion 1. Both the accounting test component and the project assessment component must be satisfied in order for a capital project or program to satisfy the requirements of Criterion 1.9
- 15. Regarding the accounting test component of Criterion 1, the Commission determined that this test should be based on the project net cost approach adopted in Decision 2013-435. Under this methodology, the revenue generated under the I-X mechanism for each capital project (or capital program or project category) is compared to the forecast revenue requirement associated with that capital project (or capital program or project category) in a PBR year. No consideration of operating and maintenance (O&M) costs or savings and potential productivity offsets above those implied by the approved X factor is required for the accounting test. The Commission provided further guidance on the weighted average cost of capital (WACC) rate assumptions of the accounting test in Decision 3434-D01-2015.
- 16. For purposes of the project assessment, the Commission determined that each project or program 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. In Decision 2013-435, the Commission set out certain minimum filing requirements that a project or program proposed for capital tracker treatment should typically address in order to assist the Commission's project assessment.¹¹ These minimum filing requirements were subsequently refined in Decision 3558-D01-2015.¹²
- 17. At paragraph 615 of Decision 2012-237, the Commission indicated that a company may choose to undertake a capital investment prior to applying for capital tracker treatment in a

⁹ Decision 2013-435, paragraphs 149-150.

⁸ Decision 2013-435, paragraph 120.

Decision 3434-D01-2015: Distribution Performance-Based Regulation, Commission-Initiated Review of Assumptions Used in the Accounting Test for Capital Trackers, Proceeding 3434, Application 1610877-1, February 5, 2015.

Decision 2013-435, paragraphs 1091-1092.

Decision 3558-D01-2015: Distribution Performance-Based Regulation, Commission-Initiated Proceeding to Consider Modifications to the Minimum Filing Requirements for Capital Tracker Applications, Proceeding 3558, Application 1611054-1, April 8, 2015.

subsequent annual capital tracker filing. The Commission further clarified at paragraph 48 of Decision 2013-435:

- 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. 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. The true-up mechanism with a prudence review also mitigates somewhat the incentive for companies to overstate the initial capital tracker forecasts. Nonetheless, the companies remained free to incur expenditures prior to applying for capital tracker approval. [footnotes removed]
- 18. With respect to Criterion 2, in Decision 2013-435, the Commission clarified that, in addition to asset replacement projects and projects required by an external party, in principle, a growth-related project will satisfy the requirements of Criterion 2. This is so where it can be demonstrated that the sum of the incremental revenues allocated to the project on some reasonable basis, the revenue provided under the I-X mechanism and any customer contributions to the project, are insufficient to offset the revenue requirement associated with the project in a PBR year.¹³ In certain circumstances, Criterion 2 may also permit 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.
- 19. Under Criterion 3, the Commission determined that applying a materiality threshold to that portion of the revenue requirement for a project that is not funded under the I-X mechanism is warranted. The Commission established a two-tier materiality threshold. The first tier of the materiality threshold, a "four basis point threshold," is to be applied at a project level (grouped in the manner approved by the Commission). The second tier of the materiality threshold, a "40 basis point threshold," is to be applied to the aggregate revenue requirement proposed to be recovered by way of all capital trackers.
- 20. Additionally, the Commission recognized the significance of the grouping of projects proposed for capital tracker treatment when it stated in paragraph 601 of Decision 2012-237:
 - 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.
- 21. In Decision 2013-435, the Commission elaborated that grouping of projects will require close scrutiny, since it will have a direct effect on the results of the accounting test and the project assessment under Criterion 1, as well as the assessment of materiality under Criterion 3.

Decision 2013-435, paragraph 309.

The Commission determined that the reasonableness of the grouping of capital projects is best assessed on a case-by-case basis for each company. The Commission indicated that it will require each company to provide sufficient justification for its proposed grouping of projects for capital tracker treatment.¹⁴

- 22. Finally, in Section 4.4 of Decision 2013-435, the Commission set out the K factor calculation methodology. Under the approved methodology, the K factor calculations sum the incremental revenue requirement amounts (i.e., additional to the amounts provided under the I-X mechanism) for each project or program approved for capital tracker treatment, as determined using the project net cost approach.
- 23. As set out in Decision 2012-237, 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. The Commission outlined the capital tracker true-up process as follows:
 - 975. ... 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.¹⁵
- 24. On true-up, a K factor adjustment will be made based on the actual dollars spent on the projects or programs approved for capital tracker treatment, with the difference between the approved forecast K factor amount and actual K factor amount refunded to, or collected from, customers.

2.2 ATCO Gas's prior capital tracker-related proceedings

- 25. Because the 2013 capital tracker proceeding leading to Decision 2013-435 had not yet been completed at the time the Commission established 2013 interim PBR rates in Decision 2013-072, ¹⁶ the Commission approved, on an interim basis, a 2013 capital tracker placeholder (K factor) for ATCO Gas, equal to 60 per cent of the applied-for K factor amount. Accordingly, ATCO Gas was directed to include in its 2013 PBR rates a K factor placeholder of \$5.71 million on an interim basis. ¹⁷
- 26. Similar interim K factor placeholders were approved by the Commission for each of 2014, 2015 and 2016. In Decision 2013-460, ¹⁸ the Commission approved on an interim basis a K factor placeholder in the amount of \$13.196 million to be included in ATCO Gas's 2014

Decision 2013-072: 2012 Performance-Based Regulation Compliance Filings, AltaGas Utilities Inc., ATCO Electric Ltd., ATCO Gas and Pipelines Ltd., ATCO Electric Distribution & Transmission Inc. and FortisAlberta Inc., Proceeding 2130, Application 1608826-1, March 4, 2013.

¹⁴ Decision 2013-435, paragraphs 403 and 406.

Decision 2012-237, paragraph 975.

Decision 2013-072, Table 1, paragraph 41.

Decision 2013-460: ATCO Gas and Pipelines Ltd., 2014 Annual PBR Rate Adjustment Filing, Proceeding 2826, Application 1609915-1, December 19, 2013.

PBR rates.¹⁹ In Decision 2014-363,²⁰ the Commission approved on an interim basis a 2015 K factor placeholder in the amount of \$34.95 million equal to 90 per cent of the proposed 2015 K factor.²¹ In Decision 20820-D01-2015,²² the Commission directed ATCO Gas to include a K factor placeholder in its 2016 PBR rates equal to 90 per cent of the proposed 2016 K factor.²³

- 27. In Decision 2013-435, dealing with the 2013 capital trackers, the Commission did not approve any of ATCO Gas's projects for capital tracker treatment because ATCO Gas did not use a project net cost approach in its 2013 capital tracker application. As a result, the Commission was unable to determine whether its programs proposed for capital tracker treatment satisfied the accounting test requirement of Criterion 1 and the materiality test under Criterion 3. Accordingly, the Commission directed ATCO Gas to retain its current 60 per cent K factor placeholder in its rates. Later, in Decision 2014-296, the Commission approved an increase in the placeholder amount to 90 per cent of the revenue associated with the 2013 and 2014 applied-for capital trackers. The Commission approved offsetting the collection of this 90 per cent K factor placeholder against the placeholder amounts owing to ratepayers as a result of Decision 2014-169.
- 28. In Decision 3267-D01-2015, the Commission dealt with ATCO Gas's 2013 K factor true-up and 2014-2015 K factor forecast applications. In accordance with the Commission's determinations in that decision, ATCO Gas filed a compliance filing to address the identified issues and Commission directions outlined in Decision 3267-D01-2015.²⁹ In the compliance filing leading to Decision 20385-D01-2015,³⁰ ATCO Gas updated its 2013 true-up K factor amount and its 2014-2015 forecast K factor amounts. As set out in that decision, the Commission approved a 2013 actual K factor amount of \$6.9 million in the north and \$2.7 million in the south and the associated total 2013 K factor true-up refund amount of \$9.4 million. The Commission also approved the 2014 forecast K factor of \$13.1 million in the north and \$5.9 million in the south, and a 2015 forecast K factor of \$21.0 million in the north and \$11.4 million in the south, on an interim basis pending future true-up proceedings.³¹

¹⁹ Decision 2013-460, paragraph 77.

Decision 2014-363: ATCO Gas 2015 Annual PBR Rate Adjustment Filing, Proceeding 3407, Application 1610837-1, December 19, 2014.

Decision 2014-363, paragraph 50.

Decision 20820-D01-2015: ATCO Gas Ltd., 2016 Annual Performance-based Regulation Rate Adjustment Filing, Proceeding 20820, December 21, 2015.

²³ Decision 20820-D01-2015, paragraph 59.

²⁴ Decision 2013-435, paragraph 701.

²⁵ Decision 2013-435, paragraphs 701-703.

²⁶ Decision 2013-435, paragraph 702.

Decision 2014-296: ATCO Gas and Pipelines Ltd., 2014 Interim Rates, Proceeding 3282, Application 1610653-1, October 24, 2014.

Decision 2014-169: ATCO Utilities (ATCO Gas, ATCO Pipelines and ATCO Electric Ltd.), 2010 Evergreen Proceeding for Provision of Information Technology and Customer Care and Billing Services Post 2009 (2010 Evergreen Application), Proceeding 240, Application 1605338-1, June 13, 2014 and Decision 2014-296, paragraphs 28-32.

²⁹ Decision 3267-D01-2015, Appendix 3.

Decision 20385-D01-2015: ATCO Gas and Pipelines Ltd., 2013 PBR Capital Tracker Refiling and True-up and 2014-2015 PBR Capital Tracker Forecast Compliance Application, Proceeding 20385, August 24, 2015.

Decision 20385-D01-2015, paragraph 8.

Commission process for reviewing 2014 capital tracker true-up and 2016-2017 capital tracker forecast

- 29. Subject to the modification explained below, the Commission's process for reviewing ATCO Gas's 2014 true-up and 2016-2017 forecast capital tracker application will largely follow the same steps set out in Section 3 of Decision 3267-D01-2015. Specifically, in Decision 3267-D01-2015, the Commission indicated that for capital tracker forecast purposes, for projects or programs previously approved for capital tracker treatment, the Commission will not undertake a reassessment of need under Criterion 1 in the absence of evidence that the project or program is no longer required.³²
- 30. In Decision 3267-D01-2015, the Commission approved the need for each project or program that ATCO Gas proposed for capital tracker treatment, as part of the project assessment component of Criterion 1, on either an actual basis for 2013 or on a forecast basis for 2014 and 2015.
- 31. While the Commission will be following the process set out in Section 3 of Decision 3267-D01-2015, for those projects where the Commission has previously determined that a capital tracker project is needed under the project assessment component of Criterion 1, the Commission will not revisit this determination in respect of 2016 and 2017 forecast projects and programs, unless there is evidence on the record of this proceeding demonstrating that a project or program is not required in 2016 or 2017. However, the second part of the project assessment component of Criterion 1 must still be considered so that the Commission can be satisfied that the scope, level, timing and costs of each project or program are reasonable on a forecast basis and prudent on an actual basis. This approach is consistent with the approach taken by the Commission in dealing with the 2013-2015 capital tracker applications from ATCO Electric Ltd., EPCOR Distribution & Transmission Inc. and FortisAlberta Inc.³³
- 32. Further, as set out in Section 6.2, for any completed capital tracker project where the Commission has previously approved the actual costs of the project and there are no forecast capital additions to be incurred, there is no need for the Commission, in subsequent capital tracker applications seeking to include the completed project in the K factor calculation, to reevaluate either the need for the completed project, or the prudence of the scope, level and timing of the completed project and associated costs as part of project assessment under Criterion 1. There is similarly no need to repeat the assessment under Criterion 2. However, the accounting test component of Criterion 1, as well as materiality assessments under capital tracker Criterion 3, are still required. The Commission will continue to undertake a project assessment for any capital tracker project, for which the actual costs were not previously approved by the Commission upon completion.
- 33. Consistent with the determinations at paragraph 975 of Decision 2012-237 referenced in Section 2, the Commission considers that for the purposes of the true-up of the 2014 capital tracker projects or programs for which the Commission confirmed the need as part of its project assessment in Decision 3267-D01-2015, if there is no evidence on the record of this proceeding demonstrating that a project or program was not required in 2014, then there is no need to again

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Decision 3267-D01-2015, paragraph 31.

See, for example Section 3 of Decision 3220-D01-2015: FortisAlberta Inc. 2013-2015 PBR Capital Tracker Application, Proceeding 3220, Application 1610570-1, March 5, 2015.

demonstrate that a project or program was needed in order to provide utility service at adequate levels in 2014. However, the second part of the project assessment under Criterion 1 is still required so that the Commission can be satisfied that the scope, level and timing of each project or program was prudent, and the actual costs of the project or program were prudently incurred.

- 34. The Commission also considers that for the purposes of the true-up of the 2014 capital tracker projects or programs for which the Commission undertook and approved the assessment against the Criterion 2 requirements in Decision 3267-D01-2015, there is also no need to undertake a reassessment of the project or program against the Criterion 2 requirements unless the driver for the project or program has changed. However, the Commission will still undertake an assessment of the 2014 capital tracker projects and programs with respect to Criterion 3.
- 35. With respect to forecast capital projects or programs for 2016 and 2017 for which the company is seeking capital tracker treatment, the Commission will generally undertake assessments with respect to all three criteria for capital tracker treatment. However, in those instances where a project or program is part of an ongoing, multi-year program, or if a project or program is of an annual, recurring nature for which the need has been previously approved by the Commission for purposes of capital tracker treatment, in the absence of evidence that the ongoing or recurring project or program is no longer required, the Commission will not undertake a reassessment of need under Criterion 1. However, the second part of the project assessment component of Criterion 1 must still be demonstrated so that the Commission can be satisfied that the scope, level, timing of each project or program is prudent, and that the forecast costs of the project or program are reasonable.
- 36. With respect to capital tracker projects and programs that have not been previously considered by the Commission and are requested on a forecast basis for 2016 or 2017, ATCO Gas calculated the K factor revenue requirement calculations for these projects and programs by incorporating the 2013 to 2014 actual and 2015 forecast capital additions for these projects or programs. In the absence of any evidence that the prior capital additions for the project were not reasonable, given the incentives under the I-X mechanism, the Commission will accept these prior year capital additions for purposes of calculating the second component of the accounting test. In making this determination, the Commission recognizes that the company was motivated to minimize costs with respect to capital projects funded pursuant to the revenues received under the I-X mechanism and that the company provided variance explanations in the business case for the actual expenditures over the most recent five-year period. These pre-capital tracker additions to rate base, however, will be included in the prudence review at the time of rebasing for purposes of establishing the going-in rates for the next generation PBR plan or in a general rate application (GRA).
- 37. Similarly, for capital tracker projects or programs for which the Commission undertook and approved the assessment against the Criterion 2 requirements in prior capital tracker decisions, there is no need to undertake a reassessment of the project or program against the Criterion 2 requirements unless the driver for the project or program has changed. However, the Commission will undertake assessments with respect to the materiality Criterion 3.
- 38. Section 4 of this decision provides an overview of the projects or programs for which ATCO Gas is seeking capital tracker treatment in 2014 on an actual basis and in 2016-2017 on a forecast basis. The evaluation of ATCO Gas's proposed capital project groupings is set out in Section 5. The individual assessment of ATCO Gas's projects or programs proposed for capital

tracker treatment pertaining to Criterion 1 is set out in Section 6. Section 7 deals with the project assessment and the accounting test, respectively. The Commission's assessment under Criterion 2 is undertaken in Section 8 and the assessment under Criterion 3 is set out in Section 9. Section 10 addresses the K factor calculation methodology and the K factor true-up for 2014, as well as K factor forecasts for 2016 and 2017. Finally, ATCO Gas's compliance with previous Commission directions is discussed in Section 11.

4 Summary of projects included in the 2014 capital tracker true-up and the 2016-2017 capital tracker forecast application

- 39. ATCO Gas's application was filed as Exhibit 20604-X0009. The individual business cases, included as a part of the application were filed as Exhibit 20604-X0003 and Exhibit 20604-X0004. The schedules setting out ATCO Gas's capital tracker model for the years 2014 (on an actual basis), 2016 and 2017 (on a forecast basis) was filed as Exhibit 20604-X0007.
- 40. As part of the 2014 capital tracker true-up, ATCO Gas applied for the true-up of 11 projects or programs approved by the Commission for capital tracker treatment on a forecast basis in Decision 3267-D01-2015, with subsequent updates in the compliance filing Decision 20385-D01-2015.
- 41. As discussed earlier in Section 2.1, in Decision 2012-237³⁴ and in Decision 2013-435,³⁵ the Commission indicated that a company may choose to undertake a capital investment prior to applying for capital tracker treatment. In other words, capital tracker treatment may be granted on the basis of actual capital expenditures, without prior approval of capital forecasts for a project.
- 42. The projects and programs included in the 2014 capital tracker true-up and the resulting variance from approved forecast, resulting in a K factor true-up for 2014, are set out in the table below:

Table 1. Applied-for 2014 K factor true-up adjustments³⁶

	2014 con	npliance	2014	actual	Vari	ance
Projects or programs	North	South	North	South	North	South
				(\$000)		
Steel Mains Replacement	5,574	643	5,220	433	(354)	(210)
Plastic Mains Replacement	2,212	3,390	2,287	3,288	75	(103)
Transmission Driven	814	211	822	185	9	(26)
Meter Relocation and Replacement	1,481	128	1,172		(309)	(128)
Line Heater Reliability	235		232		(3)	
Regulating Metering Station Improvements	587		544		(44)	
New Urban Service Lines		222		164		(58)
Service Line Replacements and Improvements	774	1,156	769	1,163	(6)	7

Exhibit 20604-X0009, application, Table 1.

10 • Decision 20604-D01-2016 (April 14, 2016)

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³⁴ Decision 2012-237, paragraphs 614-615.

³⁵ Decision 2013-435, paragraph 48.

	2014 con	npliance	2014	actual	Vari	ance
Projects or programs	North	South	North	South	North	South
				(\$000)		
New Regulating Meter Stations	238		252		14	
Urban Main Improvements	191				(191)	
Urban Main Relocations	1,007	128	839		(169)	(128)
Total applied-for K factors	13,113	5,878	12,137	5,233	(977)	(645)

- 43. As part of the 2016-2017 capital tracker forecast, ATCO Gas applied for capital tracker treatment for 15 capital projects or programs in either or both of the years 2016 and 2017. Of these, 14 projects or programs were previously approved for capital tracker treatment in either Decision 2013-435 or Decision 3267-D01-2015. The remaining program for emergency supply has not been previously approved for capital tracker treatment and will be addressed separately in this decision.
- 44. Table 2 below summarizes ATCO Gas's applied-for 2016 and 2017 capital trackers, the portion of the K factor adjustments related to each capital tracker project or program, and the total applied-for K factor adjustment for each of 2016 and 2017:

Table 2. Applied-for 2016 and 2017 K factors³⁷

	2016 f	orecast	2017 f	orecast
Projects or programs	North	South	North	South
		(\$	000)	
Steel Mains Replacement	9,723	2,025	12,229	3,186
Plastic Mains Replacement	6,212	8,362	8,335	10,868
Transmission Driven	5,373	3,749	7,522	7,216
Meter Relocation and Replacement	1,374	248	924	
Line Heater Reliability	920	275	1,297	690
Cathodic Protection	302	199	390	302
Regulating Metering Station Improvements	291		339	
New Urban Service Lines		769		948
Service Line Replacements and Improvements	1,328	2,144	1,601	2,631
New Regulating Meter Stations	600	217	786	290
Urban Main Extensions	362		703	
Urban Main Improvements	419	174	559	273
Urban Main Relocations	1,664	144	2,136	194
Rural Main Extensions and Service Lines	297		399	
Emergency Supply		167		165
Total applied-for K factors	28,867	18,472	37,219	26,763

5 Grouping of projects for capital tracker purposes

45. In Decision 2013-435, the Commission determined that the accounting test (Criterion 1) and the first-tier of the materiality test (Criterion 3) will be applied to the approved groupings (i.e., either at a project or at a program level). The Commission also indicated that while the

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Exhibit 20604-X0009, application, Table 2.

project assessment 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 additions and the reasonableness of the forecast costs. The second-tier of the materiality test will be applied at the level of all capital tracker projects, in the aggregate.³⁸ The Commission also determined that the reasonableness of the grouping of capital projects is best assessed on a case-by-case basis for each company.³⁹

- 46. In its current application, ATGO Gas has maintained the same project groupings as proposed in its previous capital tracker application. In Decision 2013-435 and Decision 3267-D01-2015, the Commission approved a number of ATCO Gas's project groupings. To the extent that the project groupings in the present 2016-2017 forecast capital tracker and 2014 true-up application are the same as approved in Decision 2013-435 or Decision 3267-D01-2015, the Commission will not re-evaluate those project groupings. The following project groupings have been previously approved:
 - Steel Mains Replacement (SMR)
 - Plastic Mains Replacement (PMR)
 - Meter Relocation Replacement program (MRRP)
 - Line Heater Reliability, previously Line Heater Replacements
 - Transmission Driven Capital⁴¹
 - Cathodic Protection
 - Rural Main Replacements and Relocations
 - Service Line Replacements and Improvements
 - Transportation Equipment
 - Rural Main Extensions and Service Lines⁴²
- 47. In Decision 3267-D01-2015, the Commission found that more information was required in relation to the following applied-for project groupings: Regulating Metering Station Improvements, New Regulating Meter Stations, Meter Set Improvements, Meters and Instruments, Regulators and Meter Installations, Urban Main Extensions, and New Urban Service Lines. While the Commission approved these applied-for project groupings for the purposes of that decision, the Commission also directed ATCO Gas to reassess its project groupings and explain the reasons for its decision to change or maintain the groupings in its next capital tracker application.⁴³
- 48. The Commission further directed ATCO to consider the possibility of grouping the five new metering related projects and programs into a single group. In response to the Commission's direction with respect to metering related projects and programs, ATCO Gas submitted that each these programs should be grouped separately. ATCO Gas noted that the

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Decision 2013-435, paragraph 407.

³⁹ Decision 2013-435, paragraph 406.

Exhibit 20604-X0009, application, paragraph 31.

⁴¹ Decision 2013-435, paragraph 605, Table 11.

⁴² Decision 3267-D10-2015, paragraph 105.

Decision 3267-D01-2015, paragraphs 102 and 104.

Decision 3267-D01-2015, paragraph 102.

nature of the work is significantly different across these five programs and that the programs are forecast and managed separately.⁴⁵

- 49. Regarding Regulating Metering Station Improvements and New Regulating Meter Stations programs, ATCO Gas explained that high pressure gas from the transmission system is reduced to distribution pressure at a regulating meter station, but that new stations are grouped separately from station improvements because the drivers for this work are different. ATCO Gas noted that the primary driver of the New Regulating Meter Stations program is growth, while the primary driver of the Regulating Metering Station Improvements program is aging assets.⁴⁶
- 50. With respect to the Regulators and Meter Installations and Meter Set Improvements programs, ATCO Gas explained that gas passes through a meter set when it is delivered to customers, but that new meter sets are tracked separately from the cost to improve meter sets because the drivers are different. ATCO Gas noted that the primary driver of the Regulators and Meter Installations program is growth, while the primary driver of the Meter Set Improvements program is aging assets or, in some cases, a significant change to a customer's natural gas requirements.⁴⁷
- 51. In an IR, the Commission inquired why, given that these two sets of programs have similar drivers, the New Regulating Meter Stations and Regulators and Meter Installations programs should not be considered as a single project grouping, and why the Regulating Metering Station Improvements and Meter Set Improvements programs should not be considered as a single project grouping. In its response, ATCO Gas submitted that the nature of the work in the New Regulating Meter Stations and Regulator and Meter Installation programs is significantly different. ATCO Gas responded that a Regulating Meter Station project would include a complex construction project to build a facility required to connect to the transmission pipeline, at a potential cost ranging from \$100,000 to more than one million dollars. In contrast, a Regulator and Meter Installation project would consist of a meter set, which is the piping and regulator, but not the meter itself, and allows for the delivery of gas to the end-use customer premise at an average unit cost of \$250. In both cases, the two sets of programs that have similar drivers have additional features that distinguish one program from the other because one program utilizes a station to connect the transmission pipeline to the distribution system and the other program allows for the delivery of gas to the end-use customer. Further, ATCO Gas disagreed with the characterization of the drivers of the Regulating Metering Station Improvements and Meter Set Improvements programs as being the same.⁴⁸
- 52. Regarding the last program, ATCO Gas explained that the cost of purchasing meters is tracked in the Meters and Instruments program. ATCO Gas has a meter shop that is accredited by Measurement Canada where meters are purchased, installed and replaced as required to meet Measurement Canada regulations.⁴⁹
- 53. In Decision 3267-D01-2015, the Commission also directed ATCO Gas to consider the possibility of grouping Urban Main Extensions and New Urban Service Lines into a single

Exhibit 20604-X0009, application, paragraph 22.

Exhibit 20604-X0009, application, paragraph 19.

Exhibit 20604-X0009, application, paragraph 20.

⁴⁸ Exhibit 20604-X0027, AG-AUC-2015AUG17-036.

Exhibit 20604-X0009, application, paragraph 21.

project grouping.⁵⁰ ATCO Gas considered the nature of the work as significantly different across these two programs. ATCO Gas explained that urban mains are installed to serve all customers of a subdivision when construction of a new subdivision is initiated by a developer. Conversely, urban service lines are driven by the construction of a single home or business. The Rural Main Extensions and Service Lines program contains both main extensions and service lines because in rural areas, the main and service line are often constructed at the same time at the request of an individual customer.⁵¹

54. Interveners did not raise any issues with ATCO Gas's project groupings in argument or reply argument.

Commission findings

- 55. As noted above, the Commission previously accepted a number of ATCO Gas's project groupings in Decision 2013-435 and Decision 3267-D01-2015. To the extent that the project groupings in the present application are the same as approved in Decision 2013-435 or Decision 3267-D01-2015, the Commission does not need to re-evaluate those project groupings in this decision, except to the extent that issues related to those project groupings arose in this proceeding.
- 56. In Decision 2013-435, the Commission provided guidance on how capital projects and programs should be grouped. The Commission indicated that grouping must allow for a "meaningful application of the accounting test and materiality test" and that grouping would be assessed on a case-by-case basis for individual companies. The Commission further indicated that projects or programs must be "sufficiently similar in nature to warrant grouping into a single program."53 Expressed another way, the projects or programs proposed for grouping must be "similar in nature or function and have a common requirement for capital investment." ⁵⁴ The Commission noted that geographic location alone is not a sufficient justification to consider projects or programs as being dissimilar.55 It also indicated that projects and programs should ordinarily be grouped, where applicable, in a manner "consistent with historical project classifications in cost-of-service applications."56 The Commission added other factors to consider when assessing grouping, such as whether the component projects grouped together have a "common driver"⁵⁷ or whether a project is sufficiently "unique and substantial"⁵⁸so as to merit grouping on a stand-alone basis. Where a grouping of similar projects or programs into a capital tracker of a certain nature may be otherwise acceptable, the grouping may nevertheless be denied if the supporting information is not sufficiently disaggregated to allow for a "reasonable assessment of the forecast or actual capital expenditures" for each of the included project or program categories.

Decision 3267-D10-2015, paragraph 104.

Exhibit 20604-X0009, application, paragraphs 25-28.

⁵² Decision 2013-435, paragraph 1001.

⁵³ Decision 2013-435, paragraph 839.

Decision 2013-435, paragraph 711.

⁵⁵ Decision 2013-435, paragraph 837.

⁵⁶ Decision 2013-435, paragraph 1001.

⁵⁷ Decision 2013-435, paragraph 616.

⁵⁸ Decision 2013-435, paragraph 1003.

Decision 2013-435, paragraph 1002.

- 57. In Decision 2012-237 and Decision 2013-435, the Commission recognized the significance of project grouping and commented on the grouping incentives that result from the capital tracker mechanism. In Decision 3220-D01-2015, it further commented on these incentives as follows:
 - 54. Grouping projects for the sole purpose of either minimizing or maximizing the capital tracker revenue is contrary to the PBR decision. The Commission recognizes that a company has an incentive to group together those projects that produce a positive accounting test, but are individually below the first tier of the materiality threshold as an applied-for tracker in order to exceed the materiality threshold on a collective basis. A company also has an incentive to group a project that is below the first tier of the materiality threshold with another group that exceeds the threshold. In addition, a company has an incentive to isolate projects for which the accounting test is negative to avoid providing any offset to the K factor calculation in the accounting test.⁶⁰
- 58. Where historical groupings are employed in determining groupings for capital tracker purposes, there is little reason to question whether the company has manipulated the grouping of projects. Grouping on a historically consistent basis may not be sufficient, however, for capital tracker grouping purposes. Historical groupings have been done for a number of accounting, organizational and business reasons, and may not be suitable for determining whether particular projects or programs should be grouped together for capital tracker purposes. Accordingly, the Commission may determine that such historical groupings should be altered or refined.
- 59. In determining the correct grouping to be used by ATCO Gas, it is important to consider the logic behind the accounting test, which the Commission stated in Decision 2013-435 was "... to compare the forecast or actual revenue requirement for [a] project to the going-in revenue historically associated with a similar type of capital expenditures...." Any grouping that attempts to match current capital expenditures with going-in revenues that, historically, are not similar in nature would undermine the purpose of the accounting test. Having groupings that are highly aggregated could have this effect by making revenue requirement comparisons for similar types of expenditures difficult or meaningless. Conversely, having groupings that are highly disaggregated is also an issue because relevant historical costs will not be adequately captured in the accounting test. For this reason, it is important to ensure that capital expenditures with going-in revenues that are historically similar in nature are adequately grouped together.
- 60. Project grouping is an accounting exercise. As such, the optimal manner by which a group of projects is managed by ATCO Gas is not a valid reason to group the projects for capital tracker treatment. Regardless of project groupings, the company should continue to operate its business in the most efficient manner.
- 61. Regarding the five meter programs, the Commission is persuaded by ATCO Gas's explanations provided that the programs are substantially different as evidenced by the fact that not all programs actually involve meters and hence, do not have the same asset types. The Regulating Metering Station Improvements and New Regulating Meter Stations programs involve the meter stations, which are required to connect the transmission pipeline to the distribution system. The Regulators and Meter Installations program involves a meter set, which includes the piping and regulator, but not the meter itself. The Meters and Instruments program

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⁶⁰ Decision 3220-D01-2015, paragraph 54.

⁶¹ Decision 2013-435, paragraph 262.

involves the actual purchase of meters. The programs as presented to the Commission by ATCO Gas are not similar in nature for grouping purposes. For this reason, the Commission accepts that the five meter programs should not form a single project grouping.

- 62. The Commission further explored the possibility of grouping the Regulating Metering Station Improvements, New Regulating Meter Stations, Meter Set Improvements, and Regulators and Meter Installations programs into two project groupings, each containing two programs. The first two programs involve a station that is required to connect the transmission pipeline to the distribution system, and latter two of these programs allows for the delivery of gas to the end-use customer. In terms of drivers, New Regulating Meter Stations and Regulators and Meter Installations are driven by growth and Regulating Metering Station Improvements program and the Meter Set Improvements program are driven by a significant change to a customer's natural gas requirements. While some meter programs have the same drivers and others have the same asset type, no two programs had both the same drivers and the same asset types. Accordingly, the Commission approves ATCO Gas's individual project groupings of each of these four meter programs.
- 63. In addition, in Proceeding 3267, there was a discussion regarding the ability to disaggregate the Meters and Instruments program in order to assign costs to specific programs in which the meters were deployed. In Decision 3267-D01-2016, the Commission recognized that it may not be feasible to split the costs of this program into different categories and accordingly, found ATCO Gas would not be required to allocate the costs of meters to the associated programs in which they belonged. Given that the other meter programs have been approved as separate project groupings, the Commission approves the separate grouping of the Meters and Instruments program, as filed.
- 64. Regarding the Urban Main Extensions and New Urban Service Lines programs, these programs are similar in nature and have a similar requirement for capital investment. However, the Commission accepts ATCO Gas's explanation that service lines are installed at the request of customers whereas mains are installed at the request of developers. The installations under these programs are different from the Rural Main Extensions and Service Lines program, under which both mains and service lines are installed together at the request of a customer. As a result of these differences, the Commission considers the Urban Main Extensions and New Urban Service Lines programs to be sufficiently unique so as to merit separate capital tracker groupings. The Urban Main Extensions and New Urban Service Lines programs are approved as separate project groupings for the purposes of the first PBR term.
- 65. In Decision 3267-D01-2016, the Commission approved separate project groupings for the Urban Feeder Mains, Urban Main Improvements and Urban Main Relocations programs for the purposes of that decision only. ⁶⁴ No issues related to these groupings arose in this proceeding. As a result, the Commission accepts the separate project grouping of these three programs for the purposes of this decision. However, the Commission considers that on a go forwards basis further information regarding the grouping in these programs is required as it considers that these programs may not be sufficiently distinct to justify continued separation of each of these

Proceeding 3267, Exhibit 0090.01.ATCO GAS-3267, ATCO Gas argument, paragraphs 71-75.

⁶³ Decision 3267-D01-2016, paragraph 93.

Decision 3267-D01-2016, paragraph 103.

programs and resulting groups in future years. Accordingly, ATCO Gas is directed to consider, in its next capital tracker application, the possibility of grouping the Urban Feeder Mains, Urban Main Improvements, and Urban Main Relocations programs into a single grouping. If it remains unwarranted to group these programs into a single grouping, ATCO Gas shall provide its rationale with supporting evidence on why these programs are dissimilar for capital tracker purposes.

66. For the purpose of this decision, the Commission accepts ATCO Gas's grouping of projects, as proposed in this application. Accordingly, the accounting test and the first tier of the materiality test is to be applied to ATCO Gas's projects and programs proposed for capital tracker treatment, as filed. With respect to the project assessment component of Criterion 1, the Commission will assess in the remaining sections of this decision the large projects embedded in each of ATCO Gas's programs because, even though individual projects within a program may address similar issues, each project may be sufficiently independent that it requires individual justification.

6 Project assessment under Criterion 1 – The project must be outside of the normal course of the company's ongoing operations

- 67. As discussed in Section 3 of this decision, consistent with paragraph 150 of Decision 2013-435, each of ATCO Gas's projects or programs proposed for capital tracker treatment will be evaluated against the project assessment requirements of Criterion 1. The purpose of the project assessment component of Criterion 1 is to demonstrate that a project proposed for capital tracker treatment is required in order to maintain utility service at adequate levels, as required by paragraph 594 of Decision 2012-237, and that the actual scope, level, and timing of the project are prudent and that costs of the project are reasonable for forecast projects and prudent for completed projects.
- 68. ATCO Gas's capital trackers applied for in this application can be broadly divided into two categories. The first category is composed of applied-for projects or programs previously approved for capital tracker treatment in Decision 3267-D01-2015. As set out in Section 4 of this decision, this category includes all of the projects or programs comprising the 2014 true-up and the majority of projects or programs forming part of the 2016 and 2017 forecasts. The second category is composed of the new program, Emergency Supply, proposed to be implemented in 2016 or 2017 that has not been previously approved for capital tracker treatment.
- 69. ATCO Gas provided a business case for its new Emergency Supply program proposed for capital tracker treatment in 2016 and 2017. For projects or programs that were previously approved by the Commission, ATCO Gas provided project updates. In its business cases and project updates, as supplemented by other evidence filed in the proceeding, ATCO Gas has generally provided an assessment of its proposed capital tracker projects consistent with the minimum filing requirement guidelines set out in Decision 3558-D01-2015.
- 70. The Commission has evaluated ATCO Gas's business cases, engineering studies, cost related information, and related evidence and argument against each of the project assessment minimum filing requirements. However, for the purposes of this decision, the Commission has commented only on those aspects of the minimum filing requirements that the Commission considers are insufficiently addressed by ATCO Gas's evidence or were otherwise raised as an

issue in the proceeding. In future capital tracker applications, ATCO Gas should continue to provide similar information with respect to each of the minimum filing requirements, including business cases, engineering studies and cost related information, including costs by cost category, unit costs and historical cost comparators, in sufficient detail to allow an evaluation of the reasonableness of its forecasts and the prudence of its incurred costs.

71. The balance of this section is organized as follows: Section 6.1 deals with common issues related to the project assessment of ATCO Gas's projects or programs, which are inflation assumptions, overhead allocations, affiliate transactions, the company's internal cost controls and accountability mechanisms with respect to quality, safety and cost for capital projects approved for capital tracker treatment, and the 2015 current estimate. The Commission's project assessment under Criterion 1 of ATCO Gas's projects or programs previously approved for capital tracker treatment in Decision 3267-D01-2015 is set out in Section 6.2. The project assessment of ATCO Gas's projects or programs that have not been previously approved for capital tracker treatment in Decision 3267-D01-2015 is set out in Section 6.3.

6.1 Common issues

6.1.1 Controls and accountability

- 72. Regarding controls and accountability, at paragraph 661 of Decision 3267-D01-2015, the Commission stated:
 - 661. The Commission considers that formal project management policies and procedures are necessary to ensure the Commission understands that the scope, level, timing and costs of forecast capital projects are reasonable and actual costs have been prudently incurred. The Commission takes comfort in the fact that the PMBOK [Project Management Body of Knowledge] is a current project management guide and encourages ATCO Gas to continue to use to it to refine project management practices.
- 73. In the application, ATCO Gas described its capital project delivery practices, including a set of standardized project management policies and procedures, which ATCO Gas stated were used to complete all of its capital projects safely and in a timely manner, and to ensure that costs were prudently incurred. In undertaking any capital project, ATCO Gas also stated that it uses a variety of means to ensure decisions made and costs incurred are reasonable at the time they are made, that projects are delivered prudently given the information available at the time, and that actions taken are appropriate for both ATCO Gas's distribution system and its customers. In doing so, ATCO Gas indicated that it applies principles of project management consistent with the Project Management Institute's (PMI's) recommended methodologies in the PMBOK guide.
- 74. ATCO Gas detailed the following policies and procedures relating to its project management phases: identification, initiation, planning, execution, monitoring and control, and closure. The project execution phase, ATCO Gas described its use of contractor resources including in-house resources, contractor pre-qualification, pre-bid meeting and submission of bids, contractor capacity and the best cost determinations, contractor security and development, and material supplier pre-qualification process. ATCO Gas explained its process

Exhibit 20604-X0009, application, paragraph 527.

Exhibit 20604-X0009, application, paragraph 528.

Exhibit 20604-X0009, application, paragraphs 533-569.

improvement practice used to develop and improve its program and program management processes. 68

Commission findings

75. The Commission has reviewed ATCO Gas's project management policies and procedures in light of the Commission's findings in paragraph 661 of Decision 3267-D01-2015. In this application, ATCO Gas provided an explanation of its controls and accountability procedures with respect to project identification, initiation, planning, execution, monitoring and control, and closure of its capital projects, as evidence of whether the scope, level, timing and costs of forecast capital projects are reasonable and the actual costs are prudently incurred. Accordingly, the Commission finds that ATCO Gas has complied with the direction set out at paragraph 661 of Decision 3267-D01-2015. In future capital tracker applications, ATCO Gas is directed to continue providing its formal management policies and procedures and identify any changes from the previous year.

6.1.2 Inflation rates

76. ATCO Gas used the following inflation factors for its 2016 and 2017 capital tracker forecasts, which it separated into labour and non-labour components:

Table 3. 2016-2017 inflation

	2016	2017
Occupational labour	3.75%	3.50%
Supervisory labour	3.50%	3.50%
Materials, equipment and contractor	2.50%	2.50%

- 77. ATCO Gas explained that the occupational labour inflation rate of 3.75 per cent in 2016 is the actual rate of increase specified in ATCO Gas's 2014 collective bargaining agreement for occupational labour staff. ATCO Gas indicated that these types of collective bargaining agreements are typically in effect for two to three years, and that the 2014 collective bargaining agreement expires on December 31, 2016. In an information response to the Commission, ATCO Gas clarified that the 2014 collective bargaining agreement provided an inflation rate of 3.50 per cent for both 2014 and 2015. As specified in the information response, the increases from 2014 to 2016 represented the average inflationary increase and did not include step or progression increases.
- 78. ATCO Gas also used a 3.50 per cent forecast inflation rate for occupational labour in 2017 based on a three-year average of the Average Weekly Earnings (AWE) index.⁷⁴ In the hearing, Ms. Berger, on behalf of ATCO Gas, stated that collective bargaining negotiations for 2017 are expected to commence in the fall of 2016.⁷⁵

Exhibit 20604-X0009, application, paragraph 570.

Exhibit 20604-X0009, application, paragraph 96.

Exhibit 20604-X0009, application, paragraph 97.

⁷¹ Exhibit 20604-X0027, AG-AUC-2015AUG17-040(h).

⁷² Exhibit 20604-X0027, AG-AUC-2015AUG17-040(a).

⁷³ Exhibit 20604-X0027, AG-AUC-2015AUG17-040(a).

⁷⁴ Exhibit 20604-X0027, AG-AUC-2015AUG17-040(b).

Transcript, Volume 2, page 281, lines 10-17 (Ms. Berger).

79. For supervisory employees, ATCO Gas used the inflation rate of 3.50 per cent for both 2016 and 2017, also based on a three-year average of the AWE index. ATCO Gas explained that over the last three years, the AWE index has experienced an average growth of 3.50 per cent. Based on this examination, ATCO Gas stated that the resulting increase of 3.50 per cent provides a reasonable assumption for salary inflation. In response to a Commission IR, ATCO Gas further noted that it would not adjust its application to reflect a higher inflation forecast, and that the forecast inflation would be trued-up to actual inflation in a future true-up application. ATCO Gas explained that, while there are a number of publications that can be relied to determine inflation factors, including AWE, it did not rely on the Conference Board of Canada and Wynford Group inflation forecasts for its supervisory labour rate forecasts, as was done in Decision 3267-D01-2015. ATCO Gas provided the following two tables of external sources for forecasting inflation:

Table 4. ATCO Gas's updated forecasts of inflation from external sources⁷⁸

Key Economic Indicators – CPI* Alberta	Date of forecast	2016 forecast	2017 forecast
Conference Board of Canada	Feb-15	2.20%	2.00%
Alta Provincial Budget 2015	Mar-15	1.50%	1.70%
TD Bank	Apr-15	2.00%	2.00%
RBC Financial Group	Jun-15	2.40%	2.40%
Average		2.03%	2.03%

^{*}Consumer Price Index.

	Date of	2016	2017
Key Economic Indicators – AWE Alberta	forecast	forecast	forecast
Conference Board of Canada	Feb-15	2.20%	3.00%
Alta Provincial Budget 2015	Mar-15	2.20%	2.40%
Wynford Group (2015 only)	Jun-15	2.80%	2.80%
3-year average AWE Index	Average	3.50%	3.50%
Average		2.68%	2.93%

- 80. Instead, ATCO Gas submitted that, based on the company's best judgment, the three-year AWE index provides the best reflection of future anticipated inflation for occupational and supervisory for 2016 and 2017.⁷⁹ As the supervisory inflation is reviewed annually, ATCO Gas relied on economic outlooks and historical averages to forecast this inflation.⁸⁰ ATCO Gas submitted that the three-year average provides a reasonable assumption for determining salary inflation for 2016 and 2017 in the circumstances.⁸¹
- 81. ATCO Gas used an inflation forecast of 2.5 per cent for materials, equipment and contractor costs in 2016 and 2017. To determine this forecast inflation, ATCO Gas examined the actual rate of inflation it experienced from 2012-2014 on its procured costs of 2.9 per cent as

Exhibit 20604-X0009, application, paragraph 97.

⁷⁷ Exhibit 20604-X0027, AG-AUC-2015AUG17-040(e)-(g).

⁷⁸ Exhibit 20604-X0040, AG-UCA-2015AUG17-009(d).

⁷⁹ Exhibit 20604-X0027, AG-AUC-2015AUG17-040(d).

⁸⁰ Exhibit 20604-X0027, AG-AUC-2015AUG17-040(h).

⁸¹ Exhibit 20604-X0027, AG-AUC-2015AUG17-040(d).

well as the Alberta CPI experienced in 2014 of 2.6 per cent.⁸² ATCO Gas submitted that its inflation rate for materials, equipment and contractor costs of 2.5 per cent in 2016 and 2017 respectively reflects a conservative expectation of inflation for these categories.⁸³

Commission findings

- 82. The Commission recognizes that a portion of ATCO Gas's labour and salary costs are based on the negotiated results of collective bargaining agreements between ATCO Gas and employee unions. As discussed above, these collective bargaining agreements will expire on December 31, 2016.
- 83. Regarding the labour inflation rate for 2016 of 3.75 per cent, the Commission recognizes that this rate was negotiated in the 2014 collective bargaining agreement. Accordingly, the Commission approves the 2016 occupational labour inflation rate, as filed. The Commission also approves the occupational labour rate for 2017, which is based on a three-year average of the AWE index, and is slightly lower than the 2016 forecast, and is the same as inflation that was forecast for 2014-2015.
- 84. Under PBR, the non-union salary costs are common to forecasting both O&M salary expenses and capital expenditures for projects that are fully funded under the I-X mechanism, and those that require incremental funding through capital trackers. Given that these salary costs are common costs, the Commission recognizes there remains an incentive for ATCO Gas to minimize these costs in order to realize potential cost savings under PBR.
- 85. The Commission agrees that using the labour inflation rates negotiated in the latest collective bargaining agreement along with the slightly lower rate of inflation for management staff is reasonable in the circumstances of the present proceeding. For occupational labour rate, the methodology for determining the forecast inflation rate using a three-year average of the AWE index is reasonable. The Commission also approves ATCO Gas's use of the AWE index for the supervisory labour inflation forecast.
- 86. The Commission finds that it is reasonable for ATCO Gas to base its inflation rate of 2.5 per cent for materials, equipment and contractor costs on the actual rate of inflation from 2012-2014 for procured costs of 2.9 per cent and the Alberta CPI in 2014 of 2.6 per cent. Accordingly, the Commission finds the ATCO Gas inflation rates to be reasonable for the purposes of forecasting costs associated with proposed capital tracker expenditures. The inflation rates are approved, as filed.

6.1.3 Allocated indirects (overheads)

87. ATCO Gas provided the following table in the application, outlining its overhead allocation amounts based on capital funded by way of capital trackers and through the I-X mechanism:

Exhibit 20604-X0009, application, paragraph 98.

Exhibit 20604-X0009, application, paragraph 98.

Table 5. ATCO Gas's 2012 to 2017 allocated indirects⁸⁴

	2012 actual	2013 actual	2014 actual	2015 approved ⁽¹⁾	2015 forecast	2016 forecast	2017 forecast		
		(\$000)							
Contractor charges	5,034	3,881	2,986	3,224	3,013	3,034	2,745		
IT* support	3,308	3,493	3,622	3,605	3,779	3,830	3,856		
Staff expenses	1,678	1,821	1,504	1,844	1,707	1,732	1,692		
Materials	1,475	1,610	1,581	1,768	1,409	1,447	1,403		
Equipment	950	1,181	999	1,095	1,002	1,026	1,024		
TOTAL	12,445	11,986	10,692	11,536	10,910	11,069	10,720		
I-X (per Schedule A4)		1.0171	1.0159	1.0149	1.0149	1.0149	1.0149		
2012 approved indexed by I-X	10,665 ⁽¹⁾	10,847	11,020	11,184	11,184	11,350	11,520		
Higher/(lower) than I-X		1,139	(328)	352	(274)	(281)	(800)		
Total capital expenditures – Schedule A2		271,137	292,282	341,732	349,779	384,294	359,934		
% of allocated indirects in tot capital expenditures	al		3.7%	3.4%	3.1%	2.9%	3.0%		

^{*}Information technology.

- 88. ATCO Gas submitted its allocated indirect costs for 2013-2017 remain relatively stable over the years and remain less than the 2012 approved costs indexed by I-X for all years except 2013.85
- 89. The costs that are included in ATCO Gas's overhead pool and a description of those costs were provided in its application. These costs are summarized by program in each of the north and south in the tables below:

Table 6. ATCO Gas's 2013 to 2017 allocated indirects by program⁸⁶

	2013	2014	2015	2015	2016	2017
North	actual	actual	approved	forecast	forecast	forecast
			(\$00	00)		
Urban Mains Extensions	568	637	477	466	417	484
Rural Mains Extensions & Services	485	448	412	385	382	413
Urban Feeder Mains	168	222	176	153	139	162
New Regulating Meter Stations	136	60	35	42	39	39
Urban Main Improvements	84	165	193	149	109	128
Urban Main Relocations	387	302	233	226	222	258
Rural Main Replacements and Relocations	87	89	88	95	73	85
Regulating Metering Station Improvements	53	43	56	26	18	18
Cathodic Protection	40	84	44	35	43	60
New Urban Service Lines	823	1,062	1,097	1,016	1,040	1,048
Service Line Replacements and Improvements	248	108	107	114	119	120
Meters and Instruments	210	229	237	169	168	166

Exhibit 20604-X0009, application, paragraph 102.

Exhibit 20604-X0009, application, paragraph 104.

Exhibit 20604-X0009, application, paragraph 112.

	2013	2014	2015	2015	2016	2017
North	actual	actual	approved	forecast	forecast	forecast
			(\$00	00)		
SCADA	1	10	5	5	4	6
Regulators and Meter Installations	231	272	214	216	222	224
Meter Set Improvements	38	24	40	40	42	42
General Land and Structures	89	17	43	75	55	71
Transportation Equipment	19	33	27	29	29	35
Tools and Work Equipment	17	13	12	14	18	13
Heavy Work Equipment	8	10	9	7	10	6
Garage, Stores and Shop Equipment	1	5	1	2	3	2
Office Furniture and Equipment	-	-	-	-	-	-
Technical Support Equipment	-	-	1	2	10	5
Emergency Supply	3	2	-	1	-	-
Communication Equipment	116	47	92	67	67	70
Information Technology	-	-	34	65	66	66
Steel Mains Replacement	946	802	1091	916	816	924
Plastic Mains Replacement	634	847	853	694	644	826
Meter Relocation Replacement program	272	250	340	276	262	-
Line Heater Reliability program	64	68	96	61	47	46
Transmission Driven	298	238	546	758	949	447
AMR	846	35	9	72	77	86
Total	6,874	6,122	6,568	6,176	6,090	5,850

	2013	2014	2015	2015	2016	2017
South	actual	actual	approved	forecast	forecast	forecast
		•	(\$00		1	
Urban Mains Extensions	304	482	323	314	280	326
Rural Mains Extensions & Services	213	250	312	267	260	288
Urban Feeder Mains	181	187	115	74	67	77
New Regulating Meter Stations	53	63	47	23	22	21
Urban Main Improvements	119	207	91	112	102	118
Urban Main Relocations	97	75	125	71	64	75
Rural Main Replacements and Relocations	129	81	84	46	61	71
Regulating Metering Station Improvements	26	31	25	20	14	14
Cathodic Protection	21	38	36	38	45	64
New Urban Service Lines	685	801	648	725	737	743
Service Line Replacements and Improvements	342	190	157	170	177	179
Meters and Instruments	217	190	227	168	169	165
SCADA	1	9	7	2	3	4
Regulators and Meter Installations	179	197	170	188	193	195
Meter Set Improvements	10	11	14	11	11	12
General Land and Structures	103	11	38	72	91	82
Transportation Equipment	27	29	26	29	27	40
Tools and Work Equipment	13	16	12	12	14	11

	2013	2014	2015	2015	2016	2017
South	actual	actual	approved	forecast	forecast	forecast
			(\$00	00)		_
Heavy Work Equipment	9	4	10	3	5	7
Garage, Stores and Shop Equipment	1	3	2	2	2	1
Office Furniture and Equipment	-	-	-	-	-	-
Technical Support Equipment	-	-	2	1	1	1
Emergency Supply	-	-	-	15	2	1
Communication Equipment	89	61	49	67	67	65
Information Technology	-	85	34	64	66	66
Steel Mains Replacement	218	226	184	293	330	374
Plastic Mains Replacement	660	722	923	936	825	853
Meter Relocation Replacement program	379	278	383	305	292	-
Line Heater Reliability program	79	57	58	36	68	67
Transmission Driven	184	72	857	550	906	864
Commercial Below Ground Entry project	-	-	-	-	-	-
AMR	693	29	9	72	78	86
2013 Alberta Floods	80	165	-	48	-	-
Total	5,112	4,570	4,968	4,734	4,979	4,870

- 90. In relation to the 2014 true-up amount being requested in respect of IT support, in argument Calgary emphasized that ATCO Gas did not adjust the rates for IT costs in this application to reflect the Commission's ordered reductions in Decision 2014-169 (Errata).87 Calgary noted that in Proceeding 3378,88 the Commission was asked to make a finding on the present value approach with respect to the certain reductions ordered in Decision 2014-169 (Errata). 89 In argument, Calgary submitted that in the event the Commission rejects ATCO Gas's proposed present value approach in Proceeding 3378, it will be necessary for ATCO Gas to adjust (reduce) its IT support amounts in respect of allocated indirects (overheads) from those currently proposed at \$3.622 million.90
- 91. In reply argument, ATCO Gas noted that Proceeding 3378 is still ongoing and that the use of present value methodology to determine the adjustment to the IT costs will be decided in that proceeding. ATCO Gas submitted that there is no need to adjust the IT costs requested in this application at this time.⁹¹
- 92. Interveners did not comment on any other aspect of the allocated indirects used by ATCO Gas in this application.

Exhibit 20604-X0139, Calgary argument, paragraph 11.

Proceeding 3378, ATCO Utilities Evergreen compliance filing.

Decision 2014-169 (Errata), ATCO Utilities (ATCO Gas, ATCO Pipelines and ATCO Electric Ltd.), 2010 Evergreen Proceeding for Provision of Information Technology and Customer Care and Billing Services Post 2009 (2010 Evergreen Application), Proceeding 240, Application 1605338-1, February 6, 2015.

Exhibit 20604-X0139, Calgary argument, paragraph 15.

Exhibit 20604-X0146, paragraph 5.

Commission findings

- 93. In Decision 3267-D01-2015, regarding ATCO Gas's 2013 actual overhead costs and 2014 and 2015 forecast overhead costs, the Commission gave the following direction:
 - 147. In its compliance filing to this decision, ATCO Gas is directed to limit the total pool of overheads for each of 2013, 2014 and 2015 to the lower of the amounts in this application or amounts reflecting increases by I-X, for each year, applied to the 2012 total pool of overheads approved in Decision 2011-450[92] dealing with ATCO Gas's 2012 rates. This recalculated total pool of overheads should then be allocated to ATCO Gas's 2013 actual capital expenditures and 2014-2015 forecast capital expenditures, including capital tracker projects, consistent with the company's capitalization and allocation methodologies. 93
- 94. The Commission finds that the amount of information provided in this application provides a useful basis for assessing the allocation of indirects by program. The Commission takes further comfort in the forecast for allocated indirects as a percentage of capital expenditures which are steady at around three per cent for 2015-2017. The Commission therefore finds these costs to be reasonable on a forecast basis.
- 95. Regarding Calgary's concern with the use of the present value methodology, the Commission observes that in Decision 3378-D01-2016,⁹⁴ which was recently released, the Commission approved ATCO Gas's use of the present value approach to deal with the refund due to rate payers resulting from Decision 2014-169 (Errata).⁹⁵ Accordingly, the Commission finds that there is no need to adjust the forecast allocated indirects being applied for in this application.

6.1.4 Affiliate transactions

- 96. In Decision 3558-D01-2015, which considered modifications to the minimum filing requirements for capital tracker applications, the Commission determined that identifying affiliate-related costs included in the forecast or actual costs of a proposed capital tracker project or program is useful in assessing those projects or programs. Accordingly, at paragraph 80 of Decision 3558-D01-2015, the Commission made the following direction:
 - 80. ... the companies are directed to include in their business cases a summary of the services provided by or to an affiliate, the related costs and an explanation of how those amounts were determined.⁹⁶
- 97. In its application ATCO Gas explained that in 2014, it received IT support services from ATCO I-Tek. In an information response, ATCO Gas clarified that the total costs for services received from ATCO I-Tek in 2014 was \$22.4 million. ATCO Gas also provided a breakdown of the IT related costs in the business case accompanying each program. ATCO Gas submitted that

Decision 2011-450: ATCO Gas (a Division of ATCO Gas and Pipelines Ltd.), 2011-2012 General Rate Application Phase I, Proceeding 969, Application 1606822-1, December 5, 2011.

⁹³ Decision 3267-D01-2015, paragraph 147.

Decision 3378-D01-2016, ATCO Utilities (ATCO Gas, ATCO Pipelines and ATCO Electric Ltd.) Evergreen II Application, Compliance Filing to Decision 2014-169 (Errata), Proceeding 3378, March 4, 2016.

⁹⁵ Decision 3378-D01-2016, paragraph 132.

⁹⁶ Decision 3558-D01-2015, paragraph 80.

it is not requesting an IT capital tracker and that only allocated indirects have been included in the capital expenditures for the requested capital trackers.⁹⁷

98. In argument, the CCA expressed concerns regarding the information provided to support the breakdown of staff performing work for regulated and non-regulated affiliates, and suggested that the costs for ATCO Gas staff tasked on temporary assignments with other affiliates be removed. The CCA stated:

AG should be directed to identify by position those staff who work for non-regulated and regulated affiliates. Costs, including but not limited to salaries, overheads, pensions, pension adjustments and severance, associated with these staff should also be identified and removed from the 2015 and 2016 results of AG. AG should also be directed to provide similar information for staff which were transferred from related affiliates in 2015 and 2016. These costs should be considered non-utility and removed from actual utility results.⁹⁸

99. ATCO Gas replied that to the extent affiliate relationships are relevant to the project assessment of individual trackers, ATCO Gas has provided the required information to the Commission. Further ATCO Gas noted that the costs referenced by the CCA appear to be O&M rather than capital. 99 In ATCO Gas's view, the CCA's request was beyond the scope of this proceeding and therefore should be rejected.

Commission findings

- 100. The Commission has reviewed ATCO Gas's disclosure of its affiliate transactions relating to its capital tracker projects or programs in light of the direction given at paragraph 80 of Decision 3558-D01-2015. The Commission finds that ATCO Gas provided sufficient detail relating to the costs of affiliate transactions allocated to its capital tracker projects or programs in its application and project business cases. The Commission also notes that ATCO Gas entered into a new master services agreements (MSA) for IT services with Wipro Solutions Canada Limited (Wipro) commencing January 1, 2015. The Commission is currently reviewing the terms and conditions of IT services provided under the Wipro MSA in a separate proceeding, proceeding 20514. The information provided in the application is sufficient in identifying affiliate-related costs in assessing capital tracker programs applied-for in 2016 and 2017.
- 101. Accordingly, the Commission finds that ATCO Gas has complied with the direction set out at paragraph 80 of Decision 3558-D01-2015.
- 102. Regarding the CCA's submissions on the sufficiency of the information provided, the Commission is satisfied by Ms. Berger's testimony at the oral hearing that "... to the extent anyone is, say, temporarily assigned on a project, it would be reported in our annual compliance report." This allows for a disclosure mechanism for costs related to costs for ATCO Gas staff tasked on temporary assignments to affiliates.

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⁹⁷ Exhibit 20604-X0022, AG-AUC-2015AUG17-048(a).

Exhibit 20604-X0140, CCA argument, paragraph 152.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 192.

Transcript, Volume 1, pages 144-145.

103. Further, the disclosure of affiliate relationships, such as the temporary secondment of employees, is managed through the inter-affiliate code of conduct compliance report process and is therefore out of the scope of this proceeding.

6.1.5 2015 current estimate

- 104. In order to facilitate the development of more accurate 2016 and 2017 forecasts, ATCO Gas provided an updated forecast of its capital programs for 2015 (current estimate) in its application and supporting appendices. ATCO Gas stated that this update provides more accurate K factor forecasts for 2016 and 2017, as well as it aids in testing the reasonableness of the 2016 and 2017 capital forecast.¹⁰¹
- 105. In the individual business cases, ATCO Gas provided variance explanations for those capital tracker programs that deviated from the 2015 approved forecast provided in the compliance filing to Decision 3267-D01-2015 by more than \$1.0 million. However, ATCO Gas stated that it is not seeking a revised 2015 K factor in this application. ¹⁰²

Commission findings

106. The Commission finds that testing ATCO Gas's current estimates for 2015 is outside the scope of the current proceeding. The 2015 forecasts versus actuals will be fully tested in a future capital tracker proceeding. The variance explanations provided in the application were of assistance to the Commission in assets capital tracker projects included in the application. The Commission agrees with ATCO Gas's position that using current estimates for 2015 in the determination of forecasts for 2016 and 2017 results in more reasonable forecasts for those years.

6.2 Previously approved capital tracker projects or programs

107. This section deals with ATCO Gas's projects or programs that were approved for capital tracker treatment on an actual or forecast basis in either Decision 2013-435 or in Decision 3267-D01-2015. It considers these projects or programs in the context of the true-up of 2014 actual expenditures and also considers the 2016 and 2017 forecasts.

6.2.1 Projects or programs for which no objections were raised

108. In the application, there were a number of previously approved capital tracker projects or programs to which there were no objections by the parties regarding either the need or the scope, level, timing, and costs. Table 7 summarizes these projects and programs and shows the 2014 actual capital additions on which the 2014 capital tracker true-up is based, the 2015 forecast as per Schedule A2 of the application, as well as the 2016 and 2017 forecast capital additions proposed in the application:

Exhibit 20604-X0009, application, paragraph 113.

Exhibit 20604-X0009, application, paragraph 113.

Project or program name	Capital additions (\$ million)							
	2014	2014 actual		2015 forecast		2016 forecast		forecast
	North	South	North	South	North	South	North	South
Line Heater Reliability	3.6	4.5	2.9	2.7	4.0	3.1	3.5	5.1
Regulating Metering Station Improvements	8.3	1.5	1.56	1.66	1.72	1.37	1.38	1.15
Service Line Replacements and Improvements	2.5	4.1	2.6	4.0	2.7	4.0	2.8	4.2
Urban Main Improvements	3.9	6.0	5.5	3.0	4.1	3.6	4.1	3.7
Urban Main Relocations	7.3	2.1	7.5	2.1	7.8	2.2	8.3	2.4

Table 7. Projects or programs for which no objections were raised¹⁰³

109. The projects or programs for which no objections were raised are described in the subsections below. In addition to the capital additions expected in 2016 and 2017, the variances for the above projects or programs related to the true-up for 2014 are explained using the capital expenditures for each of the projects or programs undertaken in 2014.

6.2.1.1 Line Heater Reliability

- 110. The purpose of the Line Heater Reliability program is to bring non-compliant ATCO Gas line heaters to an Occupational Health and Safety Code compliant level, including related work at those non-compliant sites to ensure line heater reliability and safe operability. ATCO Gas provided details of the Line Heater Reliability program in Appendix B5 of the application.¹⁰⁴ The need for this program, as part of the project assessment under capital tracker Criterion 1, was previously approved in Decision 2013-435¹⁰⁵ and later in Decision 3267-D01-2015.¹⁰⁶
- 111. The 2014 forecast capital expenditures for this program were \$3.128 million in the north, and the actual 2014 capital expenditures were \$3.1 million in the north, resulting in a \$0.8 million negative variance. ATCO Gas explained that variance is within the Rule 005¹⁰⁸ reporting threshold. 109
- 112. The forecast capital additions for this program for 2016 are \$4.047 million in the north and \$3.088 million in the south and for 2017 are \$3.545 million in the north and \$5.085 million in the south. The forecasts were developed based on a per site average cost which was

Exhibit 20604-X0007, application, Schedule A2.

Exhibit 20604-X0003, Appendix B5, Line Heater Reliability program.

Decision 2013-435, paragraph 671.

Decision 3267-D01-2015, paragraph 630.

Exhibit 20604-X0009, application, paragraph 656.

Rule 005: Annual Reporting Requirements of Financial and Operational Results.

Exhibit 20604-X0009, application, paragraph 660.

Exhibit 20604-X0003, Appendix B5, page 14.

developed using information from projects completed in 2013 and 2014 and detailed cost estimates for 2015 projects and future years.¹¹¹

6.2.1.2 Regulating Metering Station Improvements

- 113. Regulating metering stations are the facilities required to receive gas on the distribution system from interconnections with the high pressure transmission system, as well as regulate pressures between different pressure distribution systems. Projects under this program are done to address reliability and performance issues. Typical projects in this program include installation of duplicate regulating "runs," major repairs to station buildings, and replacement of equipment due to deterioration or performance issues. ATCO Gas provided details of the Regulating Metering Station Improvements program in Appendix B7.¹¹² The need for this program, as part of the project assessment under capital tracker Criterion 1, was approved in Decision 3267-D01-2015.¹¹³
- 114. In the compliance filing¹¹⁴ to Decision 3267-D01-2015, ATCO Gas requested capital tracker treatment approval for its Regulating Metering Station Improvements program for the north for 2014, which was approved in Decision 20385-D01-2015.¹¹⁵
- 115. Actual expenditures for the Regulating Meter Station Improvement program were higher by \$0.3 million in the north than was originally forecast. The work completed in 2014 included replacing regulating equipment, station piping, valves, and improvements to the buildings. In its application, ATCO Gas provided justification of projects exceeding \$75,000 or those which were unique in scope and had significant costs. ¹¹⁶ ATCO Gas also explained that its forecast was based on a three-year average due to the reactive nature of the work, and therefore it was unable to predict the level of expenditures or the specific planned projects in advance of the work occurring.
- 116. ATCO Gas is seeking capital tracker treatment for Regulating Metering Stations Improvements program for the years 2016 and 2017 for the north. Its forecast capital additions for the north are \$1.72 million for 2016 and \$1.38 million for 2017. The forecasts were developed using a historical average approach based on an average of three years of actual capital expenditures. 118

6.2.1.3 Service Line Replacements and Improvements

117. The Service Line Replacements and Improvements program consists of the replacement or the alternation of service lines because of safety, reliability or capacity issues, or as a result of a customer request. The replacement or alteration of service lines with safety, reliability or capacity issues is typically identified through field observations while completing inspections or other work at the same location. Customer driven alterations are the result of customer requests

Exhibit 20604-X0003, Appendix B5, pages 14-15.

Exhibit 20604-X0003, Appendix B7, Regulating Metering Station Improvements program.

Decision 3267-D01-2015, paragraph 408.

¹¹⁴ Proceeding 20385.

Decision 20385-D01-2015: ATCO Gas, 2013 PBR Capital Tracker Refiling and True-up and 2014-2015 PBR Capital Tracker Forecast Compliance Application, Proceeding 20385, August 24, 2015, Table 1.

Exhibit 20604-X0007, application, paragraph 667.

Exhibit 20604-X0003, Appendix B7, Table 2.

Exhibit 20604-X0007, Schedule A2.

for service line relocations, often as a result of home renovations, landscaping or the construction of additions, decks or garages. For customer requested relocations, a direct customer contribution is required. ATCO Gas provided details of the Service Line Replacements and Improvements program in Appendix B9 of the application. The need for this program, as part of the project assessment under capital tracker Criterion 1, was approved in Decision 3267-D01-2015.

- 118. The 2014 approved forecast capital expenditures for this program were \$2.3 million, while the actual 2014 capital expenditures were \$2.5 million, resulting in a \$0.2 million negative variance for the north. The 2014 approved forecast capital expenditures for this program were \$3.5 million while the actual 2014 capital expenditures were \$4.1, resulting in a \$0.6 million negative variance for the south. For the north, ATCO Gas explained that the variance of \$0.2 million is within the Rule 005 variance reporting threshold. Program the redevelopment of established neighborhoods in Calgary. In addition, some projects identified by ATCO Gas were an order of magnitude more than expected for a typical service line improvement project.
- 119. The forecast capital additions for this program for 2016 are \$6.7 million (\$2.7 million for the north and \$4.0 million for the south) and for 2017 are \$7.0 million (\$2.8 million for the north and \$4.2 million for the south), respectively. The forecasts were developed using a historical average approach¹²⁵ based on an average of three years of actual capital expenditures.¹²⁶

6.2.1.4 Urban Main Improvements

120. The Urban Main Improvements program involves upgrading existing mains, upgrading supply pressure, and installing and replacing valves. ATCO Gas stated this work is necessary in order for ATCO Gas to fulfill its obligation to provide safe and reliable gas distribution service. Part of that responsibility, ATCO Gas must construct facilities that accommodate changes in demand on the distribution system and that ensure the safe isolation of systems in case of an emergency. The work required under this program is typically identified and completed within the current year as the number of main improvements required and the scope of each improvement is not known far in advance. This program is in response to events such as municipal development and zoning, overall load growth, or inspection results. ATCO Gas provided details of the Urban Main Improvements program in Appendix B12 of the application. The need for this program, as part of the project assessment under capital tracker Criterion 1, was approved in Decision 3267-D01-2015.

Exhibit 20604-X0003, Appendix B9, Service Line Replacements and Improvements program.

Decision 3267-D01-2015, paragraph 327.

Exhibit 20604-X0009, application, Table 88.

Exhibit 20604-X0009, application, paragraph 674.

This included a business along Ogden Road SE Calgary, which required an upgrade to their existing service requiring approximately 40 metres of 88 millimetre of service line in a paved parking lot, costing \$30,000. Another project involved the lowering of an 11 millimetre service line along Riverfront Avenue in Calgary, costing \$10,000.

Exhibit 20604-X0009, application, paragraph 675.

Exhibit 20604-X0003, Appendix B9, Table 3, PDF page 109.

Exhibit 20604-X0003, Appendix B9, paragraph 15, PDF page 107.

Exhibit 20604-X0003, Appendix B12, Urban Main Improvements program.

- 121. In the compliance filing¹²⁸ to Decision 3267-D01-2015, ATCO Gas requested capital tracker treatment approval for its Urban Main Improvements program for the north for 2014, which was approved in Decision 20385-D01-2015.¹²⁹
- 122. The forecast capital additions for this program for 2016 are \$4.1 million for the north and \$3.6 million for the south and for 2017 are \$4.1 million for the north and \$3.7 million for the south, respectively, and were developed using a three-year historical average approach.¹³⁰

6.2.1.5 Urban Main Relocations

- 123. Urban mains relocation work is necessary in order for ATCO Gas to provide safe and reliable gas distribution service. Municipally driven projects include road widening, road rehabilitations, neighborhood rehabilitations, back lane renewals and deep utility improvements. On occasion, ATCO Gas is directed by Alberta Transportation to replace or relocate facilities that interfere with highway expansion projects. ATCO Gas also performs line alterations at the request of land owners. ATCO Gas provided details of the Urban Main Relocations program in Appendix B13 of the application.¹³¹ The need for this program as part of the project assessment under capital tracker Criterion 1, was approved in Decision 3267-D01-2015
- 124. In the compliance filing¹³² to Decision 3267-D01-2015, ATCO Gas requested capital tracker treatment approval for its Urban Main Relocations program for the north and south for 2014, which was approved in Decision 20385-D01-2015.¹³³
- 125. ATCO Gas stated it has no viable alternative but to perform these externally driven projects and it must continue to undertake these relocations in order to meet its obligations to municipalities and Alberta Transportation. In the case of landowners and developers, failure to complete this work would impede development. For all relocations and alterations, ATCO Gas asserted that failure to complete the work increases the risk of damage to facilities as development occurs around them.
- 126. ATCO Gas stated that it has no control over the timing of this work as it is completed at the request of third parties. Timing is driven by the third-party's schedule and ATCO Gas attempts to complete the work according to this schedule. Due to the difficulty in forecasting these costs, ATCO Gas utilizes a historical average in determining the forecast.
- 127. In 2014, actual expenditures for the Urban Mains Relocations program were higher by \$0.8 million in the north than forecast, due to undertaking a number of large projects requested by third parties. For example, in Edmonton, a 168 millimetre main and a 114 millimetre main was relocated to accommodate the construction of a condominium complex, at a cost of \$0.3 million. Another example involved relocating 250 metres of 273 millimetre main to accommodate Light Rail Transit system development in downtown Edmonton, at a cost of \$0.4 million. 134

Decision 20385-D01-2015, Table 1.

Proceeding 20385.

¹³⁰ Exhibit 20604-X0008, paragraph 19.

Exhibit 20604-X0003, Appendix B13, Urban Main Relocations program.

¹³² Proceeding 20385.

Decision 20385-D01-2015, Table 1.

Exhibit 20604-X0009, paragraph 693.

128. The forecast capital additions for this program for 2016 are \$7.8 million for the north and \$2.2 million for the south and for 2017 are \$8.3 million for the north and \$2.4 million for the south, respectively. These forecasts were developed using a historical average approach.¹³⁵

Commission findings

- 129. In Decision 2013-435, and, or Decision 3267-D01-2015, the Commission approved the need on an actual or forecast basis, for each of the projects or programs listed in Table 7 above, for purposes of capital tracker treatment in one or more of 2013, 2014, or 2015. Further, the Commission determined that the proposed scope, level, timing and forecast costs for these projects and programs were reasonable. Therefore, the Commission has previously determined that each of the projects or programs listed in Table 7 above satisfied the project assessment requirement of capital tracker Criterion 1 in one or more previous years. In addition, in Decision 3267-D01-2015 and the compliance filing Decision 20385-D01-2015, the Commission approved the actual scope, level, timing and costs of projects and programs included in the 2013 capital tracker true-up application, as prudent.
- 130. With respect to the true-up of 2014 actual costs, as noted in Section 3, if there is an absence of evidence on the record of the true-up proceeding demonstrating that a project was not required in 2014, there is no need to demonstrate that a project was needed in order to provide utility service at adequate levels in 2014, as would otherwise be required under the project assessment component of Criterion 1. The Commission finds no evidence on the record of this proceeding to indicate that any of the projects or programs listed in Table 7 was not required in 2014.
- 131. With respect to the scope, level and timing of the each of the projects or programs listed in Table 7 carried out in 2014, the Commission has reviewed ATCO Gas's 2014 actual capital additions associated with each of these projects or programs and finds that they are consistent with the scope, level and timing of the work outlined in the business case for these capital trackers and approved in Decision 3267-D01-2015. The Commission has also reviewed the costs of the 2014 actual capital additions for each of these projects or programs in light of the evidence supporting these costs, the associated procurement and construction practices and the evidence explaining the differences between approved forecast and actual costs, and finds the actual costs to be prudent.
- 132. In the application, ATCO Gas requested capital tracker treatment for these projects or programs on a forecast basis in 2016 and 2017. As noted in Section 3, where a project or program is part of an ongoing multi-year program, or if a project or program is of an annual recurring nature for which the need has been previously approved by the Commission for purposes of capital tracker treatment, in the absence of evidence that the project or program is no longer required, the Commission will not undertake a reassessment of need under Criterion 1. The Commission finds no evidence on the record of this proceeding to indicate that any of the projects or programs listed in Table 7 is not required to continue in 2016 or 2017.
- 133. With respect to the scope, level and timing of each of the projects or programs listed in Table 7 for 2016 and 2017, the Commission has reviewed the business cases and the relevant portions of the record for each of these projects or programs and finds the forecast scope, level and timing of each of these projects or programs for 2016 and 2017 to be reasonable. The

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Exhibit 20604-X0008, paragraph 5.

Commission observes that the 2016 and 2017 forecast costs for each of these projects or programs are consistent with the variance explanations provided in the business cases, which show the actual expenditures over the most recent five-year period. The Commission has reviewed the information supporting ATCO Gas's 2016 and 2017 forecasts and accepts the total annual cost forecasts.

134. Given the above, the Commission accepts the information provided by ATCO Gas regarding the scope, level, timing and forecast costs for each for the projects or programs listed in Table 7 above as proposed for 2016 and 2017. Accordingly, the Commission finds that each of these projects or programs satisfies the project assessment requirement of Criterion 1 for 2016 and 2017.

6.2.2 Projects or programs for which objections were raised

- 135. In the proceeding, there were nine capital tracker projects or programs previously approved for capital tracker treatment in Decision 2013-435, Decision 3267-D01-2015 and, or in Decision 20385-D01-2015, for which objections were raised by the parties to this proceeding regarding need, scope, level, timing or costs.
- 136. The following section discusses the SMR program, the PMR program, the Transmission Capital Driven program, the MRRP, the Cathodic Protection program, the New Regulating Meter Stations program, the Rural Main Extensions and Service Lines program, the New Urban Service Lines program, and the Urban Mains Extension program.

6.2.2.1 Steel Mains Replacement

137. ATCO Gas described its SMR program, historically named the Urban Mains Replacement program, as an ongoing program that evaluates installed steel mains and identifies projects that have reached the end of their safe, operable lives, and as a result, require replacement. The main objective of the ongoing SMR program is to ensure that mains and services are removed from service when there are no remaining alternatives to mitigate the increasing risk associated with these assets. ATCO Gas explained that it continues to evaluate its 9,000 kilometres (km) of steel pipe on a regular basis. ATCO Gas provided information as to how the SMR program satisfies the project assessment test in Section 4.3.1 of the application. Details of the nature, scope and actual work undertaken in this program in 2014 were provided in Section 5.3.1 of the application. The business case was included in Appendix B1. ATCO Gas submitted that there has been no change to the scope of the SMR program since the last capital tracker application. The need for this program, as part of the project assessment under capital tracker Criterion 1, was previously approved in Decision 3267-D01-2015.

138. In its business case, ATCO Gas provided the methodology for identifying SMR projects. ATCO Gas explained that it evaluates its pipe system annually. ATCO Gas uses an engineering

Exhibit 20604-X0004, Appendix B1, paragraph 2.

Exhibit 20604-X0009, application, Section 4.3.1.

Exhibit 20604-X0009, application, Section 5.3.1.

Exhibit 20604-X0004, Appendix B1.

Exhibit 20604-X0138, ATCO Gas argument, paragraph 33.

¹⁴¹ Decision 3267-D01-2015, paragraph 195.

assessment process, including leak density analysis, field operational data and a demerit point system in identifying and prioritizing steel mains that require replacement under the program.¹⁴²

- 139. ATCO Gas explained the engineering assessment process in the business case. ATCO Gas considers a number of factors including pipe vintage, pipe material, coating material, coating condition, joining methods, weld condition, service tee fittings, cathodic protection, number and types of repairs, municipal infrastructure work planned in the area, and a detailed leak history. ATCO Gas calculates leak frequency using a leak frequency tool. That leak frequency is then used as an input to the demerit point system and reported separately in the business case. Demerit points for a particular project consider the following eight factors: pipe material, operating pressure, service entry location, installation date, soil type, coating condition, cathodic protection system performance, and below ground leak history. Finally, specific areas are prioritized for replacement using a combination of leak frequencies and demerit points. Additional consideration may also be given to timing replacement activities with municipal and other ATCO Gas work on a specific project.¹⁴³
- 140. In the last capital tracker proceeding, questions were raised as to whether the current demerit point system was reliable in assessing the ATCO Gas system. ¹⁴⁴ In Decision 3267-D01-2015, the Commission commented that there was potential to improve the current demerit point system in order to make it more helpful in the decision making process undertaken by ATCO Gas and for intervenors and the Commission to consider when assessing the merits of various proposed projects. ¹⁴⁵ In that decision, the Commission directed ATCO Gas to reconsider the design of its demerit point system and to propose revisions for consideration in its next capital tracker application, including providing suggestions for which factors should be eliminated from, or added to, the system and for changes to current weightings. ¹⁴⁶
- 141. In its current application, ATCO Gas declined to provide any information to allow for a review of its demerit point system, stating only that "the current model is being reviewed to ensure all risk factors are being appropriately factored into the demerit point system." ATCO Gas noted that it will endeavour to complete the new demerit point system to be used as a part of the assessment criteria for the 2017 SMR program. In response to a Commission IR, ATCO Gas stated that, in its view, the new demerit point system does not require approval from the Commission, but that it will be explained during the 2017 capital tracker true-up application to assist the Commission in verifying the reasonableness of capital expenditures related to the SMR program. ¹⁴⁸
- 142. ATCO Gas applied for capital tracker treatment for the SMR program in 2014, 2016 and 2017. With respect to the true-up for 2014, the capital expenditures for ATCO Gas were \$18.1 million in the north and \$5.3 million in the south. Net capital additions for 2014 were \$17.9 million in the north and \$4.8 million in the south. The capital expenditures are forecast to be \$27.3 million in the north and \$11.0 million in the south in 2016, and \$28.1 million in the north and \$11.4 million in the south in 2017. Net capital additions are forecast to be

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Exhibit 20604-X0004, Appendix B1, paragraph 25 and Figure 1.

Exhibit 20604-X0004, Appendix B1, paragraphs 26-27.

Decision 3267-D01-2015, paragraphs 224 and 229.

¹⁴⁵ Decision 3267-D01-2015, paragraph 230.

Decision 3267-D01-2015, paragraph 231.

Exhibit 20604-X0009, application, paragraph 42.

Exhibit 20604-X0027, AG-AUC-2015AUG17-011(d).

- \$27.3 million in the north and \$11.0 million in the south in 2016, and \$28.0 million in the north and \$11.4 million in the south in 2017. 149
- 143. In ATCO Gas's previous capital tracker application, ATCO Gas forecast its 2014 capital expenditures for this program to be \$18.9 million in the north and \$6.0 million in the south. ATCO Gas's actual capital expenditures for this program in 2014 were \$18.1 million in the north and \$5.3 million in the south, which is a variance of \$0.8 million in the north and \$0.7 million in the south. The forecast for the emergency repairs component in 2014 amounted to \$1.5 million in the north and \$1.1 million in the south. ATCO Gas explained that it had forecast to replace 27.7 km of mains and 2,495 services, while it actually replaced 25.4 km of mains and 2,435 services. ATCO Gas noted that the cost-per-service replaced was approximately seven per cent lower than forecast. While replacement levels and the cost-per-service replaced were lower than forecast, the costs of emergency repairs in 2014 were approximately 50 per cent higher than forecast. No interveners took issue with the actual capital costs in 2014 for this project.
- 144. ATCO Gas developed a 2016 project list for the SMR program and explained that it used a cost-per-service forecast for planned residential projects based on actual costs from similar projects in 2014, adjusted for inflation, in order to develop the 2016 forecast. ATCO Gas calculated its forecast expenditures for planned residential projects in 2017 based on the 2016 forecast plus inflation. North forecasts are based on Edmonton costs and south forecasts are based on Calgary costs. Forecasts for feeder SMR projects are based on historical contract rates and bid information received in 2015. Forecasts for emergency repairs in both 2016 and 2017 are based on a three-year average, adjusted for inflation. 152
- 145. In its argument, the UCA submitted that the Commission should not approve ATCO Gas's 2017 forecast because engineering assessments were not provided and, consequently, ATCO Gas has failed to provide information necessary to satisfy the capital tracker criteria. ¹⁵³
- 146. In argument, the CCA also recommended that the Commission deny the 2017 forecast as the attempt to include SMR forecast expenditures without any evidence represents an attempt to return to a proactive program, which the Commission previously denied in Decision 2011-450.¹⁵⁴
- 147. In addition, the CCA expressed concerns with the 2016 forecast of the SMR program. The CCA observed that ATCO Gas continues to rely on its demerit point system even though ATCO Gas has acknowledged that it is not representative of the risks on the system, and further, that ATCO Gas is in the process of updating its demerit point system.¹⁵⁵
- 148. The CCA expressed a number of concerns regarding ATCO Gas's leak frequency data, which ATCO Gas uses in its engineering assessments and demerit point system. The CCA expressed concern regarding gaps in ATCO Gas's leak history data given that 11 of the 18 projects cited in business cases B1.1 to B1.18 do not provide sufficient leak frequency data as they fail to show at least one of the two-year leak frequency or 10-year leak frequency

Exhibit 20604-X0007, application, Schedule A2.

Exhibit 20604-X0009, application, paragraphs 578, 582, 583, 585 and 587, and tables 51 and 54.

Exhibit 20604-X0004, Appendix B1, paragraph 32.

Exhibit 20604-X0004, Appendix B1, paragraphs 42-45.

Exhibit 20604-X0135, UCA argument, paragraphs 31-32.

Exhibit 20604-X0140, CCA argument, paragraphs 70-71.

Exhibit 20604-X0140, CCA argument, paragraphs 11-12.

statistics.¹⁵⁶ In addition to a number of projects missing leak frequencies, the CCA noted that three of the projects report zero leaks of any kind over either time frame.¹⁵⁷

- 149. The CCA stated that "AG repeatedly supports the validity of treating all leaks with equal weighting," and argued that this assertion is not appropriate in the circumstances. The CCA explained that there are a variety of leak types, ranging from slow leaks to immediate loss of part of the system, and a variety of leak locations, including mains hundreds of metres from a residence and the service line entry to a home, each of which can result in different levels of risk. The CCA submitted that factors such as severity of the leak, location of the main or service, soil type, and distance from a dwelling, all impact the risk. While ATCO Gas stated that it conducts risk assessments consistent with Annex B of CSA Z662, ¹⁵⁹ a Canadian Standards Association publication, the CCA noted that ATCO Gas also confirmed that it has made no attempt to classify the different types of leaks by their severity or probability to cause damage, which is inconsistent with Annex B. The CCA explained that combining both service leaks and main leaks together into a leak total indicator does not distinguish between the type of leak or the severity of leak. ¹⁶⁰The CCA submitted that ATCO Gas does not follow any industry accepted practices in the classification and reporting of its leaks, which results in engineering assessments that are unsupported and arbitrary. ¹⁶¹
- 150. The CCA also noted that ATCO Gas's application reflects a leak frequency per 100 km, which may be misleading. It provides two examples; regarding projects identified in Business Case B.1. In the case of the Glenmore Trail Feeder, the frequency of 484 leaks per 100 km actually represents two leaks in the last 10 years and in the case of Argyll, the frequency of 48 leaks per 100 km actually represents one leak in the last 10 years. ¹⁶² Even though ATCO Gas confirmed that when a leak is recorded, it records whether the leak is on a main or on a service line, ¹⁶³ the CCA observed that for the statistics provided in the business cases, ATCO Gas combines both service leaks and mains leaks together while attributing the total leak count to the length of main, resulting in a deceptive statistic. ¹⁶⁴
- 151. Further, the CCA stated that "despite their claims of the pipe reaching its ultimate life, AG provides no historical trending information that would indicate that leaks are becoming more frequent with time, for any of the areas described in the engineering assessments." The CCA submitted that the information provided by ATCO Gas showing the average leak frequency of steel mains of different vintages does not demonstrate that age of pipe is a strong indicator of leak frequency, but rather that there is no significant correlation between vintage of pipe and leaks per 100 km after data entries for mechanical leaks and 1950's and earlier vintage pipe have been removed from the sample. ¹⁶⁶

Exhibit 20604-X0140, CCA argument, paragraph 13.

Exhibit 20604-X0140, CCA argument, paragraph 15.

Exhibit 20604-X0140, CCA argument, paragraph 24.

¹⁵⁹ CSA Group, Z662-15 Oil and gas pipeline systems (CSA Group, June 2015), pages 448-496.

Exhibit 20604-X0140, CCA argument, paragraphs 17-26.

Exhibit 20604-X0140, CCA argument, paragraph 34.

Exhibit 20604-X0140, CCA argument, paragraphs 13-15.

Transcript, Volume 1, page 82, lines 14-15 (Mr. Germaine).

Exhibit 20604-X0140, CCA argument, paragraphs 26-29.

Exhibit 20604-X0140, CCA argument, paragraph 34.

Exhibit 20604-X0140, CCA argument, paragraph 35.

152. In its reply argument, the CCA further noted that while it agrees that all leaks have hazardous potential, ATCO Gas does not adequately distinguish the severity of various leaks in its assessments.¹⁶⁷ The CCA requested the following direction:

The CCA recommends that the Commission should direct AG to provide complete disclosure on its Leak Tracking System in future submissions, including any ranking system of size or severity, type of mechanical leak, detailed location on service or main, estimated volume of leak, and time from discovery of leak to complete repair including any leaks that were not deemed either repairable or necessary to repair. ¹⁶⁸

- 153. The CCA noted that ATCO Gas confirmed that it routinely records cathodic protection levels in the system and determines the adequacy of the cathodic protection levels by reviewing that history. ¹⁶⁹ In its argument, the CCA submitted that ATCO Gas has not currently provided any evidence to validate its claim of historically reduced cathodic protection levels and, as such, should be directed to provide the cathodic protection records at the time of the compliance application. ¹⁷⁰
- 154. The CCA explained that upon its review of five project closeout reports provided by ATCO Gas on SMR projects it found that there was no investigation undertaken to validate the condition of the pipe in question. The CCA stated that "AG has continually asserted there is no requirement to validate condition of samples of the pipe removed from service because the engineering assessment indicated it required replacement." The CCA submitted that failure to complete a feedback loop is a "sub-optimal practice," that it has demonstrated that the engineering assessments and risk analysis are subjective and incomplete, that "without some system of validation through follow-up assessments of the removed pipe there is no empirical support for AG methodology," and that "refusal to validate their engineering assessments renders them unproven and unsubstantiated." 174
- 155. The CCA noted ATCO Gas is forecasting high expenditures in 2016 and 2017 and expressed its view that the evidence in support of the 2016 SMR program is insufficient to justify the level of expenditures. It recommended that the Commission direct ATCO Gas to complete its 2016 SMR program over a two-year period in order to restore annual expenditures closer to levels experienced since 2010.¹⁷⁵
- 156. In its reply argument, the CCA reiterated that ATCO Gas has more information about leaks than it is sharing in the business cases, and that further disclosure is required. The CCA further noted that while it agrees that all leaks have hazardous potential, ATCO Gas does not adequately distinguish the severity of various leaks in its assessments. The CCA requested the following direction:

Exhibit 20604-X0144, CCA reply argument, paragraphs 20-24.

Exhibit 20604-X0144, CCA reply argument, paragraph 23.

Transcript, Volume 1, page 65, lines 18-24 (Mr. Germaine).

Exhibit 20604-X0140, CCA argument, paragraphs 44-46.

Exhibit 20604-X0140, CCA argument, paragraph 50.

Exhibit 20604-X0140, CCA argument, paragraph 51.

Exhibit 20604-X0140, CCA argument, paragraphs 55-56.

Exhibit 20604-X0140, CCA argument, paragraph 63.

Exhibit 20604-X0140, CCA argument, paragraphs 67-68 and 71.

Exhibit 20604-X0144, CCA reply argument, paragraphs 20-24.

The CCA recommends that the Commission should direct AG to provide complete disclosure on its Leak Tracking System in future submissions, including any ranking system of size or severity, type of mechanical leak, detailed location on service or main, estimated volume of leak, and time from discovery of leak to complete repair including any leaks that were not deemed either repairable or necessary to repair.¹⁷⁷

- 157. In its reply argument, ATCO Gas submitted that the CCA's challenges were procedurally unfair and prejudicial as ATCO Gas could have assembled responsive evidence had it known that the technical basis for the need for the SMR program was under challenge prior to submission of the CCA's argument.
- 158. Regarding the demerit point system, ATCO Gas observed that it continued to use the system that had been previously approved by the Commission in multiple decisions. Additionally, ATCO Gas pointed out that the demerit point system is currently used for comparison purposes, and not employed as a criterion of the engineering assessment. ATCO Gas agreed that the system could be improved, but noted that this does not mean it was incorrect of ATCO Gas to use it for the purposes of this proceeding.¹⁷⁸
- 159. ATCO Gas explained that in cases where it only provided one of the two-year or 10-year leak frequencies, it provided the leak frequency relevant to the decision, which is consistent with past filings. ATCO Gas noted that it provides leak frequency on a per 100 km basis in order to compare the leak frequency across projects or of varying lengths. In the case of the three projects for which zero leaks were found, ATCO Gas explained that leak frequency is only one of the factors that may point to the need for pipe replacement. In its business case, ATCO Gas explained that the purpose of the two-year leak frequency is to indicate short-term, rapid increases in leaks, while the 10-year leak frequency indicates long-term, overall high leak history.
- 160. ATCO Gas submitted that it does, in fact, complete a risk analysis in a manner consistent with Annex B of CSA Z662, in that it identifies the hazards and the consequences, uses the leak frequency to determine likelihood, and evaluates the consequences to determine the level of risk.¹⁸¹
- 161. In ATCO Gas's view, leaks on mains and services do not act differently and can have the same consequences. ATCO Gas indicated that it is for this reason that it groups these leaks together in the engineering assessment. ATCO Gas further indicated that in urban areas, service lengths are relatively similar, allowing for a fair representation of the relative risk across projects without accounting for the length of services. ATCO Gas noted that its approach to describing leak frequency is consistent with past applications.

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- 162. In response to the CCA's assertion that ATCO Gas has not provided any historical trending information, ATCO Gas noted that replacement decisions are not made based solely on

Exhibit 20604-X0144, CCA reply argument, paragraph 23.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraphs 76-78.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraphs 80-81.

Exhibit 20604-X0004, Appendix B1, paragraph 27(a).

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 87.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraphs 90-92.

the overall system trends, but rather they are made based on specific risks in specific areas.¹⁸³ In addition, ATCO Gas noted that replacement decisions are not made based solely on cathodic protection history and that cathodic protection readings are only a snapshot in time. ATCO Gas explained that the readings are intended to provide only a general sense as to whether historic cathodic protection levels have been adequate or not.¹⁸⁴

163. ATCO Gas explained that project closeout reports are management documents and not the appropriate place to conduct an integrity assessment, as suggested by the CCA. These documents exist to ensure that any lessons learned are used to improve the process going forward and to confirm that the goals of the project were achieved.¹⁸⁵

Commission findings

- 164. The need for the SMR program as part of the project assessment under capital tracker Criterion 1 was previously approved by the Commission in Decision 2013-435¹⁸⁶ and Decision 3267-D01-2015. With respect to the true-up of 2014 actual costs, if the need for a project or program was previously established in Decision 2013-435 or Decision 3267-D01-2015 and if there is an absence of evidence on the record of this proceeding demonstrating that the project or program was not required in 2014, then there is no need to demonstrate again that a project or program is needed in order to provide utility service at adequate levels in 2014. The Commission finds no evidence on the record of this proceeding to indicate that the SMR program was not required in 2014. Accordingly, the program continues to satisfy the requirement of Criterion 1 that the program was needed in 2014.
- 165. Although ATCO Gas is not required to demonstrate the need for the SMR program, it must still provide sufficient evidence to demonstrate that the scope, level, timing and actual costs of the program were prudent in 2014 in order to satisfy the project assessment as part of Criterion 1.
- 166. ATCO Gas's actual capital additions for this program were \$17.9 million in the north and \$4.8 million in the south in 2014. In light of the evidence supporting the SMR program and the SMR emergency repair projects carried out in 2014, including the associated procurement, construction and project cost management practices and evidence explaining the differences between approved forecast and actual costs, the Commission considers the scope, level, timing and actual costs of the project in 2014 to be prudent. Accordingly, the Commission finds that this program satisfies the project assessment requirement of Criterion 1 in 2014.
- 167. In Decision 3267-D01-2015, the Commission directed ATCO Gas to "propose revisions to the demerit point system for consideration in its next capital tracker application, including providing suggestions for which factors should be eliminated from, or added to, the system and for changes to current weighting." ATCO Gas did not provide any information in this regard in the current application. As such, the Commission considers ATCO Gas to be non-compliant with this direction but notes that the demerit point system is currently under review by ATCO Gas.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 104.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 112.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraphs 119-121.

¹⁸⁶ Decision 2013-435, paragraph 636.

Decision 3267-D01-2015, paragraph 186.

Exhibit 20604-X0007, application, Schedule A2.

Decision 3267-D01-2015, paragraph 321.

Given that the Commission has already approved the use of the current demerit point system, and the proposal for a new methodology has not yet been filed, the Commission considers ATCO Gas's use of the current demerit point system for the SMR program in 2016 to be reasonable.

- 168. In response to a Commission IR, ATCO Gas stated that in its view, the new demerit point system does not require approval from the Commission. However, the Commission notes that any changes to the demerit point system, which may alter the forecasts for capital tracker treatment of its SMR program must be tested by the Commission in order for capital tracker programs to be approved. Should ATCO Gas choose to not apply for capital tracker treatment of the SMR program, then such a change would not require Commission approval. Based on ATCO Gas's response to a Commission IR,¹⁹⁰ it is the Commission's understanding that the new demerit point system will be completed prior to June 2016. As such, ATCO Gas is directed to provide details of the new demerit point system, including an example demerit point analysis from the 2017 projects, if such an example is available, at the time of ATCO Gas's 2015 capital tracker true-up application. ATCO Gas is further directed to provide, as part of its 2015 true-up application, its proposed revisions to the demerit point system to account for the previous directions of the Commission in Decision 3267-D01-2015, which stated:
 - The Commission accepts ATCO Gas's view that it may not be possible to design a demerit point system that can be used as the sole decision maker in every instance. The Commission considers that the professional judgement of ATCO Gas engineers should continue to play an important role in the assessment of ATCO Gas steel mains. Nevertheless, the Commission considers that using an objective tool, like the demerit point system, to assess the safety and reliability of ATCO Gas's system that is based primarily on the physical attributes of the pipe being considered and the environment in which it is placed, is helpful in assessing the need for pipe replacements. This type of assessment provides the Commission and interveners with evidence to help verify the reasonableness of proposed capital expenditures. Accordingly, the Commission directs ATCO Gas to reconsider the design of its current demerit point system and to propose revisions to the demerit point system for consideration in its next capital tracker application, including providing suggestions for which factors should be eliminated from, or added to, the system and for changes to current weighting. ATCO Gas should provide reasons for all proposed changes to factors and weightings. ATCO Gas should also provide a timeline for the possible implementation of the revised demerit point system.
 - 232. ... In its proposed revisions to the demerit point system, the Commission directs ATCO Gas to consider whether the leak frequency data should continue to be included in the demerit point system, in addition to considering it separately when completing an engineering assessment. If it prefers to continue to include the leak frequency data in the demerit point system, ATCO Gas shall provide a full explanation as to its reasons.¹⁹¹
- 169. The analysis of the new demerit point system in the 2015 capital tracker true-up application will not impact the decisions made regarding ATCO Gas's 2015 SMR program as use of the current demerit point system was employed for the SMR program in 2015. However, the Commission considers this application to be the best available time to raise issues for consideration of the new demerit point system in order to provide ATCO Gas with direction regarding its use of a demerit point system methodology in 2017 and in future SMR program forecasts.

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¹⁹⁰ Exhibit 20604-X0027, AG-AUC-2015AUG17-011.

Decision 3267-D01-2015, paragraphs 231-232.

- 170. Regarding the concerns of the interveners related to the 2016 and 2017 forecast for the SMR program, the Commission notes that the onus is on the applicant to satisfy the Commission that a project or program is required. However, not all of the relevant information considered by ATCO Gas's engineering staff was included on the record of the proceeding. For this reason, the Commission considers that there may be a benefit to increased visibility of ATCO Gas's SMR data in future capital tracker proceedings. However, the late introduction of issues regarding the SMR project forecast by the CCA did not allow for a full exploration of the information that was available, and should be provided, in support of the SMR capital tracker program. As such, the Commission considers that additional information should be provided by ATCO Gas in future proceedings, as requested by interveners, which will allow testing of further information and for parties to provide argument and reply on the information that should be supplied under the SMR program. The Commission has provided below its findings on the information to be included in its future regulatory applications.
- 171. Regarding leak frequency data, the Commission observes that multiple reporting criteria may aid interveners and the Commission in analysing the risk in the system. Data on a per 100 km basis is useful for comparing leak frequencies across projects, while an absolute leak total can be useful in analyzing individual projects. Accordingly, ATCO Gas is directed to provide, for each project included in its future SMR business cases, the total number of leaks for each of the two-year and 10-year time periods, as well as the number of leaks on a per 100 km basis, for each of the two-year and 10-year time periods.
- 172. Further, ATCO Gas confirmed in the hearing that at any given time it has leak frequency data for its entire system that is not more than five years out of date.¹⁹² The Commission considers that having a full picture of the leak frequencies occurring across the entire ATCO Gas system would assist the Commission and interveners in analyzing the business cases that appear before the Commission in future capital tracker proceedings. As such, ATCO Gas is directed to provide a summary table with information on leak frequencies across its entire system as a part of the SMR business case in its next capital tracker application.
- 173. ATCO Gas confirmed in the hearing that it routinely records cathodic protection levels on the system and determines the adequacy of the cathodic protection levels by reviewing that history. ¹⁹³ In its argument, the CCA expressed the view that reviewing the cathodic protection records may be helpful in determining the SMR projects required in a test period. In order to assess the relevance and probative value of these records, ATCO Gas is directed to provide a description and an outline of the information in ATCO Gas's cathodic protection records and to comment on the feasibility of providing more detailed information in future capital tracker applications with SMR projects, in the compliance filing to this decision.
- 174. The CCA submitted that there has never been any verification that the current methodology for determining projects under the SMR program results in the selection of only the SMR projects that genuinely require replacement. The Commission shares this concern, and directs ATCO Gas to perform an integrity assessment of all SMR projects that are completed between the release of this decision and the end of 2016. However, the Commission accepts ATCO Gas's position that project closeout reports are not the appropriate vehicle for an integrity

Transcript, Volume 3, page 351, lines 4-7 (Mr. Germaine).

¹⁹³ Transcript, Volume 3, page 365, lines 4-9 (Mr. Germaine).

assessment. The Commission, therefore, is not requiring ATCO Gas to perform this integrity assessment as a part of its project closeout reports.

- 175. ATCO Gas is directed to provide the information referred to in the previous paragraph as a part of the 2016 capital tracker true-up application. It should be noted that this information will not be used in a retroactive manner to reassess the validity of its 2016 SMR programs, which have been approved using the current methodology; but to assist the Commission with assessing the information required for ongoing and future ATCO Gas SMR projects.
- 176. In its reply argument, the CCA requested a greater level of disclosure of leak information in future business cases, including any ranking system of size or severity, type of mechanical leak, detailed location on service or main, estimated volume of leak, and time from discovery of leak to complete repair including any leaks that were not deemed either repairable or necessary to repair. The Commission considers that some or all of this information will be helpful in improving the assessment of individual projects and the SMR program overall. ATCO Gas is directed, in the compliance filing to this decision, to comment on which of the additional leak data listed by the CCA, if any, are tracked by ATCO Gas, comment on whether reports are available on these items, and further comment on the feasibly of providing additional information on leak frequency in addition to what was provided in the business cases on the record of the current proceeding.
- 177. Regarding the 2016 forecast for the SMR program, no party raised any objections with respect to the specific projects described within the business cases. Though the CCA disagreed with the timing of projects within the program, it stated its agreement with the scope of the program by recommending that all the applied-for projects be completed by the end of 2017. The Commission finds that there is insufficient evidence to delay some of these projects and, as such, denies the CCA's recommendation. With respect to the scope, level and timing of the SMR program for 2016, the Commission has reviewed the business case and the relevant portions of the record for this program and finds the forecast scope, level and timing of the program for 2016 to be reasonable.
- 178. In its assessment of the SMR capital tracker program in 2016 and all the years leading up to 2016, the Commission has relied on the current methodology for determining required projects under the SMR program, including the engineering assessments, leak frequencies, and demerit point scores.
- 179. ATCO Gas's forecast capital additions associated with emergency repairs for this program are \$1.6 million in 2016 and \$1.7 million in 2017. The Commission has reviewed the costs of the forecast capital additions in light of the evidence supporting these costs, including procurement, construction and project cost management practices. The Commission has also reviewed ATCO Gas's forecast methodology based on a cost-per-service forecast and use of a three-year average forecast for emergency repairs. Regarding the 2016 and 2017 forecasts for the SMR program, the Commission notes that the forecast methodology for the emergency repairs is consistent with the previously approved methodology based on a three-year average, and finds the forecast scope, level and timing of the emergency repairs in 2016 and 2017 to be reasonable. The Commission finds the total annual cost forecast in 2016 and 2017 for emergency repairs to be reasonable.

- 180. ATCO Gas's forecast capital additions associated with the identified projects for the SMR program are \$36.7 million in 2016. The Commission has reviewed the costs of the forecast capital additions in light of the evidence supporting these costs, including procurement, construction and project cost management practices. The Commission has also reviewed ATCO Gas's forecast methodology based on a cost-per-service forecast. Accordingly, the Commission finds that this program satisfies the project assessment requirement of Criterion 1 for 2016.
- 181. For the remainder of the 2017 forecast costs for the SMR program, excluding emergency repairs, the Commission observes that escalating the 2016 forecast by inflation constitutes a change to the previously approved forecast methodology. The Commission agrees with the CCA that approving a forecast which is not associated with any specific projects would be similar to the previously denied proactive program and cannot be used to support the approval of a general capital tracker program fund. The Commission notes that approvals of expenditures for the SMR program have generally been associated with a defined set of projects and therefore it is the Commission's preference to not approve expenditures without a clear understanding of the need. Accordingly, the Commission does not approve the remainder of the 2017 SMR program forecast because it is not associated with a defined set of projects. However, as set out at paragraph 615 of Decision 2012-237, a company may choose to undertake a capital investment prior to applying for capital tracker treatment in a subsequent annual capital tracker filing. In other words, a company does not have to wait for the Commission's approval of its forecast for capital tracker treatment to proceed with projects required to maintain service reliability and safety at adequate levels. Consistent with these findings, this does not prevent ATCO Gas from receiving compensation for all prudently incurred program costs at the time of its true-up application.
- 182. In light of the above considerations, the Commission finds that, for purposes of capital tracker treatment in 2017 on a forecast basis, the scope of the SMR program should be limited to emergency repairs. The Commission directs ATCO Gas, in its compliance filing to this decision, to recalculate the accounting test, the first tier of the materiality test and the K factor amount associated with this program based only on capital additions for the emergency repairs component of the SMR program for 2017.

6.2.2.2 Plastic Mains Replacement

183. The PMR program consists of the replacement of polyvinyl chloride (PVC) and early generation pre-1978 polyethylene (PE) pipe. ATCO Gas stated that its early plastic pipe systems needs to be replaced proactively due to the brittle failures and leak potentials of these types of plastic pipe, which can cause incidents involving fatalities, injury or property damage. The PMR program consists of planned replacement projects and emergency replacement projects that are required throughout the year. ATCO Gas provided details of the PMR program in Appendix B2 of the application. The need for this program as part of the project assessment under capital tracker Criterion 1 was previously approved in Decision 2013-435¹⁹⁵ and Decision 3267-D01-2015.

Exhibit 20604-X0004, Appendix B2, Plastic Mains Replacement program.

¹⁹⁵ Decision 2013-435, paragraph 647.

Decision 3267-D01-2015, paragraph 269.

- 184. ATCO Gas is applying for capital tracker treatment for both the north and south in 2014. Net capital additions were \$16.9 in the north and \$16.4 million in the south. ¹⁹⁷ In the north, the 2014 approved forecast capital expenditures for this program were \$20.1 million, while the actual 2014 capital expenditures were \$20.3 million, resulting in a \$0.2 million negative variance. In the south, the 2014 approved forecast capital expenditures for this program were \$14.8 million, while the actual 2014 capital expenditures were \$17.2 million, resulting in a \$2.4 million negative variance. ¹⁹⁸
- 185. ATCO Gas explained that at the start of 2014, there was approximately 7,300 km of mains remaining to be replaced. In 2014, ATCO Gas planned to replace 300 km of mains, impacting approximately 1,020 services, in order to match resource availability, but it was able to replace 332 km of main, impacting 1,335 services. Overall, ATCO Gas replaced more km of mains with a higher service density than forecast, at a unit cost which was three per cent less than forecast, on a total basis. ATCO Gas explained that the additional replacement will not result in the program being completed ahead of the target deadline, but will help ensure that that the original timeline of 2030 is met. ATCO Gas confirmed that it has been increasing its engineering, land and construction resources annually to ensure completion of the program by 2030. 199
- 186. In 2014, for the north, ATCO Gas originally planned to replace 150 km of mains at a unit cost of \$130,000 per km, but replaced 168 km of mains at a unit cost of \$117,000 per km. This represented a 12 per cent positive variance in the amount of mains replaced and a 10 per cent negative variance in the unit costs. Two factors that contributed to the unit cost decrease were the use of directional drilling as a method of installation and the use of ploughing mains, where possible. ATCO Gas explained that ploughing mains is more cost effective and can be implemented in suitable ground conditions where agreement is obtained by land owners. Cost savings were also achieved by completing more work in the summer, rather than in the winter. 201
- 187. In 2014, for the south, the negative variance of \$2.4 million was primarily due to higher unit costs caused by an increase in the service density and by replacing more km of mains than forecast. In 2014, ATCO Gas originally planned to replace 150 km of mains at a unit cost of \$97,000 per km, but replaced 164.1 km of mains at a unit cost of \$103,000 per km. This represented a nine per cent positive variance in the amount of mains replaced and a seven per cent positive variance in the unit costs. ATCO Gas stated that the unit costs were developed based on 2013 projects. For example, the service density for the south in 2013 was 3.0 services per km. However, that the service density increased to 3.7 services per km in 2014, resulting in an increase in the 2014 unit cost per km. ATCO Gas indicated that it would be recognizing the impact of service density in the unit costs when providing future forecasts. ²⁰³
- 188. For both the north and south, emergency replacements were roughly 21 per cent lower than forecast. Since emergency replacements are forecast based on a three-year average,

Exhibit 20604-X0007, application, Schedule A2.

Exhibit 20604-X0009, application, Table 67, PDF page 208.

¹⁹⁹ Exhibit 20604-X0009, application, paragraphs 602-604, PDF pages 206-208.

Exhibit 20604-X0009, application, Table 67, PDF page 208.

²⁰¹ Exhibit 20604-X0027, AG-AUC-2015AUG17-022(a).

Exhibit 20604-X0009, application, Table 67, PDF page 208.

Exhibit 20604-X0009, application, paragraph 609, PDF page 208.

ATCO Gas noted that the actual costs associated with emergency replacements typically vary year to year.²⁰⁴

- 189. In 2016 and 2017, ATCO Gas applied for capital tracker treatment for this program for the north and the south. The forecast capital additions for this program for 2016 are \$50.1 million (\$21.7 million for the north and \$28.4 million for the south) and for 2017 are \$51.9 million (\$25.1 million for the north and \$26.8 million for the south), respectively, and were developed using an updated forecasting methodology. ²⁰⁵
- 190. In the application, ATCO Gas proposed a new forecasting method in order to reflect its updated prioritization method for the replacement of PVC and pre-1978 PE pipe. As discussed in Decision 3267-D01-2015,²⁰⁶ in March of 2014, ATCO Gas experienced a crack, or brittle pipe failure, on a 1974 PE main that was 40 years of age, resulting in an explosion at a residence (the Stony Plain explosion). In light of this incident, and with additional manual data collected by the company, ATCO Gas redeveloped its prioritization methodology for the replacement of PVC and pre-1978 PE pipe in an effort to maximize the reduction of risk on an annual basis. With the updated prioritization methodology, ATCO Gas submitted that starting in 2015 replacement priority will now be given to PVC and pre-1978 PE pipe with the highest service densities within ATCO Gas's system. ATCO Gas stated that this new method of prioritization does not hinder ATCO Gas's ability to complete the replacement program within the 20 year timeline.²⁰⁷
- 191. In Decision 2011-450, the Commission approved the proactive replacement of PVC and pre-1978 PE pipe over a 20-year period, beginning in 2011. In the application, ATCO Gas provided a summary table showing the km of mains replaced, the services impacted and the service density from 2011-2017, as follows:

Table 8. PMR program replacement actuals and forecasts from 2011-2017²⁰⁹

Year	km of main replaced	Services impacted	Service density
2011	170	630	3.7
2012	160	691	4.3
2013	268	893	3.3
2014	332	1,335	4.0
2015*	240	2,800	11.7
2016*	247	2,615	10.6
2017*	297	2,050	6.9
Remaining pipe	6,200210	13,835	2.2211

^{*}Forecast.

²⁰⁴ Exhibit 20604-X0027, AG-AUC-2015AUG17-022(b).

²⁰⁵ Exhibit 20604-X0004, Appendix B2, Table 4, PDF page 144.

Decision 3267-D01-2015, paragraph 239.

Exhibit 20604-X0004, Appendix B2, paragraph 5, PDF pages 123-124.

Decision 2011-450, paragraph 188.

Exhibit 20604-X0004, Appendix B2, Table 1, PDF page 127 and updated as per Exhibit 20604-X0040, AG-UCA-2015AUG17-011 where there was an error in the business case. There will be 6,200 km remaining at the end of 2017 and a service density of 2.2, not 6,700 km remaining and 2.1 service density as stated in Table 1 of the Appendix B2 of the PMR business case.

Fixed as per Exhibit 20604-X0040, AG-UCA-2015AUG17-011.

Fixed as per Exhibit 20604-X0040, AG-UCA-2015AUG17-011.

- 192. To complete the replacement of the remaining 6,200 km of mains and 13,835 impacted services within the 20-year timeline, ATCO Gas stated that an average of approximately 450 km of mains and 1,230 services would need to be replaced annually. ATCO Gas proposed three alternatives for the PMR program.
- 193. ATCO Gas first considered an operational alternative. In ATCO Gas's view, no reasonable operational alternative is available that could address the risk of potential pipe failures as O&M spending could not adequately reduce or mitigate this type of risk.²¹³ Accordingly, ATCO Gas did not recommend this alternative.²¹⁴
- 194. The second alternative assessed by ATCO Gas consisted of replacing PVC and pre-1978 PE pipe in accordance with the updated risk prioritization method. As shown in Table 8 above, under this approach, ATCO Gas would replace 247 km of mains and 2,615 services (service density of 10.6 services/km) in 2016, and 297 km of mains and 2,050 services (service density of 6.9 services/km) in 2017. In each subsequent year, the projected amount of mains replaced would increase, while the number of services replaced would decrease. Under this alternative, the program would be completed within the 20-year timeframe originally approved by the Commission. This alternative would include a 2016 and 2017 cost forecast of \$50.1 million and \$52.0 million, respectively.²¹⁵
- 195. The third alternative that ATCO Gas assessed consisted of replacing PVC and pre-1978 PE pipe in accordance with the risk prioritization methodology approved by the Commission in Decision 3267-D01-2015. Under this alternative, ATCO Gas would perform a linear replacement of 450 km of mains and 1,230 services (service density of 2.7 services/km) each year within the 20-year timeframe. This alternative would include 2016 and 2017 cost forecasts of \$50.1 million and \$52.0 million, respectively. The service of \$50.1 million and \$52.0 million, respectively.
- 196. ATCO Gas recommended that the second alterative be implemented over the third alternative. Specifically, the second alterative prioritizes pipe replacement based on risk factors assessed using the updated prioritization method, which incorporates additional risk factors not previously identified. The third alternative only prioritizes pipe replacement based on maintaining a consistent replacement of the same proportion of mains and services for the remaining 15 years of the program. The third alternative also does not eliminate as many risk factors from the system in 2016 or 2017 as compared to the second alternative. ATCO Gas also observed that the costs and overall program scope associated with the second and third alternatives are the same, as the annual expenditure forecast for 2015 remains unchanged. 219
- 197. In developing its updated prioritization method, ATCO Gas updated its risk factors to consider eight key risks: pipe location, distance from main to residence, numbers of services per unit length, pipe squeeze locations, leak history, operating pressure, pipe material and pipe

Exhibit 20604-X0004, Appendix B2, paragraph 6, PDF page 124.

Exhibit 20604-X0004, Appendix B2, paragraph 7, PDF page 124.

²¹⁴ Exhibit 20604-X0027, AG-AUC-2015AUG17-014(a).

Exhibit 20604-X0004, Appendix B2, paragraph 8, PDF page 125.

²¹⁶ Exhibit 20604-X0027, AG-AUC-2015AUG17-014(a).

Exhibit 20604-X0004, Appendix B2, paragraph 9, PDF page 125.

Exhibit 20604-X0027, AG-AUC-2015AUG17-014(a)-(b).

Exhibit 20604-X0027, AG-AUC-2015AUG17-014(a) and Transcript, Volume 3, page 419, lines 4-7 (Mr. Germaine).

size.²²⁰ The company also gathered additional information, such as the number of services attached to PVC and pre-1978 PE pipe, approximate length of the service, location of some previous squeeze points, updated leak information and pipe location (urban or rural setting).²²¹ ATCO Gas submitted that its updated prioritization method enables it to better prioritize its replacement work, and that the availability of the additional data eliminates the need to first group pipes based on leak history.²²²

198. ATCO Gas provided its risk scoring matrix, including the weight assigned to each risk factor, as set out in the table below:

Risk factors	Risk points allocated	
Leaks	1 point for each leak	
Over pressured pipe	2 points for each km over pressure	
Pipe material	3 points per km of PVC main, 1 point per km of PE main	
Pipe size	2 points per km of 26 mm main	
PE squeeze density	1 point for each squeeze location	
Service density	1 point per service	
Distance from residence	3/2/1 points per service of corresponding lengths (<20m, 20-50m, >50m)	
Urban or rural	2 points per km if urban	

Table 9. Risk scoring for the PMR program²²³

199. ATCO Gas provided a list of project prioritization results for 2016 and 2017 (2016 and 2017 project list), that is reflective of the risk factors and corresponding weighting. For each of the projects identified in the 2016-2017 project list, ATCO Gas provided evaluation metrics for region, area, work order number, total length in km, total number of services, the service density (services/km), total risk weighting and total risk weighing per total km of main.²²⁴

200. In the oral hearing, Mr. Germaine, who appeared on behalf of ATCO Gas, confirmed that the risk ranking system for prioritization of projects in the 2016 and 2017 project list was based on the total risk weighing per total km of main, and not on total risk weighting. ATCO Gas gave priority for replacement to projects with the highest total risk weighing per total km of main for a given year, as outlined in the 2016 and 2017 project list. In response to an inquiry as to why ATCO Gas did not base its prioritization of projects on total risk weighting, but rather on total risk weighing per total km of main for that given year, Mr. Germaine stated the following:

A. MR. GERMAINE: Again, it's a relative score. So as I mentioned earlier, these scores are based on the original installation project. So you may have, for example, one project that was, you know, 20 kilometres of new main and another project that was 2 kilometres of main. To be able to compare those two systems equally, we do that on a per-kilometre basis as opposed to total length. ²²⁶

Exhibit 20604-X0004, Appendix B2, paragraphs 19-28, PDF pages 133-137.

Exhibit 20604-X0027, AG-AUC-2015AUG17-013(a).

Exhibit 20604-X0004, Appendix B2, paragraph 18, PDF pages 132-133.

²²³ Exhibit 20604-X0027, AG-AUC-2015AUG17-017(a).

Exhibit 20604-X0027, AG-AUC-2015AUG17-017(a), Table 2 and Table 3, and further updated in Exhibit 20604-X0112 in response to an AUC aid to cross.

Transcript, Volume 3, page 412, lines 14-15 (Mr. Germaine).

Transcript, Volume 3, page 412, lines 16-23 (Mr. Germaine).

- 201. In response to a question by Commission counsel regarding why some projects with a higher total risk weighing per total km of main were scheduled to be replaced in 2017, whereas other projects with a lower risk weighing per total km of main were scheduled for replacement in 2016, Mr. Germaine explained that apart from ATCO Gas's risk scoring model, consideration is also given to the resources available to do the replacement work across the province. Further, Mr. Germaine explained that geographical considerations were also taken into account when the total project list was developed.²²⁷
- 202. In an IR response to the Commission, ATCO Gas demonstrated how the total risk weightings (including total risk scores and total risk scores per km) were calculated based on the associated risk factors, with the scores identified in the risk scoring model. This demonstration was provided for two projects identified in the 2016 and 2017 project list (i.e., project work order number 75-W245, which was ranked as the highest priority project for 2016, and project work order number 72-W673, which was ranked as the sixteenth highest priority project for 2016).²²⁸
- 203. As noted above, the 2016 and 2017 forecasts were derived on the basis that the PMR program will be completed by 2030 and that the level of replacement activity will be relatively consistent over that time frame. As shown in Table 8, there are approximately 6,200 km of main and 13,835 impacted services remaining to be replaced in the PMR program. This translates to 450 km per year for 15 years. ATCO Gas submitted that, not factoring for inflation, the replacement of 450 km would cost approximately \$49.5 million per year.²²⁹
- 204. As the cost of replacement increases with service density, and as ATCO Gas's prioritization method under the second alternative puts more emphasis on high density locations, ATCO Gas proposed to replace fewer mains with a higher service density in 2016 and 2017 in order to keep forecast costs at approximately \$50 million per year in those years, in exchange for replacing more km of mains with a lower service density in the future. ATCO Gas submitted that the cost of replacement for future years will still be in line with the forecasts for 2016 and 2017, and adjusted for inflation.²³⁰
- 205. ATCO Gas stated that once it established the annual level of expenditures required to complete the program over the remaining 15 years, it used regression analysis to determine the forecast number of km and services to be replaced in 2016 and 2017. ATCO Gas submitted that service density is the most influential factor driving costs associated with the replacement of PMR mains. In the business case for the PMR program, ATCO Gas provided a figure, for illustrative purposes, where a line of best fit was determined to show the relationship between service density and cost. ATCO Gas used only data on 2013 projects to determine the line of best fit. In the hearing, Mr. Germaine confirmed that this figure was not used to build the 2016 and 2017 forecast and that the line of best fit included in this illustration was obtained using

Transcript, Volume 3, page 413, lines 22-25 to page 414, lines 1-3 (Mr. Germaine).

Exhibit 20604-X0027, AG-AUC-2015AUG17-017(a), Table 4.

²²⁹ Exhibit 20604-X0027, AG-AUC-2015AUG17-020(d).

²³⁰ Exhibit 20604-X0027, AG-AUC-2015AUG17-020(d).

Exhibit 20604-X0027, AG-AUC-2015AUG17-020(d).

Exhibit 20604-X0004, Appendix B2, PDF page 142.

Exhibit 20604-X0004, Appendix B2, Figure 5, PDF page 142.

regression analysis applied jointly to the north and south data.²³⁴ ²³⁵ The figure is reproduced below:

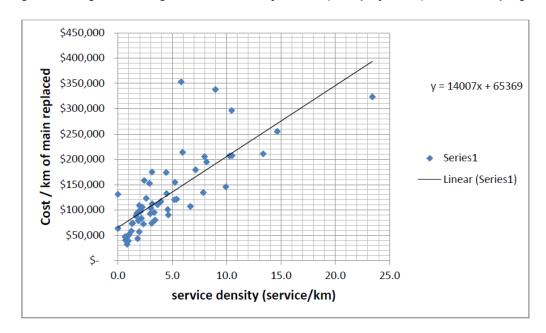


Figure 1 Figure showing the service density vs cost (2013 project list) for the PMR program²³⁶

206. To determine the 2016 and 2017 cost per km forecasts, ATCO Gas utilized a similar regression-based approach, with cost per km regressed on service density (services/km) separately for the north and south.²³⁷ The resulting estimated regression equations are included in the following table:

Table 10. Estimated regression equations for the north and south for the PMR program²³⁸

	Cost per km
North	(\$11,600) x (service density) + \$82,000
South	(\$6,600) x (service density) + \$118,200

207. In response to a Commission IR, ATCO Gas explained that these regression equations were estimated using data from a 2013 and 2014 project list that satisfied the high density criteria in both the north and south as, in ATCO Gas's view, these projects are representative of the work planned in 2015 to 2017. Specifically, ATCO Gas filtered the 2013 and 2014 project list to remove projects with a service density of less than eight services per km, and projects with less than ten services; thereby narrowing the data to include only high density projects but eliminating any projects with artificially high service densities. The two regression equations were then estimated using the remaining data points.²³⁹

Transcript, Volume 3, page 426, lines 9-10 (Mr. Germaine).

Transcript, Volume 3, page 430, lines 1-5 (Mr. Germaine).

²³⁶ Exhibit 20604-X0004, Appendix B2, Figure 5, PDF page 143.

Exhibit 20604-X0004, Appendix B2, Table 3, PDF page 144.

²³⁸ Exhibit 20604-X0004, Appendix B2, Table 3, PDF page 144.

Exhibit 20604-X0027, AG-AUC-2015AUG17-020(c).

- 208. Further, ATCO Gas noted that the estimated regression equations were not used to derive individual project estimates but were used to derive annual costs based on the total mains and aggregate service density forecast for that particular year.²⁴⁰ ATCO Gas stated that project costs per km were plotted against services per km and the resulting best fit curve was used to forecast unit costs for 2015, 2016 and 2017. The unit costs were then multiplied by the forecast number of units, resulting in the total costs for the planned work.²⁴¹
- 209. In the hearing, Commission counsel requested further clarification with respect to the forecast methodology adopted by ATCO Gas, and to confirm that the regression analysis used the specification and variables shown below:²⁴²

$$Costperkm_i = \alpha + \beta Servicesperkm_i + e_i$$

- $Costperkm_i = cost per km of main;$
- $Servicesperkm_i$ = number of services per km of main;
- $e_i = a$ random error term;
- α and β are unknown parameters; and
- the index i refers to a particular project, where i=1,...,n, where n is the number of projects.
- 210. Commission counsel also asked ATCO Gas to confirm that the method specified below was used to determine the forecast of unit (per km) costs, and subsequently total costs, in the north and south:
 - (1) for a set of projects completed in the region in question in some past period(s), regress the total costs per km of each project on a constant and the number of services per km to obtain an estimated regression equation:
 - estimate $Costperkm_i = \alpha + \beta \ Servicesperkm_i + e_i$ and obtain $\hat{\alpha}$ and $\hat{\beta}$, so that the estimated regression equation is: $Costperkm_i = \hat{\alpha} + \hat{\beta} \ Servicesperkm_i$
 - (2) substitute a forecast of the number of services per km into the estimated regression equation to obtain a forecast of total costs per km:
 - substitute in this estimated regression equation forecast value of $Servicesperkm_i$ to obtain a forecast of $Costperkm_i$, that is, a value for $Costperkm_i$.
 - (3) multiply the forecast of total costs per km by a forecast of total km to arrive at a forecast of total costs:
 - multiply this forecast by the forecast of km, to yield a forecast of cost, that is, $\widehat{Cost} = \widehat{Costper}km_l \times km$.
 - (4) add a cost adjustment for emergency projects based on a three-year average from past years.

Exhibit 20604-X0027, AG-AUC-2015AUG17-020(b)-(c).

²⁴¹ Exhibit 20604-X0004, Appendix B2, paragraph 46, PDF pages 144-145.

Exhibit 20604-X0109, AUC aid to cross – PMR regression model.

- 211. In the hearing, Mr. Germaine confirmed that the approach described above is correct.²⁴³
- 212. With respect to the data used, ATCO Gas provided the following 2016 and 2017 forecast unit costs and km for its planned replacements in the application:

	2016	2017
North		
km	82	122
\$000/km	262.3	205.7
Total (\$000)	21,508	25,092
South		
Km	165	175
\$000/km	171.0	151.3
Total (\$000)	28,216	26,482

213. Based on the two estimated regression equations reported in Table 10, and the data reported in Table 11 above, Mr. Germaine explained how the total forecast cost of \$21.5 million was derived for the north in 2016, as follows:

A. MR. GERMAINE:

...Again, as I mentioned earlier, the number that you see -- and I'll just give an example. So 2016 for the north of 21.5 million approximately.

Q. Yes.

A. MR. GERMAINE: Yeah. So that number -- that is the number that -- it is one number that, I guess, is the result of our forecasting process. And it's sort of the aggregate of those pieces I mentioned earlier. We don't take a total number of kilometres and multiply them.

We know the total projects we plan to do, which is 82 kilometres, and then it essentially spits out the total of 21.5. And then from that, we would get a result in cost per kilometre, if that is helpful.

- Q. Okay. And, sir, can you explain why you did not provide the service density for each region for 2016 and 2017 in this table or in the business case?
- A. MR. GERMAINE: There is no specific reason why it was not included.²⁴⁵
- 214. In response to a question from Commission Counsel, Mr. Germaine added that ATCO Gas did not include the service density used to determine the 2016 and 2017 forecast for either the north or the south in the business case. However, as shown in Table 8, ATCO Gas did provide the service density forecast for the two regions combined for 2016 and for 2017.

Transcript, Volume 3, page 431, lines 2-11 (Mr. Germaine).

²⁴⁴ Exhibit 20604-X0004, Appendix B2, Table 5, PDF page 145.

Transcript, Volume 3, page 435, lines 3-17 (Mr. Germaine).

215. The Commission calculated the implied value of the service density for the north and the south, for 2016 and 2017, using the two estimated regression equations provided in Table 10 and the data on the forecast unit costs (\$000/km) reported in Table 11.²⁴⁶ These service densities, as shown in Table 12 below, were confirmed by Mr. Germaine to "look approximately correct."²⁴⁷

Table 12. Commission calculated service densities for 2016 and 2017 for the PMR program

	2016	2017
North	(262.3 – 82)/11.6 = 15.54	(205.7 – 82)/11.6 = 10.66
South	(171.0 – 118.2)/6.6 = 8.0	(151.3 – 118.2)/6.6 = 5.02

216. In the application, ATCO Gas provided the total capital expenditures for the PMR program for planned and emergency replacements, as follows:

Table 13. 2016 and 2017 capital expenditure forecast for planned and emergency replacements in the PMR program²⁴⁸

	2016	2017
	(\$000)	
North		
Planned	21,508	25,092
Emergency	277	293
Total	21,785	25,385
South		
Planned	28,216	26,482
Emergency	137	144
Total	28,353	26,626
Total plastic mains replacement	50,138	52,011

- 217. As stated earlier, the PMR program consists of planned replacement work and emergency replacement work. ATCO Gas explained that it continues to respond to emergency work. For the emergency replacement forecast, ATCO Gas used a three-year average from 2012, 2013 and 2014.²⁴⁹
- 218. No intervener filed any evidence, argument or reply argument with respect to the PMR program.

Commission findings

219. The need for the PMR program as part of the project assessment under capital tracker Criterion 1, was previously approved in Decision 2013-435²⁵⁰ and in Decision 3267-D01-2015.²⁵¹ With respect to the true-up of 2014 actual costs, as noted in Section 3, if there is an absence of evidence on the record of this proceeding demonstrating that a project was not required in 2014, then there is no need to demonstrate that a project is needed in order to provide utility service at

Exhibit 20604-X0109, AUC aid to cross – PMR regression model.

Transcript, Volume 3, page 435, lines 18-25 to page 436, line 1 (Mr. Germaine).

²⁴⁸ Exhibit 20604-X0004, Appendix B2, Table 2, PDF page 128.

Transcript, Volume 3, page 454, lines 24-25 (Mr. Germaine).

Decision 2013-435, paragraph 647.

²⁵¹ Decision 3267-D01-2015, paragraph 266.

adequate levels in 2014, as would otherwise be required under the project assessment component of Criterion 1. The Commission finds no evidence on the record of this proceeding to indicate that the PMR program was not required in 2014.

- 220. Although ATCO Gas is not required to demonstrate the need for the PMR program in 2014, it must still provide sufficient evidence to demonstrate that the scope, level, timing and actual costs of the program were prudent in 2014. With respect to the scope, level and timing of the program carried out in 2014, the Commission has reviewed the ATCO Gas's actual capital additions of \$16.9 million in the north and \$16.4 million in the south for this program in 2014, and finds that that they are generally consistent with the scope, level and timing of the work outlined in the business case for this capital tracker that was approved in Decision 3267-D01-2015.
- 221. The Commission has also reviewed the costs of the 2014 actual capital additions for both planned and emergency replacements for this program in light of the evidence supporting these costs. This included a review of the business case, information responses, cost variance explanations provided in the application, testimony on the processes and procedures by which projects are identified and carried out and the procurement, construction and project cost management practices outlined in ATCO Gas's Capital Project Delivery model. As a result, the Commission finds the actual costs to be prudent for 2014. Accordingly, the Commission finds that the PMR program satisfies the project assessment requirement of Criterion 1 in 2014.
- 222. In the application, ATCO Gas requested capital tracker treatment for the north and the south for this program in 2016 and 2017. As noted in Section 3, where a project or program is part of an ongoing multi-year program, or if a project or program is of an annual recurring nature for which the need has been previously approved by the Commission for purposes of capital tracker treatment, in the absence of evidence that the project or program is no longer required, the Commission will not undertake a reassessment of need under Criterion 1. The Commission finds no evidence on the record of this proceeding to indicate that the PMR program is not required to continue in 2016 or 2017.
- 223. The forecast capital additions for the PMR program for 2016 are \$50.1 million (\$21.7 million for the north and \$28.4 million for the south) and for 2017 are \$51.9 million (\$25.1 million for the north and \$26.8 million for the south), respectively. With respect to the scope, level and timing of the PMR program for 2016 and 2017, the Commission has reviewed the business case and the relevant portions of the record for this program. Regarding the scope, ATCO Gas stated that the overall scope of the program remains unchanged from that of previous years. In the Commission's view, despite an updated prioritization method and a change in the forecast methodology proposed by ATCO Gas in this application, the Commission agrees that the overall scope of work to be completed annually in the 20-year timeframe previously approved by the Commission remains reasonable.
- 224. With respect to the prioritization of the work to be completed annually, ATCO Gas advocated using an updated prioritization method for the PMR program, thereby focusing on higher service density areas in 2016 and 2017. As ATCO Gas stated in the application, the program is based on giving "replacement priority to PVC and pre-1978 PE pipe with the highest service densities in ATCO Gas' system, starting in 2015 and onward."²⁵² Consistent with this

Exhibit 20604-X0004, Appendix B2, PDF page 124.

objective, ATCO Gas provided a prioritized list of projects for 2016 and 2017, which included evaluation metrics.²⁵³

- 225. The Commission has reviewed the 2016-2017 project list and is concerned that there are a number of projects scheduled for 2017 that have a higher service density and risk weighting (both total risk weighting and risk weighting per total km of main) than many of the projects scheduled for 2016. As identified above in Table 12, the Commission-calculated average service densities in the north in 2016 (15.54 services/km) and 2017 (10.67 services/km) are higher than the average service densities in the south in either year (8.0 services/km in 2016 and 5.02 services/km in 2017). Moreover, the Commission calculated the average service density for the south for 2016 and it is lower than the average service density for the north in 2017. The observations for average service density are not consistent with the objective of prioritizing higher density projects, as proposed by ATCO Gas as the second alternative in its business case. However, based on the explanation provided by Mr. Germaine in the hearing, the Commission accepts that this inconsistency may be explained in part by the fact that geographical considerations are also taken into account when the total project list is developed. Accordingly, the Commission approves ATCO Gas's 2016 and 2017 project prioritization list, as developed from its risk model found in Table 9.
- 226. The Commission finds that regression analysis, as used by ATCO Gas in its business case for the program, can be a useful tool to model, and subsequently forecast, cost or cost per km. However, if parties are to understand and test ATCO Gas's forecasts, then the regression analysis needs to be well-documented and reproducible. A complete understanding of the method and results is not possible if the regression model, the data used in the regression analysis, accurate detailed descriptions of the variables used, and the analysis used by ATCO Gas to produce forecast costs for the program, are not fully provided and cannot be reproduced by the Commission or interveners.
- 227. For example, in a regression where cost per km depends on service density, parties would benefit from being provided with the explicit values of service density for each region and year that are inputted into the estimated regression equations to yield cost per km forecasts for the those regions and years. In a response to a Commission aid to questioning, service densities were calculated and provided by the Commission, and ATCO Gas's witness confirmed that the service densities "look approximately correct." Based on the Commission's calculations provided in Table 12, the Commission finds that the implied service density values for each region for 2016 and 2017 are approximately consistent with the overall service densities for these years presented in Table 8, as can be confirmed by multiplying the implied service density for each region by the number of km for each region found in Table 11, and then summing across the two regions.
- 228. The Commission considers that it would be helpful to all parties if ATCO Gas were to provide a more complete presentation of the regression models and accompanying analysis, separately for each region in which the analysis is conducted. A more complete presentation might include a variety of regression diagnostic statistics such as the number of observations used, the time period used, the goodness of fit statistic, estimated standard errors of all the estimated parameters, the estimated standard error of the regression, tests of parameter significance, and tests of whether the regressions for different regions are statistically significantly different. In addition, if cost data used to estimate a particular regression include

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Exhibit 20604-X0112, updated PMR tables.

values for different years, then the cost data in these different years should be inflation-adjusted using a method that is fully described and justified. The additional information will assist in testing the veracity of the regression models, and ultimately the derivation of service densities and forecast costs.

- 229. As a further consideration, ATCO Gas could determine the estimated standard errors for forecasts of cost per km for different regions in different years, so that the uncertainty associated with these forecasts can be evaluated. Interested parties, as well as ATCO Gas, may also benefit from an evaluation of alternative regression models that employ standard regression diagnostic procedures, such as individual and joint tests of significance of parameters. These alternatives could include models with multiple explanatory variables where, for example, service density is replaced by separate variables for the number of services and pipeline length.
- 230. Consistent with the Commission's view that regression results should be reproducible in order to aid in a complete understanding of forecasting methods and results, in the oral hearing the Commission sought, and ATCO Gas provided, the 2013 and 2014 project lists that were used in the regression analysis. Project detail in these lists included the year, region, distance (km), service density, and cost per km, and also identified projects that were not included in the regression analysis. With this data, the Commission was able to re-estimate ATCO Gas's various regression models and confirm, approximately, the regression results for the combined regions for 2013 as shown in the illustrative example in Figure 1,255 and also for the two regions, north and south, separately for that same year.256
- 231. The Commission observes, however, that ATCO Gas's 2016 and 2017 forecasts were based on the estimated north and south regression equations reproduced in Table 10. As described in Point 3 of the Commission's aid to questioning concerning the PMR regressions, and confirmed by an ATCO witness to be correct, ATCO Gas used these estimated equations, along with service density forecasts for each region, to produce the forecast costs per km, and the total costs, for each region, as shown in Table 11.257 To confirm the north and south estimated regression equations provided in Table 10, the Commission re-estimated these equations using data limited to the 2013 and 2014 projects that satisfied ATCO Gas's criteria of only including data points with a service density of at least eight and involving at least 10 services, resulting in 13 data points for the north and 11 data points for the south. The data points used by the Commission is provided in Appendix 5, and yielded the following results:

Table 14. Commission-estimated regression equations for the north and south

	Cost per km
North	(\$12,326.6) x (service density) + \$76,451.3
South	(\$11,023.6) x (service density) + \$68,403.6

232. The Commission considers that the Commission's regression results produced in Table 14, particularly for the south, are sufficiently different from those provided by ATCO Gas, and

Data provided as an undertaking in Exhibit 20604-X0113.

Exhibit 20604-X0004, Appendix B2, Figure 5, page 22.

²⁵⁶ Exhibit 20604-X0114.

This process is described in Exhibit 20604-X0027, AG-AUC2015AUG17-020, response (d).

These criteria are specified in responses (b), (c) and (d) of Exhibit 20604-X0027, AG-AUC-2015AUG17-020.

reproduced in Table 10. This raises concerns in terms of the results of ATCO Gas's regression to support the service densities and forecast costs for the PMR program.

- 233. In particular, substituting the Commission-calculated region-specific service densities from Table 12 into the estimated regression equations in Table 14 would likely yield different forecast unit costs. Therefore, these different forecast unit costs, when multiplied by forecast km, and added to emergency replacement costs, will likely yield forecast total costs for the PMR program that differ from those provided in the application and reproduced in Table 13. Accordingly, the Commission directs ATCO Gas in the compliance filing to this decision to reestimate the two regression equations, provided in Table 10, using only the data points that satisfy the specified criteria outlined by ATCO Gas. ATCO Gas is also directed to explain any discrepancies between the data points used by ATCO Gas in the compliance filing and the data points listed in Appendix 5. Lastly, the Commission directs ATCO Gas to use these newly estimated equations to re-calculate the 2016 and 2017 unit cost forecasts for the north and south, and to update tables 11 and 13 of this decision accordingly.
- 234. While there is potential to improve on the regression model in order to make it more useful for ATCO Gas, interveners and the Commission to assess the validity of the PMR forecasts, the Commission considers ATCO Gas's regression-based approach is an acceptable approach to forecasting PMR costs, and it is approved for the purposes of this decision, and subject to any further directions on the PMR forecasts that may be made in the compliance filing to this decision.
- 235. The Commission has reviewed the information on the record in relation to the scope, level, timing and forecast costs for 2016 and 2017. The Commission finds that the information provided by ATCO Gas supports a finding that the PMR program was required to maintain utility service quality at adequate levels. However, the Commission is not prepared to approve the scope, level, timing and forecast costs. Accordingly, the Commission cannot make a finding at this time that the PMR program, as modified by the Commission's directions, satisfies the project assessment requirement of Criterion 1.

6.2.2.3 Transmission Driven Capital

- 236. The Transmission Driven Capital program relates to projects that ATCO Gas must undertake when a transmission company, either ATCO Pipelines or NOVA Gas Transmission Ltd., makes a change to its transmission system that requires a change to ATCO Gas's distribution facilities.
- 237. ATCO Gas is applying for capital tracker treatment for the Transmission Driven Capital program in 2014, 2016 and 2017. The capital expenditures for ATCO Gas in 2014 were \$6.7 million in the north and \$2.8 million in the south. Capital expenditures are forecast to be \$35.6 million in the north and \$36.0 million in the south in 2016, and \$16.9 million in the north and \$35.4 million in the south in 2017, respectively. Net capital additions for 2014 were \$8.9 million in the north and \$1.9 million in the south and are forecast to be at \$35.8 million in the north and \$33.4 million in the south in 2016 and \$17.8 million in the north and \$38.9 million in the south in 2017.

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Exhibit 20604-X0007, application, Schedule A2.

- 238. A variance analysis of the 2014 true-up was provided in Section 5.3.3 of the application.²⁶⁰ The business case was included in Appendix B3.²⁶¹
- 239. The most significant projects in this program are the distribution projects required as a result of the ATCO Pipelines Urban Pipeline Replacement (UPR) program to replace and relocate several high pressure pipelines to the transportation and utility corridors in the Calgary and Edmonton areas. ATCO Gas explained that to continue to supply its customers, this project will require ATCO Gas to relocate and install regulating meter stations and urban feeder mains.²⁶²
- 240. ATCO Gas submitted that aside from the UPR program related projects, ATCO Gas undertakes a variety of additional projects each year due to changes made by the transmission companies. While ATCO Gas indicated that it is aware of some of these projects that may be required in 2016 and 2017, ATCO Gas noted that additional projects may be required depending on the needs of the transmission companies.²⁶³
- 241. In order to calculate its 2016 and 2017 capital tracker forecast, ATCO Gas utilized four methodologies. For UPR program related projects, ATCO Gas's primary forecast methodology is based on a cost per unit of pipe installed and, if the project includes an unusual element, a lump sum estimate is added to the unit cost. For projects that do not lend themselves to a cost per unit analysis, such as stations and tie-ins, ATCO Gas prepared forecasts based on historical project costs. When projects are in their final stages, detailed engineering estimates may be available, which are then used to replace the two forecasting methods previously mentioned. For Transmission Driven Capital program projects not related to the UPR program, ATCO Gas estimated its forecasts on an annual basis using a three-year historical average methodology.²⁶⁴
- 242. ATCO Gas submitted that actual expenditures for the Transmission Driven Capital program were lower than forecast by \$1.9 million in the north and higher than forecast by \$0.2 million in the south in 2014. The 2014 variance amounts included both UPR projects and general Transmission driven projects. ATCO Gas spent \$0.6 million above the three-year average forecast for Transmission Driven Capital program projects not related to the UPR program. ATCO Gas noted that it completed work on 49 such projects in 2014, and submitted that all of this work was driven by the transmission service provider and was necessary in order to ensure the continued safe and reliable operation of the ATCO Gas distribution system. The system of the ATCO Gas distribution system.
- 243. In 2014, ATCO Gas spent \$2.6 million below forecast on the UPR program. ATCO Gas explained that several UPR program projects originally planned for 2014 were deferred either in whole or in part to 2015 and other projects planned for 2015 were advanced into 2014. In its application, ATCO Gas provided variance analyses for individual projects in the UPR program.²⁶⁷

²⁶⁰ Exhibit 20604-X0009.

Exhibit 20604-X0004, Transmission Driven Capital program.

Exhibit 20604-X0004, Appendix B3, paragraph 11.

Exhibit 20604-X0004, Appendix B3, paragraph 12.

²⁶⁴ Exhibit 20604-X0004, Appendix B3, paragraphs 26, 28, 31 and 33.

Exhibit 20604-X0009, application, paragraph 615.

Exhibit 20604-X0009, application, paragraph 618.

Exhibit 20604-X0009, application, paragraph 620.

- 244. Calgary raised concerns regarding the Transmission Driven Capital program, and specifically the projects related to the UPR program. Calgary submitted that the nature of the UPR program necessitates a high degree of coordination and joint activity between ATCO Gas and ATCO Pipelines, which creates a perverse incentive for both ATCO Gas and ATCO Pipelines to maximize their own revenues without regard to the overall UPR program costs. ²⁶⁸ For example, Calgary referred to the response of Mr. Feltham, who appeared on behalf of ATCO Gas, during the hearing:
 - Q. So -- fair enough. If they're design and project management, do I take it that that relates to the use of third-party services? Can you maybe help me out a little bit more? Let's take design first. How would you share design costs? What would that look like in terms of the activities and the personnel involved?
 - A. MR. FELTHAM: Well, it's related to the integrated nature of the project, you know, the so we have some commonality in the project teams, common individuals. And we're paying those costs.
 - Q. The same thing apply to project management? It's internal? I guess, firstly, these are internal costs that are being shared and allocated; right?
 - A. MR. FELTHAM: Yes.
 - Q. No third-party costs? Same thing with project management?
 - A. MR. FELTHAM: That's correct.
 - Q. Do you have handy sort of the basis upon which these costs are split? Are these -- like, for example, for 2016, are you sharing those costs 50/50, or is it based on some other allocated methodology?
 - A. MR. FELTHAM: I don't know the basis for the allocation. I do know we have an affiliate agreement in place between ATCO Gas and ATCO Pipelines for that service. Q. Would that set out the allocation approach?
 - A. MR. FELTHAM: Yes, sir. 269
- 245. Calgary argued that when the time came to submit the requested affiliate agreement with ATCO Pipelines, ATCO Gas's witness backtracked, and claimed that no such agreement existed.²⁷⁰
- 246. Calgary expressed its concern with a lack of detail from ATCO Gas concerning its internal costs for design and project management:

There appears to be no breakout of any costs attributed to the "Construction Labour & Equipment" amounts shown in Table 2 of Appendix B3, including as between third party and internal AG costs, or to break out any costs which may be shared by AG with other

Exhibit 20604-X0139, Calgary argument, paragraph 30.

Transcript, Volume 2, page 189, lines 2-25 to page 190, lines 1-3.

Exhibit 20604-X0139, Calgary argument, paragraph 24.

ATCO Utilities, including ATCO Pipelines. Yet those forecast costs under this single category are substantial: \$55.486 million for 2016 and \$38.721 million for 2017.²⁷¹

247. Calgary also referred to the testimony of Mr. Feltham regarding the absence of a documented strategy to lower the total cost of UPR program projects:

A. MR. FELTHAM: There's not a -- I don't think we've done it on a project-by-project basis in terms of a single document. The overarching document identified -- that was in the original ATCO Pipelines proceedings on a needs or UPR is the overall document. And then, again, on a project-by-project basis, once the – you know, it's identified that a transmission line is being removed from service, then ATCO Gas ensures it has its least cost design, and Pipelines does the same.²⁷²

- 248. In the absence of evidence of an overall strategy on the part of the two ATCO utilities to reduce overall costs to customers, Calgary submitted that the Commission has no basis to conclude that the forecasted costs for the UPR program projects were reasonable.²⁷³ Calgary recommended that the Commission should reduce the forecast amounts by an equivalent of the Construction Labour & Equipment category for each of 2016 and 2017. Further, ATCO Gas should be directed, in its true-up applications for 2015, 2016 and 2017 capital trackers, to break out the actual costs for the Transmission Driven Capital program to track design and project management costs.²⁷⁴
- 249. The UCA also submitted that elements of the Transmission Driven Capital program represent an extraordinary retirement, the cost of which should be borne by ATCO Gas's shareholders.²⁷⁵
- 250. The UCA noted that ATCO Gas has provided a description of the assets to be retired in this program, which consist of a total of 20 gate stations and a total of 15 farm tap units. The UCA observed that of the 20 gate stations, six were constructed prior to 1970, five were constructed in the 1970s, three were constructed in the 1980s and six were constructed in the 1990s. The UCA pointed out that in ATCO Gas's evidence, ti stated that the average service life for assets listed in Account 477, which contains 90 per cent of the assets to be retired, is 40 years. Accordingly, the UCA submitted that ATCO Gas is proposing to remove from service a significant number of farm taps and gate stations included within Transmission Driven Capital program prior to the end of their expected service life. The UCA submitted that ATCO Gas is proposing to remove from Service as significant number of farm taps and gate stations included within Transmission Driven Capital program prior to the end of their expected service life.
- 251. In determining which assets will be retired and which will be incorporated into new service infrastructure, the UCA disagreed with an ATCO Gas submission that ATCO Gas considered only whether the necessary conversion could be conducted for less than construction cost of new capital assets, and that remaining service life was irrelevant to this

Exhibit 20604-X0139, Calgary argument, paragraph 28.

²⁷² Transcript, Volume 2, page 187, lines 19-25 to page 188, lines 1-2.

Exhibit 20604-X0139, Calgary argument, paragraph 33.

Exhibit 20604-X0139, Calgary argument, paragraph 35.

Exhibit 20604-X0135, UCA argument, paragraph 34.

²⁷⁶ Exhibit 20604-X0116, PDF page 4.

Exhibit 20604-X0116, PDF page 2.

Exhibit 20604-X0135, UCA argument, paragraph 35.

determination.²⁷⁹ ²⁸⁰ Additionally, in its argument, the UCA referred to the Commission findings in Decision 2013-417,²⁸¹ regarding extraordinary retirements:

279. Once a gas utility asset is no longer used or required to be used, it must be removed from rate base and the further disposition of that asset through a sale or other disposition, including use for the provision of unregulated services, is the business of the company and its shareholders – not of utility service customers (subject to approval if a disposition is made outside the ordinary course or rate adjustments on prudence reviews). Accordingly, it is the gas utility and its shareholders that receive the benefit of any gain or bear the risk of loss for all utility property that ceases to be used or required to be used to provide utility service.²⁸²

. . .

- 304. ... Under-recovery or over-recovery of capital investment on ordinary retirements are for the account of customers under the amortization of reserve differences described above. Under-recovery or over-recovery of capital investment on extraordinary retirements (as is the case with assets disposed of outside of the ordinary course of business or moved to a non-utility account) are for the account of the utility.²⁸³ [footnote removed]
- 252. In light of the above, the UCA submitted that the assets ATCO Gas proposed to retire in the Transmission Driven Capital program constitute an extraordinary retirement, and the resulting costs should be borne by ATCO Gas's shareholders:

The UCA submits that AG has not provided evidence that the wholesale retirement of assets through the TDC Project is not an extraordinary retirement. The assets to be retired as a result of changes to the transmission system that connects to AG's system are akin to "stranded assets" as described by the Commission in Decision 2013-417. As set out by the Commission in Decision 2013-417, the owner of capital assets bears both the benefits and risks of ownership, including the risk of extraordinary retirement of assets. As such, the UCA submits that the shareholders of AG, and not ratepayers, should bear the ultimate cost of assets retired by AG as a result of changes to transmission services. ²⁸⁴

253. With respect to Calgary's arguments regarding the affiliate relationship between ATCO Gas and ATCO Pipelines, ATCO Gas submitted that Calgary's assertions were not supported by the record of this proceeding.²⁸⁵ ATCO Gas noted that Mr. Feltham had corrected himself during the hearing, and clarified that ATCO Gas and ATCO Pipelines were each responsible for their own internal costs:

Mr. Feltham: So the two numbers we were discussing, the regulated affiliate provider line on this table is for the net book value of the assets we're forecasting to transfer. ATCO Gas does its own design and project management. ATCO Pipelines does its own design and project management. And those costs are internal to both companies. ²⁸⁶

Transcript, Volume 4, page 540, lines 13-24.

Exhibit 20604-X0135, UCA argument, paragraph 38.

Decision 2013-417: Utility Asset Disposition, Proceeding 20, Application 1566373-1, November 26, 2013.

²⁸² Decision 2013-417, paragraph 279.

²⁸³ Decision 2013-417, paragraph 304.

Exhibit 20604-X0135, UCA argument, paragraph 43.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 7.

Transcript, Volume 4, page 578, lines 5-11.

- 254. ATCO Gas referred to Mr. Feltham's testimony, in which he confirmed that ATCO Gas and ATCO Pipelines did not share any common resources:
 - Q. Right. And all the design and project management costs are for personnel and otherwise expenses that are internal ATCO Gas costs. There's nothing -- there's no common resources you're sharing with Pipe and allocating to yourself for the purposes of this application?
 - A. MR. FELTHAM: There are no common resources shared with ATCO Pipelines.²⁸⁷
- 255. ATCO Gas submitted that it separately identified any affiliate related costs included in the actual or forecast costs of a project or program for its capital tracker programs and provided the details in the application, in compliance with the Commission's direction in Decision 3558-D01-2015. 289
- 256. Regarding Calgary's evidentiary concerns, ATCO Gas submitted there are no costs shared with ATCO Pipelines included in the UPR program forecast. ATCO Gas noted that it provided a business case for each UPR related project in the application, which outlines the selection of the best cost alternative for each project. ATCO Gas indicated that "each project undergoes an engineering analysis using hydraulic pressure modeling to determine the best option available resulting in the lowest cost alternative." ATCO Gas confirmed during the hearing that those hydraulic models are revisited as ATCO Pipelines' work progresses to ensure that the design remains appropriate. Finally, ATCO Gas indicated that it undertakes an iterative process in the coordination with ATCO Pipelines to address the impact of one party's design changes on the other party, which serves to minimize the total cost to both ATCO Gas and ATCO Pipelines.
- 257. In its reply argument, ATCO Gas concluded that the concerns raised by Calgary are without merit and therefore the request from Calgary to reduce the forecast of Construction, Labour, and Equipment by 15 per cent is arbitrary and unsupportable.²⁹⁴
- 258. With respect to the UCA's issues regarding extraordinary retirements, ATCO Gas argued that the events causing the relocations are not fires, floods or storms or any of the other listed causes associated with the definition of "extraordinary retirement" under the *Uniform Classification of Accounts for Gas Utilities*. Additionally, ATCO Gas submitted that there is no suggestion that the retirements at issue unduly deplete the balance of the mass property depreciation accounts affected, another key aspect of that definition under Section 8(A) of the *Uniform Classification of Accounts for Gas Utilities*.
- 259. In ATCO Gas's view, transmission driven capital activities, the passage of time, municipal infrastructure changes, rezoning, road or highway widening, load growth, failure, code

Transcript, Volume 4, page 581, lines 8-15.

Exhibit 20604-X0009, application, paragraphs 188-189.

Decision 3558-D01-2015, paragraph 80.

Exhibit 20604-X0004, Appendix B3, paragraph 20.

Transcript, Volume 2, page 183, lines 1-13.

Transcript, Volume 2, page 185, lines 13-17.

Transcript, Volume 2, page 187, lines 2-10.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 24.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 55.

changes and redevelopment always have and always will result in such retirements. ATCO Gas submitted that this is why projects undertaken when a transmission company makes a change to its transmission system, that requires a change to ATCO Gas's distribution system, arise in the normal course of utility operations and have consistently been reflected in past depreciation studies.

260. ATCO Gas argued that the UCA's position appears to be premised on the belief that the equal life group (ELG) depreciation methodology hinges on the assumption that all assets in an account should retire based on the expected service life of the account; otherwise, the retirement must be viewed as extraordinary. ATCO Gas clarified that the key premise behind the ELG depreciation methodology, however, is that assets retire throughout the estimated total life of the asset account. ATCO Gas submitted the following:

The Commission has noted that a utility is deemed to have recovered its original investment in utility depreciable property when the asset comes to the end of its useful life and is retired from service even if the retirement occurs prior to the anticipated average service life of the asset. Accordingly, no losses or gains are considered to occur under this method. As a matter of fact, simply knowing the average service life of an asset account does not in any way confirm that those assets are expected to retire evenly around that service life. ²⁹⁶

261. In its reply argument, ATCO Gas recommended that the UCA's proposal be rejected because they conflict with Decisions 2013-417 and the principles of ELG depreciation in paragraphs 290-295 of that decision. Under the ELG methodology, it is assumed that assets are fully deprecated at the time of their retirement. ATCO submitted that "To the extent these assets are retiring sooner or later than contemplated by the survivor curve, that methodology contemplates those differences are amortized over the remaining life of the assets in the mass property account." ATCO Gas's prior depreciation studies have contemplated asset retirements consistent with Decision 2013-417. The UCA's recommendation should be rejected.

Commission findings

262. The need for the Transmission Driven Capital program as part of the project assessment under capital tracker Criterion 1 was previously approved by the Commission in Decision 2013-435²⁹⁸ and later in Decision 3267-D01-2015.²⁹⁹ With respect to the true-up of 2014 actual costs, if the need for a project or program was previously established in Decision 2013-435 or Decision 3267-D01-2015 and if there is an absence of evidence on the record of this proceeding demonstrating that the project or program was not required in 2014, then there is no need to demonstrate again that a project or program is needed in order to provide utility service at adequate levels in 2014. The Commission finds no evidence on the record of this proceeding to indicate that the Transmission Driven Capital program was not required in 2014. Accordingly, the program continues to satisfy the requirement of Criterion 1 that the program was needed in 2014.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 58.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraphs 61-62.

²⁹⁸ Decision 2013-435, paragraph 679.

Decision 3267-D01-2015, paragraph 344.

- 263. Although ATCO Gas is not required to demonstrate the need for the Transmission Driven Capital program, it must still provide sufficient evidence to demonstrate that the scope, level, timing and actual costs of the program were prudent in 2014.
- 264. ATCO Gas's actual capital additions for this program in 2014 were \$8.9 million in the north and \$1.9 million in the south. 300 In light of the evidence supporting the Transmission Driven Capital program projects carried out in 2014, including the associated procurement, construction and project cost management practices and evidence explaining the differences between approved forecast and actual costs, the Commission considers the scope, level, timing and actual costs of the project in 2014 to be prudent. Accordingly, the Commission finds that this project satisfies the project assessment requirement of Criterion 1 in 2014.
- 265. In Decision 3267-D01-2015, in determining the need for the Transmission Driven Capital program, the Commission specifically examined the business case for the Transmission Driven Capital program for the Northwest Edmonton Connector project, as part of ATCO Pipelines' UPR initiative. The Commission determined that this project was approved in order to maintain service reliability and safety at adequate levels, as part of the Transmission Driven Capital program. Accordingly, the Commission does not need to reassess whether this project satisfies the project assessment requirement under Criterion 1.
- 266. ATCO Gas requested to continue capital tracker treatment for this program in 2016 and 2017. As noted in Section 3, where a forecast project or program is part of a multi-year, ongoing project or program or, if the project or program is of an annual, recurring nature that has previously been approved for capital tracker treatment, in the absence of evidence that the ongoing or recurring project or program is no longer required, the Commission will not undertake a reassessment of need under Criterion 1. The Commission finds no evidence on the record of this proceeding to indicate that the Transmission Driven Capital program is not required to continue in 2016 or 2017. Accordingly, the Commission finds that the program is needed in 2014 and 2015.
- 267. The UPR related projects under the Transmission Driven Capital program is also part of a multi-year ongoing project or program. Three new projects have been proposed and 17 projects are ongoing-projects, and work will be undertaken on these projects in 2016 and 2017. Accordingly, the Commission finds that the UPR related projects, as part of the Transmission Driven Capital program, satisfy Criterion 1.
- 268. Regarding the 2016 and 2017 forecast for the Transmission Driven Capital program, the Commission is not persuaded by Calgary's recommendation for a forecast reduction to this program. In the Commission's view, and subject to the findings in this section, ATCO Gas provided sufficient evidence on the record to support its forecast methodologies and costs as a result of transmission driven projects that require completion in 2016 and 2017. ATCO Gas explained its forecasting methods for different projects and phases of the Transmission Driven Capital program including for the UPR program, and for projects not related to the UPR program. ATCO Gas also confirmed that it and its affiliate are each responsible for their own costs, and share no common resources with respect to the Transmission Driven Capital program.

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Exhibit 20604-X0007, application, Schedule A2.

269. The Commission finds that there was no evidence on the record of this proceeding that would point to any delays which would impact the forecast costs in 2016. As stated by ATCO Gas's witness during the hearing, as of the end of 2015, ATCO Gas anticipated that work in 2016 will proceed, as forecast:

Mr. Feltham: ... in the case of transmission driven, that the work is proceeding at pace and that the work forecast for -- in the updated forecast for 2015 will happen.

'16 is upon us in just a month, and, again, the work -- well, the design work is substantially complete, if not totally complete. Contract resources are in place, and we expect to complete the work as forecast.³⁰¹

- 270. The Commission has reviewed the costs of the forecast capital additions in light of the evidence supporting these costs, including procurement, construction and project cost management practices. The Commission has also reviewed ATCO Gas's forecast methodology and finds ATCO Gas's forecasting methodologies and forecast costs to be reasonable. The forecast costs for 2016 are approved as filed.
- 271. The forecast costs for 2017 are also approved with the following exception. With respect to the business case for Palliser and Bridlewood Gate, which is part of the Southwest Calgary Connector, the Commission considers that the timing of this project is uncertain, for capital tracker treatment, given the status of ATCO Pipelines Southwest Calgary Connector project, and the projected in-service date.
- 272. In its application, ATCO Gas confirmed that work for the Southwest Calgary Connector would be completed in 2018 as part of the UPR initiative.³⁰² ATCO Gas's explanation is that it will have facilities in place prior to ATCO Pipelines removing the pipeline from service. During the oral hearing for this proceeding, ATCO Gas was asked about the schedule for the Palliser and Bridlewood Gate station project, and ATCO Gas's witness stated:

A. MR. FELTHAM: So the distribution portion, the pipeline portion of this work, is one were the schedule doesn't depend on ATCO Pipelines. What's required is for ATCO Gas to have its facilities in place prior to ATCO Pipelines being able to remove its transmission line from service.

So when would the actual construction start? I would expect that to be in the spring of 2017, would be when the material dollars start flowing for the construction of the new distribution pipelines.

Q. And why does that project specifically, sir, not need to wait for ATCO Pipelines to have their end in place before you do the work or do the work at the same time?

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Transcript, Volume 4, page 536.

Exhibit 20604-X0004, Business Case 3.20, Palliser and Bridlewood Gate Stations, paragraph 1 states: "This Business Case explores the alternatives available to ATCO Gas in response to ATCO Pipelines' plans to install the Southwest Calgary Connector and withdraw the Turner Valley, Woodlands Branch Lateral, Canyon Meadows Branch, Anderson Road Lateral, Cedarbrae Branch, and the 323 mm Jumping Pound transmission lines from high pressure service. This work will be completed in 2018 as part of the Urban Pipeline Replacement (UPR) Program."

- A. MR. FELTHAM: So this is one where you can do the work in parallel. The only piece that is dependent on ATCO Pipelines' schedule is the construction of the actual commissioning of Bridlewood gate. So Bridlewood gate will receive service from the new Southwest Calgary Connector that's proposed for construction in 2017. 303
- 273. The ATCO Gas witness indicated that ATCO Gas is matching its schedule to ATCO Pipelines, and if there was a delay for ATCO Pipelines that the ATCO Gas project would be delayed as well. Given the timing for this project and co-ordination required with ATCO Pipelines to provide service, there is insufficient evidence that the Palliser and Bridlewood Gate project forecast for capital tracker treatment will commence in 2017, given the timelines for completion of the Southwest Calgary Connector by ATCO Pipelines.
- 274. At this time, no Commission approvals have been requested from ATCO Pipelines for facilities related to the Southwest Calgary Connector project.³⁰⁴ Accordingly, the Commission directs ATCO Gas to remove the 2017 forecast costs of \$8.3 million for the Palliser and Bridlewood Gate project from the capital tracker forecasts for 2017.
- Regarding the issues of depreciation and extraordinary retirements raised by the UCA related to ATCO Gas's business cases for the Transmission Driven Capital program for UPR projects, ATCO Gas argued that the retirements should be treated as normal course retirements.
- 276. As stated in the Utility Asset Disposition decision, Decision 2013-417:
 - ... The UCAGU [Uniform Classification of Accounts for Gas Utilities] in Section 8 states that "ordinary retirements result from causes reasonably assumed to have been contemplated in prior depreciation provisions, and normally may be expected to occur when plant reaches the end of its expected service life." The UCAGU also makes provision for "extraordinary retirements" defined as retirements "from causes not reasonably assumed to have been anticipated or contemplated in prior depreciation or amortization provisions." Under-recovery or over-recovery of capital investment on ordinary retirements are for the account of customers under the amortization of reserve differences described above. Under-recovery or over-recovery of capital investment on extraordinary retirements (as is the case with assets disposed of outside of the ordinary course of business or moved to a non-utility account) are for the account of the utility....³⁰⁵ [footnotes omitted]
- The Commission provided additional clarification on the matter of extraordinary and 277. ordinary retirements in Decision 2738-D01-2016.306 At issue in that decision were costs incurred as result of a 2013 flood in Southern Alberta. In that decision, the Commission determined that a deprecation study undertaken in advance of ATCO Gas's 2011-2012 GRA included the impact of a 2005 flood event that was similar in nature and size to the 2013 flood, and therefore that the 2013 flood did not give rise to an extraordinary requirement of the destroyed assets, and that the undepreciated cost would flow to the account of the ratepayer. The Commission stated:

Transcript, Volume 4, pages 562-563.

http://www.auc.ab.ca/items-of-interest/Application-Forecast/Pages/default.aspx. The SWCC facilities application is scheduled for the last quarter of 2016.

Decision 2013-417, paragraph 304.

Decision 2738-D01-2016: ATCO Gas and Pipelines Ltd., Z Factor Application for Recovery of 2013 Southern Alberta Flood Costs, Proceeding 2738, March 16, 2016.

- 93. ... In this proceeding, the Commission finds that the characteristics of the 2013 flood event are of a similar nature to the 2005 flood event that was incorporated in the 2009 depreciation study. Relying on this finding of fact, the Commission concludes that the 2013 flood does not give rise to an extraordinary retirement of the destroyed assets and therefore the undepreciated net book value of \$496,747 will continue to be recovered from ratepayers.³⁰⁷
- 278. In this application, the issue of whether ATCO Gas has undertaken a reconfiguration of its distribution assets on the scale of those proposed for distribution in conjunction with UPR program was examined during the oral hearing. ATCO Gas's witness responded to Commission counsel, as follows:
 - Q. And are you aware, sir, of a project system replacement of the magnitude of UPR that has occurred in past years that would make it a normal occurrence? Have you done anything on this scale before?

A: Mr. FELTHAM: I don't know if we've ever grouped something on this scale before. So UPR is a project that's happening in both cities, Edmonton and Calgary, and it's all been lumped together essentially as if it's one great, big, giant project.

But the --certainly municipal infrastructure has changed before, rezoning has happened before. You get road and highway widening. That's all happened before. Obviously our system grows.

Sometimes you have code changes that result in basically us having -- well, all of those things leading to the end of the useful life of a particular asset and the construction of a new one. So I hadn't really thought about that before, you know, about kind of lumping all that together and calling it one thing. Is it of the same scale of UPR? I think it would probably be similar.³⁰⁸

- 279. The Commission recognizes that ATCO Gas's distribution system has gone through a number of changes in the past due to transmission driven capital. Retirements, such as those that are externally driven by upstream transmission companies, can be contemplated in depreciation studies. The treatment of retirements, when facilities are rendered redundant due to system changes, are recorded in the depreciation accounts of the utility.³⁰⁹
- 280. As noted by ATCO Gas, to the extent assets are retired sooner or later than contemplated by the survivor curve, the ELG methodology contemplates those differences and amortizes them over the remaining life of the assets in ATCO Gas's mass property account. Absent evidence to the contrary, the Commission finds that retirement of the UPR assets as proposed in the application should be reasonably contemplated for depreciation purposes and the Commission considers that the projects proposed are similar in nature as other transmission capital programs, including asset retirements. The Commission makes this determination based on evidence provided in oral testimony that:

³⁰⁷ Decision 2738-D01-2016, paragraph 93.

Transcript, Volume 4, page 566.

Exhibit 20604-X0146, paragraph 60.

Exhibit 20604-X0146, paragraph 61.

• ATCO Gas forecasts its retirements by account, not by program. Ms. Berger confirmed:

So we would forecast retirements of pipe in the mains account, and it would include all mains activity from just regular activity, and it, of course, would include SMR, PMR, such programs as that and other work, and potentially anything related to transmission driven, ...³¹¹

- For pipelines, Mr. Feltham confirmed that there would not be large pipeline retirements due to UPR.³¹²
- ATCO Gas provided an undertaking during the oral hearing listing the planned retirements of gate stations and farm tap units as a result of the UPR program. ATCO Gas stated that a number of mechanisms have contributed to the retirement of assets prior to UPR and will continue upon completion of the UPR program.
- Ms. Berger confirmed that retirements of gate stations are depreciated using the equal life group depreciation of mass properties. For example, with respect to Gate Station 11 Ms. Berger stated it "it has been contemplated in our depreciation studies and it has reached its end of life given the low net book value of this asset."³¹⁴
- 281. The Commission considers that ATCO Gas's depreciation practices account for retirements of assets (pipelines, gate stations, and farm tap units) due to changes in the transmission system. The Commission accepts the evidence from ATCO Gas's witness that large scale retirements of pipelines for the distribution assets are not expected due to ATCO Pipelines' UPR initiative. For the reasons above, the UCA's request is denied.

6.2.2.4 Meter Relocation Replacement

- 282. ATCO Gas described the MRRP as a program required to address safety concerns associated with line pressure gas inside buildings. The program includes the removal and replacement of the meter, regulator, and associated piping, to building exteriors.³¹⁵
- 283. ATCO Gas is seeking capital tracker treatment for the MRRP in 2016 and 2017 for the north and in 2016 for the south. The forecast capital expenditures and additions for the north are \$12.5 million and \$0.96 million in 2016 and 2017 respectively, and \$10.94 million in 2016 for the south.³¹⁶
- 284. The MRRP began in 2003. This capital tracker program consists of relocating and replacing Tier 2 (T2) and Tier 3 medium risk (T3M) meter sets in 2016. In addition, throughout 2016 and 2017, some low risk meter sets, Tier 3 low risk (T3L) and Tier 4 (T4), will be moved in conjunction with an annual meter recall program, at sites that present safety issues for customers or ATCO Gas employees, where meter access problems exist, or at the time that ATCO Gas remedies operational issues, e.g., leaks.

Transcript, Volume 2, page 249, lines 7-10.

Transcript, Volume 4, page 567, lines 18-22.

Transcript, Volume 4, page 568, lines 5-13.

Exhibit 20604-X0116.

Exhibit 20604-X0009, application, paragraph 207.

Exhibit 20604-X0003, Appendix B4, Table 2.

- 285. The need for the MRRP was previously approved in Decision 2011-450, where the Commission made the following determinations:
 - 158. Tier 2 meters exhibit a high risk factor, multiple medium risk factors or both at a single residence. Given the identified level of safety concerns and risk the Commission accepts AG's proposal to replace Tier 2 above ground entry meters.
 - 159. In response to UCA-AG-33(a), the number of Tier 3 meters identified as having medium risk factors is 32,511. The Commission considers that the Tier 3 meters with a medium risk factor should be removed by 2014 as contemplated in the application. The timing of the Tier 3 meter replacements should be coordinated with Tier 2 replacements to achieve efficiencies.
 - 160. The Commission approves the relocation of meters classified as Tier 3 with low risk factors in conjunction with other work such as meter recalls.
 - 161. The Commission approves the forecast capital expenditures for the replacement of meters designated under the safety/accessibility heading in Table 2.1.1.2(c). The Commission assumes that any Tier 3 or Tier 4 meters which subsequently develop safety or accessibility issues will be replaced under this program.
- 286. The Commission recognized the continued need for this program when it approved the MRRP as a capital tracker in Decision 2013-435:
 - 659. The Commission agrees with ATCO Gas and SMi [SMi Faciliop] 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. 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. Accordingly, the Commission accepts the need for the continuation of the MRRP program in 2013. ³¹⁷ [footnotes omitted]
- 287. In Decision 3267-D01-2015, the Commission found the MRRP was needed in 2014 and 2015, and that the MRRP satisfied Criterion 1 and Criterion 2 in 2014 and 2015.³¹⁸
- 288. In the current application, ATCO Gas submitted that it will relocate the remaining 7,632 T2 and T3M meter set by the end of 2016. ATCO Gas also indicated that as of December 31, 2016, approximately 40,000 T3L and T4 meter sets remained inside residences. ATCO Gas estimated it would take 15 additional years to relocate these meters outside, and according to the Commission's direction, ATCO Gas is only permitted to relocate these meter sets outside in conjunction with recalls or other work, or where the meter sets present safety and accessibility concerns.³¹⁹
- 289. ATCO Gas submitted that it forecast capital expenditures for 2016 and 2017 using a unit cost methodology, i.e., cost per meter move. ATCO Gas used a historical average of direct costs from each geographical area to calculate the overall weighted average unit cost per move. The

Decision 3267-D01-2015, paragraphs 630 and 638.

³¹⁷ Decision 2013-435, paragraph 659.

Exhibit 20604-X0003, Appendix B4, paragraphs 16 and 26.

direct unit costs were then broken down into different cost categories, which were construction, labour and equipment, as well as materials and supplies. These costs were then broken down into different categories because inflation rates are different for labour versus non-labour categories. Allocated costs such as project management, engineering, design support, and construction management were pooled and then allocated to each capital program on the basis of direct costs. The forecast number of units is based on the known number of remaining moves, after the 2015 forecast moves are projected.³²⁰

- 290. In order to demonstrate the reasonableness of its forecast, ATCO Gas provided a comparison of its actual total cost for the past five years.³²¹
- 291. During the hearing, Commission counsel inquired as to whether ATCO Gas would be in violation of any safety code requirements if the T3L and T4 meter set moves identified in the application for 2016 and 2017 did not occur. Mr. Whittall, on behalf of ATCO Gas, replied:

MR. WHITTALL: It depends on the individual circumstance. There are at various -- at various sites we find that the vents are, for instance, underneath an opening window which does contravene safety codes at this point, and has for many years. That would be the major one.

So, it is on a case-by-case basis. And I think I should add to that that there are many of these situations that have changed since we did our last premise survey to know what the current conditions are.

So many of these that were identified in 2008 as T3L and T4s have had the circumstances change, and we find that when we get the safety and accessibility requests when we go to do the recalls.

And quite often when we are at a T2 or T3M site, for instance, and we look over the fence or the neighbour comes over and says, "well, I've got the same condition you're fixing there, why aren't you doing my house?" And we find that the conditions have changed since we did that premise survey.³²²

292. With respect to the 2014 true-up, ATCO Gas provided the details associated with the true-up of the MRRP in its application.³²³ Based on the actual costs, ATCO Gas submitted that it only qualified for capital tracker treatment for the north in 2014. The 2014 approved forecast capital expenditures were \$13.1 million, while the actual capital expenditures were \$11.9 million, resulting in a variance of \$1.26 million. ATCO Gas explained that it completed a greater number of moves in 2014 than forecast. ATCO Gas indicated that tools developed to address point of release constraints in 2012 led to efficiencies, enabling ATCO Gas to complete more moves at lower overall costs as it required fewer resources and remediation than previously expected. ATCO Gas submitted that it was also able to complete more meter set moves without excavation, which had considerable positive impact in the north where many of the remaining services were deep and not easily accessible.

³²⁰ Exhibit 20604-X0003, Appendix B4, paragraphs 21-23.

Exhibit 20604-X0003, Appendix B4, Table 4.

Transcript, Volume 4, page 498, lines 17-25 and page 499, lines 1-11.

Exhibit 20604-X0009, application, Section 5.3.4.

- 293. The UCA argued that the T3L and T4 meter set moves do not qualify for capital tracker treatment. Criterion 1 requires projects to be of sufficient importance that a company's ability to provide utility service at adequate levels would be compromised if the expenditures were not taken. The UCA submitted that in Decision 2011-450, the Commission approved a replacement program for T3L and T4 meter sets whereby these meters were only to be replaced if other related work was being performed or if safety or accessibility issues arose. The UCA proposed that the Commission, in approving such a replacement scheme, implicitly acknowledged that, unlike Tier 2 and Tier 3M meter sets, Tier 3L and Tier 4 meter sets lacked immediate safety or service-related concerns that necessitated expeditious replacement. In the UCA's view, the Commission has recognized that Tier 3L and Tier 4 meters do not represent a sufficient enough risk to service or safety to justify an immediate, *en masse* replacement, and therefore, Criterion 1 has not been satisfied.³²⁴
- 294. The UCA also argued that since T3L and T4 meter set moves are only to be undertaken in conjunction with other work, they do not satisfy Criterion 2 for the capital tracker test, which limits eligibility of projects for capital tracker status to situations where infrastructure being replaced has come to the end of its useful life or where replacement of infrastructure is required by third parties.³²⁵
- 295. Based on its arguments that neither Criterion 1 nor Criterion 2 was met, the UCA recommended that the 2016 and 2017 Tier 3L and Tier 4 meter set replacement costs be excluded from the capital tracker calculations for the MRRP.³²⁶
- 296. In its reply argument, ATCO Gas referred to Decision 3267-D01-2015, where the Commission found that the MRRP, including T3L and T4 meter set relocations, satisfied the project assessment requirements of Criterion 1 and Criterion 2. ATCO Gas submitted that it has not proposed any change to the scope or timing of the previously approved Tier 3L and Tier 4 met set relocations in this application. ATCO Gas reiterated the Commission's finding in Decision 2013-435, 327 in which the Commission expressed its agreement with SMi that ATCO Gas needed to replace all the meters outlined in the MRRP business case due to issues of public and worker safety. 328
- 297. With regard to the UCA's argument that since the relocations of T3L and T4 meter sets are not being undertaken in an immediate, *en masse* fashion and the replacements do not satisfy Criterion 1, ATCO Gas pointed out that the MRRP was never intended to address emergency conditions requiring immediate replacement. ATCO Gas characterized the MRRP as an annual, recurring program in effect since 2003, which prioritizes the pace of meter set relocations based on risk, and which recognizes that inside meters with the highest risk have the highest priority and should be relocated outside first. ATCO Gas also referred to other capital tracker replacement programs such as SMR and PMR which are not immediate, *en masse* replacements, and argued that, "the UCA is inappropriately seeking to invent a new 'Urgency' requirement for MRRP."

Exhibit 20604-X0135, UCA argument, paragraphs 24-26.

Exhibit 20604-X0135, UCA argument, paragraph 27.

Exhibit 20604-X0135, UCA argument, paragraph 29.

Decision 2013-435, paragraph 659.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraphs 41-42.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 43.

298. ATCO Gas submitted that contrary to the UCA's submissions, the MRRP continued to satisfy Criterion 2, for the following reasons:

The UCA further argues that the Tier 3L and Tier 4 relocations do not satisfy Criterion 2 despite the fact that the Commission in Decisions 2013-435 and 3267-D01-2015 found that MRRP does meet Criterion 2. MRRP is required for asset replacement or refurbishment and therefore meets Criterion 2. The UCA quotes Mr. Whittall, who says that Tier 3L and Tier 4 meters continue to operate without relocation, in an attempt to show that the meters are not at the end of their useful life and therefore the relocations do not meet Criterion 2. That was never the purpose of MRRP. The UCA fails to acknowledge that the driver of MRRP is to eliminate the risks associated with inside meter sets as detailed in the MRRP Business Case. In fact, pursuant to the MRRP Program, meters are relocated from inside to outside without replacement where possible. It is the other components, such as the service line, riser, or fittings which require replacement during the meter relocation. Each Tier 3L and Tier 4 relocation requires the same replacement or refurbishment of assets and therefore satisfies Criterion 2.

Moreover, the Commission states in Decision 3267-D01-2015 that it will not undertake a reassessment against the Criterion 2 requirements unless there is evidence that the driver for the program has changed. Given that the driver for MRRP has not changed, the Commission should reject the UCA's comments regarding Criterion 2.³³⁰ [footnotes omitted]

Commission findings

299. The Commission approved the MRRP previously in Decision 2011-450,³³¹ and as a capital tracker in Decision 2013-435³³² and Decision 3267-D01-2015.³³³ The scope of the program as previously approved by the Commission includes T2 and T3M meter set relocations and replacements, and lower risk T3L and T4 meter set relocation and replacements in the cases where they develop safety issues or if similar work such as a meter recall is required. The Commission approved the MRRP on the basis that the meter replacements were required due to issues of public and worker safety and therefore satisfied Criterion 1.

300. The Commission observes that the pace of meter relocations in the MRRP, which is an annual, recurring program, has been prioritized based on risk since its initial approval by the Commission in 2003. In the Commission's view, in the current application, ATCO Gas proposed to complete the various components of this program, including the T3L and T4 meter set moves, in a manner consistent with prior Commission approvals for this capital tracker program as set out in Decision 2013-435 and Decision 3267-D01-2015. The Commission is not persuaded by the UCA's submissions that the T3L and T4 meter set moves are no longer required in the years 2016 and 2017, given that the need for these moves have been established for prior years of the PBR term. The Commission also accepts Mr. Whittall's statements on the possible safety code violations if the projected T3L and T4 meter set moves are not undertaken in 2016 and 2017. 334 Consequently, the Commission finds that the MRRP continues to qualify as a capital tracker, for

Exhibit 20604-X0146, ATCO Gas reply argument, paragraphs 46-47.

³³¹ Decision 2011-450, paragraphs 157-161.

Decision 2013-435, paragraph 659.

³³³ Decision 3267-D01-2015, paragraph 630.

Transcript, Volume 4, page 498, lines 17-25 to page 499, lines 1-11.

both the purposes of assessing the true-up of actual 2014 costs and the forecast costs for 2016 and 2017.

- 301. In Decision 3267-D01-2015, the Commission determined that it will not reassess a finding that a particular project or program satisfies the requirements of Criterion 2 unless the driver for the project or program has changed.³³⁵ In this particular case, the Commission has not been persuaded by the UCA that a reassessment of the program under Criterion 2 is warranted. The Commission finds that the driver for the MRRP continues to be asset replacement or refurbishment.
- 302. With respect to the scope, level and timing of this program carried out in 2014, the Commission has reviewed ATCO Gas's 2014 actual capital additions associated with this program and finds that they are generally consistent with the scope, level and timing of the work outlined in the business case and approved by the Commission for capital tracker treatment in Decision 3267-D01-2015. The Commission has reviewed the costs of the 2014 actual capital additions for this program in light of the evidence supporting these costs and the evidence explaining the differences between approved forecast and actual costs, and finds the actual costs to be prudent for true-up purposes.
- 303. With respect to the scope, level and timing of the MRRP in 2016 and 2017, the Commission has reviewed the business case and the relevant portions of the record for the program and finds the forecast scope, level and timing of each of the MRRP in 2016 and 2017 to be reasonable. The Commission has reviewed the information supporting ATCO Gas's 2016 and 2017 forecasts and finds the total annual cost forecasts have been calculated in accordance with the forecasting methodology previously employed and that the forecasts are reasonable when compared with historical actual costs for the MRRP.
- 304. Given the above, the Commission finds that the information provided by ATCO Gas supports a finding that the scope, level, timing and forecast costs for the MRRP are reasonable as filed for 2016 and 2017. Accordingly, the Commission finds that this program satisfies the project assessment requirement of Criterion 1 for 2016 and 2017.

6.2.2.5 Cathodic Protection

- 305. The Cathodic Protection program consists of maintaining and improving cathodic protection on ATCO Gas's existing steel mains. ATCO Gas maintains cathodic protection through improvement projects such as the replacement and new installation of dresser bondings, isolation fittings, anodes, rectifiers and ground beds.
- 306. ATCO Gas submitted that cathodic protection improvements are necessary to extend the life of its steel mains, reduce leak frequencies, and to help maintain safe and reliable service. Moreover, ATCO Gas explained that the Technical Standard and Specifications Manual for Gas Distribution Systems prepared in accordance with the *Gas Distribution Act*, requires pipelines with electrochemical conditions to be adequately protected from corrosion. ATCO Gas uses

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Decision 3267-D01-2015, paragraph 638.

Canadian Standards Association (CSA) standard Z662 along with Canadian Gas Association (CGA) recommended practice OCC-1³³⁶ as its guidelines for corrosion protection.³³⁷

- 307. The Cathodic Protection program has two components: (i) an Anode Replacement program; and (ii) a general Cathodic Protection program comprising all projects required to maintain and improve cathodic protection, excluding the projects in the anode replacement program.
- 308. As part of the Anode Replacement program, ATCO Gas is identifying, tracking and monitoring all isolated steel locations as part of a five-year leak survey occurring from 2012 to 2016. ATCO Gas's current estimates of isolated steel are approximately 50,000 locations province-wide. ATCO Gas submitted that its identification of locations will be complete by the end of 2016, and that the Anode Replacement program will continue to address the identified locations in subsequent years. ATCO Gas indicated that inspection, replacement of the isolated steel, or installation of an anode, is coordinated with other company programs wherever possible.³³⁸
- 309. ATCO Gas is seeking capital tracker treatment for the Cathodic Protection program in 2016 and 2017 for both the north and south. The total capital expenditures and additions forecast for the north are \$1.53 million and \$1.92 million in 2016 and 2017, respectively, and for the south are \$1.66 million and \$2.14 million in 2016 and 2017, respectively.
- 310. ATCO Gas uses a historical average forecasting methodology for the general Cathodic Protection program and a unit cost methodology for the anode replacement program. ATCO Gas submitted that the need to upgrade or replace the cathodic protection on its steel mains arises when components of its cathodic protection fail, and upon failure ATCO Gas must replace the equipment as soon as possible. Given the short lead times, ATCO Gas indicated that the number of systems that will require replacement is not predictable. Moreover, in ATCO Gas's view, the scope of work can also vary significantly. For these reasons, ATCO Gas submitted that it is appropriate to use a forecast methodology based on an average of actual capital expenditures for the prior three years for the general Cathodic Protection program. In this application, ATCO Gas used the actual costs from 2012-2014 to develop forecasts for the general Cathodic Protection program, which were then adjusted to direct costs by removing non-direct costs for the respective year, and then brought to constant dollars and averaged. 340
- 311. ATCO Gas submitted that it uses a unit cost methodology for the anode replacement program, as there is a predetermined number of units to be completed in each year and that the cost per anode is relatively uniform. ATCO Gas developed its unit cost forecast using 2014 actual expenditures. The 2014 actual costs were adjusted to direct costs by removing non-direct costs, which were then divided by the number of anodes replaced in 2014 to determine the direct unit cost forecast. ATCO Gas multiplied the direct unit cost forecast by the forecast number of anodes, to arrive at an estimated 2,175 and 2,500 service anodes to be replaced for each of 2016 and 2017. ATCO Gas based its projected failure rate of anodes on an estimated number of

³³⁶ CGA Recommended Practice OCC-1, for the control of external corrosion on buried or submerged metallic piping systems.

Exhibit 20604-X0003, Appendix B6, paragraphs 6 and 10.

Exhibit 20604-X0003, Appendix B6, paragraph 26.

Exhibit 20604-X0003, Appendix B6, paragraph 35.

³⁴⁰ Exhibit 20604-X0003, Appendix B6, paragraphs 38, 39 and 41.

isolated steel locations and its projected number of low cathodic protection readings based on past experience within the anode replacement program.³⁴¹

312. ATCO Gas provided a comparison of forecast expenditures in 2016 and 2017 with actual costs from 2010 to 2014 for the Cathodic Protection program. ATCO Gas noted that the increase in forecast spending for the program from 2014 and 2015 to 2016 and 2017 was a result of a ramp-up in the anode replacement program. ³⁴² During the hearing, Mr. Whittall, on behalf of ATCO Gas, explained the need to ramp up the anode replacement program in 2016 and 2017 as follows:

In the case of ramping up in 2016 through 2017, there are two reasons: Number 1, we had a build-out of the rural system in the early '70s as part of the Alberta Rural Gasification Program. And what we're starting to see a greater number of failures just based on time of anodes throughout the system, just because of that build-out and the number that were installed as a cluster at that point.

And -- pardon me -- secondly, there were some locations that we -- that we were not tracking centrally, and so our integrity group wasn't able to see what was happening there. The inspections were being done. Anodes were being replaced in our operating groups, but we weren't able to see them. So we were wanting to make sure that all that were inspected are being replaced as they are failed.³⁴³

313. Mr. Whittall also provided reasons for undertaking more inspection for replacing anodes in 2016 and 2017:

There's a couple reasons. The first reason would be that we do expect to find some isolated steel segments that we were unaware of, and so they will be inspected. And it's just the inspection cycle is not necessarily flat over every five-year period. It all depends on when the pipe was installed across the some and in what volumes across a five-year basis.³⁴⁴

314. The CCA disagreed with the proposed increase in forecast anode replacements in 2016 and 2017. First, the CCA argued that ATCO Gas had stated in its prior capital tracker application that it expected the volume of anodes requiring replacement would decrease significantly post-2016. However, instead of the volume going down in 2017, ATCO Gas forecast the highest levels of replacement in the history of program, with forecast costs increasing from \$2.2 million in 2015 to \$3.2 million in 2016 and to \$4.0 million in 2017. The CCA submitted that ATCO Gas provided no evidence to support the increased forecasts for anode replacement, which included a failure to provide a complete count of anodes or records for the anodes. In the CCA's view, there was no valid reason for ATCO Gas to not have a complete list of the isolated sections of pipe that has been in operation for greater than 40 years. The CCA also noted that ATCO Gas completed fewer anodes than forecast in 2015. Based upon the above arguments, the CCA recommended that ATCO Gas's forecast be limited to the 2015 actual installation quantity of 609 anodes using the forecast unit costs for each test year 2016 and 2017.

Exhibit 20604-X0003, Appendix B6, paragraph 44.

Exhibit 20604-X0003, Appendix B6, paragraph 48.

Transcript, Volume 4, page 383, lines 20-25 to page 384, lines 1-10.

Transcript, Volume 4, page 387, lines 1-8.

Exhibit 20604-X0140, CCA argument, paragraphs 79-80.

- 315. ATCO Gas provided the following submission in response to the CCA:
 - ... As stated in the Application, anodes have an expected life of up to 50 years. As such, each year more and more anodes installed in the 1970s as part of the provincial rural gasification program are reaching the end of their useful lives. Mr. Whittall discussed additional reasons for the forecast increases during the hearing. One factor is that ATCO Gas is in the process of examining service orders and work orders to identify additional locations with isolated steel pipe. In 2014, ATCO Gas examined over 30,000 original service orders to identify isolated steel pipe. ATCO Gas is also centralizing this data in order to be able to better analyze it. With this additional data, ATCO Gas is better able to estimate the number of anode replacements required each year.³⁴⁶
- 316. ATCO Gas argued that the issue is not whether it has a complete list of locations, but that it must still replace depleted anodes whenever they are discovered. Providing adequate corrosion protection is a requirement of the *Gas Distribution Act*, and ATCO Gas confirmed that it continues to find previously unknown locations of isolated steel pipe with anodes that require replacement.³⁴⁷
- 317. ATCO Gas explained that the reasons for the higher forecasts for 2016 and 2017, despite having noted in a prior capital tracker application its expectations for lower volume of anode replacements after 2016, is that the failure rate for the anodes was less than expected, which had the effect of pushing the program into future years, and that ATCO Gas discovered more isolated locations than had previously been expected.³⁴⁸
- 318. With respect to the CCA's submissions regarding ATCO Gas's 2015 work, ATCO Gas explained that it was able to complete some of the anode replacements planned for 2015 earlier in 2014, due to resource availability. Accordingly, in ATCO Gas's view, the number of actual replacements undertaken in 2015 is not indicative of the forecast replacements in 2016 and 2017.³⁴⁹

Commission findings

- 319. In Decision 3267-D01-2015, the Commission approved the need for the Cathodic Protection program, including the Anode Replacement program component, for purposes of capital tracker treatment for 2015. Further, the Commission determined the forecast scope, level, timing and costs for the program for 2015 to be reasonable. Therefore, the Commission has previously determined that this program satisfied the project assessment requirement of Criterion 1.³⁵⁰
- 320. In the present application, ATCO Gas also requested capital tracker treatment for this program on a forecast basis in 2016 and 2017. As noted in Section 3, where a project or program is part of an ongoing multi-year program, or if a project or program is of an annual recurring nature for which the need has been previously approved by the Commission for purposes of capital tracker treatment, in the absence of evidence that the project or program is no longer required, the Commission will not undertake a reassessment of need under Criterion 1. The

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 137.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 138.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 139.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraphs 140-141.

Decision 3267-D01-2015, paragraph 471.

Commission finds no evidence on the record of this proceeding to indicate that this program is not required to continue in 2016 or 2017.

- 321. In Decision 3267-D01-2015, the Commission approved ATCO Gas's unit cost forecast for the Anode Replacement program in 2015. The Commission continues to be of the view that ATCO Gas's unit cost forecast for the anode replacement program in 2016 and 2017, which is consistent with the approach previously approved methodology for 2015, is reasonable.
- 322. With respect to the scope, level and timing of this program for 2016 and 2017, the Commission has reviewed the evidence on the record and the relevant portions of the record for this program. Specifically with respect to the reasonableness of ATCO Gas's anode replacements forecast, the Commission accepts ATCO Gas's explanation that an increasing number of anodes are reaching the end of their useful lives and require replacement. The Commission also accepts ATCO Gas's submission that a relatively higher forecast in 2016 and 2017 is warranted for the reasons provided by ATCO Gas that the failure rate for anodes was less than expected in previous years, and the discovery of more isolated locations than previously expected, both of which had the effect of pushing the program into future years.
- 323. Regarding the list of locations, the Commission is also cognizant of Mr. Whittall's submission during the hearing that ATCO Gas currently does not have a complete count of the isolated locations and the number of anodes that it has to monitor³⁵¹ and ATCO Gas's submission in its application that the identification of isolated steel locations will be complete by the end of 2016.³⁵² The Commission is of the view that the resulting list will be of use to the Commission and interveners in testing the prudence of actual expenditures for this program in the true-up for the test years. Accordingly, the Commission directs ATCO Gas to provide a complete list of its isolated steel locations in its 2016 and 2017 capital tracker true-up applications.
- 324. Given the above, the Commission finds that the information provided by ATCO Gas supports a finding that the scope, level, timing and forecast costs for the Cathodic Protection program are reasonable as proposed for 2016 and 2017. Accordingly, the Commission finds that this program satisfies the project assessment requirement of Criterion 1 for 2016 and 2017.

6.2.2.6 New Regulating Meter Stations

- 325. The New Regulating Meter Stations program consists of installing new stations or upgrade existing stations to increase flow capacity. Projects in this program are driven by customer growth but are not directly related to new customer additions.
- 326. ATCO Gas is seeking capital tracker treatment for the New Regulating Meter Stations program in 2016 and 2017 for the north and south. The total capital expenditures for the north are \$2.9 million and \$2.96 million in 2016 and 2017, respectively, and for the south are \$1.65 million and \$1.68 million in 2016 and 2017, respectively. The total capital additions for the north are \$2.87 million and \$2.93 million in 2016 and 2017, respectively, and for the south are \$1.63 million and \$1.66 million in 2016 and 2017, respectively.
- 327. ATCO Gas determined the capital tracker forecasts for 2016 and 2017 using a three-year historical average cost approach. ATCO Gas explained that it is neither in control of the drivers

³⁵² Exhibit 20604-X0003, Appendix B6, paragraph 26.

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Transcript, Volume 4, page 592, lines 20-25.

nor the schedule for completion of work. Rather, the timing of the majority of the work undertaken is driven by the schedules of municipalities and developers. ATCO Gas indicated that program requirements are dependent on where development occurs and whether the existing infrastructure will support the growth. ATCO Gas noted that there is also considerable variability in facility requirements, which drives the expenditure levels.

- 328. ATCO Gas provided the details associated with the true-up of the program in 2014 in its application.³⁵³ The 2014 approved forecast capital expenditures for the north were \$1.42 million, while the actual capital expenditures were \$2.86 million, resulting in a variance of \$1.43 million. ATCO Gas submitted that the variance was a result of a higher level of new subdivision development that required increased levels of new station infrastructure or station upgrades.³⁵⁴ In response to a Commission information request, ATCO Gas provided a list of all new station projects undertaken in 2014 along with the associated capital expenditures. For each new station with a cost equal to or greater than \$200,000, ATCO Gas further provided explanations describing the need and demonstrating that the least cost alternative was chosen.³⁵⁵
- 329. The CCA contested ATCO Gas's forecast for the program totalling \$4.5 million and \$4.6 million for the years 2016 and 2017, respectively. The CCA noted that these forecasts were matched only in 2012 and 2014. In the last five-years, which were exceptional growth years in Alberta. The CCA argued that ATCO Gas's forecasts does not take into account any impact of the UPR program on reducing new station requirements adjacent to the areas of recent growth in Edmonton and Calgary. The CCA contended that the UPR program is adding an unprecedented number of new gate stations, which is covered under the Transmission Driven capital program, and which will reduce the requirement for other facilities off the legacy High Pressure system in the urban areas. Based upon these arguments, the CCA recommended that, ... AG be directed to reduce its forecast to the 2015 approved level of \$3.4 million to more accurately reflect the reduced growth projections for Alberta in the near future.
- 330. In reply argument, ATCO Gas refuted the CCA's suggested approach of picking and choosing when to apply a three-year average to suit its interests is unfair and unwarranted, as ATCO Gas did not adjust its forecast upwards in prior years when economic forecasts suggested faster economic growth. Additionally, even during periods of slower growth, new stations can be required depending on the location of customer demand.³⁵⁹
- 331. ATCO Gas clarified that the new UPR program stations within Edmonton and Calgary, are primarily required to maintain service to the existing customers, as some existing stations are being eliminated having lost their high pressure gas source due to the UPR program. ATCO Gas submitted that there will be no reduction in loads in any part of the distribution system. 361

Exhibit 20604-X0009, application, Section 5.3.8.

Exhibit 20604-X0009, application, paragraph 683.

Exhibit 20604-X0027, AG-AUC-2015AUG17-046.

Exhibit 20604-X0140, CCA argument, paragraph 95.

Exhibit 20604-X0140, CCA argument, paragraphs 96-97.

Exhibit 20604-X0140, CCA argument, paragraph 99.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 153.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 154.

³⁶¹ Exhibit 20604-X0035, AG-CCA-2015AUG17-017 d).

Commission findings

- 332. In Decision 3267-D01-2015, the Commission approved the need for the New Regulating Meter Stations program for purposes of capital tracker treatment in 2014 and 2015. Further, the Commission determined the forecast scope, level, timing and costs for the program in 2014 and 2015 to be reasonable. Therefore, the Commission has previously determined that this program satisfied the project assessment requirement of Criterion 1.³⁶²
- 333. With respect to the true-up of 2014 actual costs, as noted in Section 4, if there is an absence of evidence on the record of the true-up proceeding demonstrating that a project was not required in 2014, then there is no need to demonstrate that a project was needed in order to provide utility service at adequate levels in 2014, as would otherwise be required under the project assessment component of Criterion 1. The Commission finds no evidence on the record of this proceeding to indicate that the New Regulating Meter Stations program was not required in 2014.
- 334. With respect to the scope, level and timing of this program carried out in 2014, the Commission has reviewed ATCO Gas's 2014 actual capital additions associated with this program and finds that they are generally consistent with the scope, level and timing of the work outlined in the business case for this capital tracker and approved by the Commission in Decision 3267-D01-2015. The Commission has also reviewed the costs of the 2014 actual capital additions for this program in light of the evidence supporting these costs and the evidence explaining the differences between approved forecast and actual costs, including the information provided in AG-AUC-2015AUG17-046, and finds the actual costs to be prudent.
- 335. In the present application, ATCO Gas requested capital tracker treatment for this program on a forecast basis in 2016 and 2017. As noted in Section 3, where a project or program is part of an ongoing multi-year program, or if a project or program is of an annual recurring nature for which the need has been previously approved by the Commission for purposes of capital tracker treatment, in the absence of evidence that the project or program is no longer required, the Commission will not undertake a reassessment of need under Criterion 1. The Commission finds no evidence on the record of this proceeding to indicate that this program is not required to continue in 2016 or 2017.
- 336. The issues raised by the CCA regarding the forecasting methodology used by ATCO Gas in this application, the reasonableness of the forecast costs given the current economic downturn, and the possible impact of the UPR project on the new for new regulating meter stations require further comment. In Decision 3267-D01-2015, the Commission approved the use of a three-year average for determining forecasts on the basis that ATCO Gas was not in control of the drivers or the schedule for completion of work.³⁶³ The Commission is of the view that this reasoning is still valid given the unpredictable nature of the costs in this program, and considers a three-year average to be a reasonable method of forecasting costs for this program. The Commission also accepts ATCO Gas's submission that the new stations required as a result of the UPR program will be used to maintain service to existing customers, whereas this program is driven by new customer growth. Therefore, the Commission accepts that there will be no impact on the New Regulating Meter Stations program in 2016 and 2017 as a result of the UPR program.

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³⁶² Decision 3267-D01-2015, paragraph 430.

³⁶³ Decision 3267-D01-2015, paragraph 429.

Consequently, the Commission does not accept the CCA's recommendation to reduce the forecast costs for this program in 2016 and 2017, to the 2015 approved level of \$3.4 million.

- 337. With respect to the scope, level and timing of this program in 2016 and 2017, the Commission has reviewed the business case and the relevant portions of the record for this program and finds the forecast scope, level and timing of this program in 2016 and 2017 to be reasonable. The Commission has reviewed the information supporting ATCO Gas's 2016 and 2017 forecasts and finds the total annual cost forecasts to be reasonable based on the forecasting methodology employed.
- 338. Given the above, the Commission finds that the information provided by ATCO Gas supports a finding that the scope, level, timing and forecast costs for the New Regulating Meter Stations program are reasonable as proposed in 2016 and 2017. Accordingly, the Commission finds that this program satisfies the project assessment requirement of Criterion 1 for 2016 and 2017.

6.2.2.7 New Urban Service Lines, Urban Main Extensions and Rural Main Extensions and Service Lines

New Urban Service Lines

- 339. The New Urban Service Lines program consist of residential and commercial customer service lines. Commercial service lines range from short, small diameter pipe to long larger diameter pipe, depending on customer needs. Installing new urban service lines is required to serve municipalities as they continue to grow and develop. The timing of the work undertaken in this program is driven by the schedules of municipalities, developers and home builders. ATCO Gas provided details of the New Urban Service Lines program in Appendix B8 of the application.³⁶⁴ The need for this program, as part of the project assessment under capital tracker Criterion 1, was approved in Decision 3267-D01-2015.
- 340. In the compliance filing³⁶⁵ to Decision 3267-D01-2015, ATCO Gas requested capital tracker treatment approval for its New Urban Service Lines program for the south for 2014, which was approved in Decision 20385-D01-2015.³⁶⁶
- 341. ATCO Gas stated it does not have control over the amount of new services installed in a given year. The required number of new urban service lines varies due to external factors, many of which are linked to the Alberta economy. Examples of these factors include new housing markets, population growth, municipal zoning and urban development. ATCO Gas provided the forecasting methodology in the business case.
- 342. ATCO Gas completed 10,242 residential and commercial units in the south in 2014, compared to the forecast amount of 9,146. Actual capital expenditures on the New Urban Service Lines program were higher by \$3.2 million in the south than forecast. Actual capital expenditures in 2014 were higher than anticipated due to more units being installed than planned and an increase in unit cost. This was primarily driven by the Calgary region which experienced larger growth than expected and increased levels of infill service installations. Installing infill services in developed areas costs more than constructing services in newly developed areas.

Exhibit 20604-X0003, Appendix B8, New Urban Service Lines program.

³⁶⁵ Proceeding 20385.

³⁶⁶ Decision 20385-D01-2015, Table 1.

343. ATCO Gas is seeking capital tracker treatment for New Urban Service Lines program for the years 2016 and 2017 for the north and south. The forecast capital additions for the north are \$22.1 million for 2016 and \$22.8 million for 2017. The forecast capital additions for the south are \$15.6 million for 2016 and \$16.2 million for 2017. The forecasts were developed using a unit cost approach. The units, or number of new service lines, are based on the customer growth forecast. Unit costs are based on a historical average of costs per service. 368

Urban Main Extensions

- 344. ATCO Gas installs urban main extensions to ensure that new customers, both residential and commercial, receive natural gas distribution service and in order to maintain service quality and reliability. ATCO Gas indicated that it first identifies the need for facilities when the municipality circulates area structure plans (ASP) or neighbourhood structure plans (NSP) proposed by developers or land owners, for review. These plans can take six to 12 months to be approved by the municipality. Usually once these plans are available, ATCO Gas develops long-term plans for the development of the gas distribution systems to serve these areas. After the ASP and NSP are approved, the developer may determine a phasing plan for design and construction of the area, depending on the land size, as it could take years before it is fully developed. ATCO Gas provided details of the Urban Main Extensions program in Appendix B11 of the application.³⁶⁹ The need for this program, as part of the project assessment under capital tracker Criterion 1, was approved in Decision 3267-D01-2015.
- 345. Before any construction can begin, the developer must obtain the necessary approvals through the municipality such as servicing agreements and subdivision plans. ATCO Gas submitted that this can take a number of months or more. Typically during this approval process ATCO Gas finalizes the urban main extension design, in some cases, without knowing the construction timing requirements. Once the developer receives approval, they can begin construction of their neighbourhood. When construction begins can range from months to years depending on the business climate. Constantly changing demographics, market demand, interest rates and other factors can impact a developer's decision as to when to proceed with construction.
- 346. The required number of urban main extensions is due to external factors, many of which are tied to the Alberta economy. Examples of these factors include new housing markets, population growth, municipal zoning, development or annexations. Therefore, ATCO Gas asserted it does not have control over the amount of main extensions installed in a given year.
- 347. The forecast capital additions for this program for 2016 are \$14.6 million for the north and \$9.9 million for the south; and for 2017 are \$15.2 million for the north and \$10.3 million for the south, respectively. These forecasts were developed using a historical average unit cost approach.³⁷⁰

Rural Main Extensions and Service Lines

348. The Rural Main Extensions and Service Lines program consists of the construction and installation of main extensions and services in ATCO Gas's rural service area required to

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³⁶⁷ Exhibit 20604-X0003, Appendix B8, Table 3, PDF page 96.

³⁶⁸ Exhibit 20604-X0003, Appendix B8, PDF page 95.

Exhibit 20604-X0003, Appendix B11, Urban Main Extensions program.

Exhibit 20604-X0008, paragraph 25.

connects customers to the distribution system. A main extension is a distribution main that connects the customer's property to the regulating metering station. A service line is distribution pipe that connects the main extension to the meter and regulator set at the building requiring service. The work done within this program is ongoing and serves to connect new rural customers. ATCO Gas provided details of the Rural Main Extensions and Service Lines program in Appendix B14 of the application.³⁷¹ The need for this program, as part of the project assessment under capital tracker Criterion 1, was approved in Decision 3267-D01-2015.³⁷²

- 349. In Decision 3267-D01-2015, ATCO Gas requested capital tracker treatment for this program in 2015 for the north.³⁷³ Accordingly, variance explanations were not provided for 2014.
- 350. The forecast capital additions for this program for 2016 are \$18.7 million (\$10.7 million for the north and \$8.0 million for the south) and for 2017 are \$19.4 million (\$11.1 million for the north and \$8.3 million for the south), respectively.³⁷⁴
- 351. ATCO Gas forecasts annual new service line installations based on a customer growth forecast, which are determined using Canada Mortgage and Housing Corporation (CMHC) forecasts for detached housing starts in the Edmonton Census Metropolitan Area (CMA), Grand Prairie, Red Deer, Wood Buffalo, Calgary CMA and Lethbridge.³⁷⁵
- 352. To determine the number of urban residential services from the total rural residential service forecast, ATCO Gas applied a five-year average ratio using actual rural service line installations in those regions from the previous five years. This ratio is then applied to the rural residential service line installations forecast for the respective rural region to provide the forecast units of urban services.³⁷⁶
- 353. Commercial rural service line units are forecast on a five-year historical average of new commercial units.³⁷⁷ For residential and commercial main extensions, ATCO Gas forecasts the number of lots serviced by a main by calculating a five-year average ratio of actual lots serviced by a main to the actual number of service line installations. The ratio is then applied to the previously calculated forecast number of service line installations.³⁷⁸
- 354. In the hearing, Ms. Berger stated that that the last review of the CMHC data and its effect on unit costs were performed in the Q2 CMHC housing starts report. She further stated that ATCO Gas did review the Q4 CMHC housing starts report. Based on that review, Ms. Berger stated that the potential reduction in new service line installations would be approximately 3,500 units in 2016 and 2900 units in 2017. The reductions would affect three programs: the Rural Main Extensions and Service Lines program, the New Urban Service Lines program and Urban Mains Extension program. The latter two programs are discussed in the subsections below.

Exhibit 20604-X0003, Appendix B14, Rural Main Extensions and Service Lines program.

Decision 3267-D01-2015, paragraph 508.

Decision 3267-D01-2015, paragraph 490.

Exhibit 20604-X0003, Appendix B14, Table 3, PDF page 165.

³⁷⁵ Exhibit 20604-X0027, AG-AUC-2015AUG17-025.

³⁷⁶ Exhibit 20604-X0003, Appendix B14, paragraph 25, PDF pages 165-166.

Exhibit 20604-X0003, Appendix B14, paragraph 26, PDF page 166.

Exhibit 20604-X0003, Appendix B14, paragraph 27, PDF page 166.

- 355. According to Ms. Berger, the impact to the capital tracker forecast for these three capital programs combined is a reduction of about \$3 million in 2016 and \$2.5 million in 2017.³⁷⁹ Based on the latest Q4 CMHC report, there is a potential reduction of units compared to the units included in the application that would affect new urban service lines, urban main extensions and rural main extensions and service lines. However, those changes in the growth related capital trackers would be, in effect, offset by the changes to the other factors.³⁸⁰
- 356. In argument, the CCA submitted that ATCO Gas should be directed to update its forecasts in the compliance filing to account for the Q4 CMHC housing start forecast reduction.³⁸¹
- 357. ATCO Gas disagreed with the CCA and stated that with any forecast, the passage of time will result in changes as updated information becomes available. ATCO Gas stated the CCA's suggestion neither contributed to regulatory efficiency nor was it consistent with the third PBR principle to continually adjust the forecast, given that there is a true-up mechanism in place. ATCO Gas stated that "changes in the growth related Capital Tracker Programs, in effect, would be offset by the changes to other factors if a fair and comprehensive updating were directed." As Ms. Berger indicated at the hearing, the effect of a fair and balanced update would likely result in minimal change to the applied for K factor. An approximation of the impact to the K factor related to economic changes since the application was filed has been provided by Ms. Berger. This included the changes for the Q4 CMHC report, the Q factor, and the inflation factor as well as other matters. This would result in approximately a \$1 million change in 2016 and less than a \$1 million change for 2017. 383
- 358. ATCO Gas stated that no change to the forecast should be required given the immaterial impact to this program or to the New Urban Service Lines program and Urban Mains Extension program. The true-up mechanism, which distinguishes capital trackers and PBR from the practice followed under traditional, prospective, cost-of-service regulation, ensures customers never pay more or less than the prudent costs incurred by the utility in ensuring safe and reliable service.³⁸⁴

Commission findings

359. In either Decision 2013-435 or Decision 3267-D01-2015, the Commission approved the need on an actual or forecast basis, for the Rural Main Extensions and Service Lines program, the New Urban Service Lines program and the Urban Mains Extension program for purposes of capital tracker treatment in one or more of 2013, 2014 or 2015. Further, the Commission determined that the proposed scope, level, timing and forecast costs for these programs were reasonable. Therefore, the Commission has previously determined that each of the programs discussed above satisfied the project assessment requirement of capital tracker Criterion 1 in one or more previous years. In addition, in Decision 3267-D01-2015 and the compliance filing Decision 20385-D01-2015, the Commission approved the actual scope, level, timing and costs of projects and programs included in the 2013 capital tracker true-up application, as prudent.

Transcript, Volume 3, page 317, lines 19-25 to page 318, lines 1-12 (Ms. Berger).

Exhibit 20604-X0138, ATCO Gas argument, paragraph 142.

³⁸¹ Exhibit 20604-X0140, CCA argument, paragraphs 114-115.

Exhibit 20604-X0138, ATCO Gas argument, paragraph 89.

Exhibit 20604-X0138, ATCO Gas argument, paragraphs 139-147.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 168.

- 360. With respect to the true-up of 2014 actual costs, as noted in Section 3, if there is an absence of evidence on the record of the true-up proceeding demonstrating that a project or program was not required in 2014, there is no need to demonstrate that a project or program was needed in order to provide utility service at adequate levels in 2014, as would otherwise be required under the project assessment component of Criterion 1. The Commission finds no evidence on the record of this proceeding to indicate that any of the three programs discussed above were not required in 2014.
- 361. With respect to the scope, level and timing of the each of the three programs discussed above and carried out in 2014, the Commission has reviewed ATCO Gas's 2014 actual capital additions associated with each of these programs and finds that they are consistent with the scope, level and timing of the work outlined in the business case for these capital trackers approved in Decision 3267-D01-2015. The Commission has also reviewed the costs of the 2014 actual capital additions for each of these programs in light of the evidence supporting these costs, the associated procurement and construction practices and the evidence explaining the differences between approved forecast and actual costs, and finds the actual costs to be prudent.
- 362. In the application, ATCO Gas requested capital tracker treatment for these three programs on a forecast basis in 2016 and 2017. As noted in Section 3, where a project or program is part of an ongoing multi-year program, or if a project or program is of an annual recurring nature for which the need has been previously approved by the Commission for purposes of capital tracker treatment, in the absence of evidence that the project or program is no longer required, the Commission will not undertake a reassessment of need under Criterion 1. The Commission finds no evidence on the record of this proceeding to indicate that any of the programs discussed above are not required to continue in 2016 or 2017.
- 363. The Commission has reviewed the information supporting ATCO Gas's 2016 and 2017 forecasts and the argument raised by the CCA with respect to the Q4 CMHC report. Due to the fact that growth is the main driver for the three programs, the best information available at the time of the close of record of the proceeding should be used to assess ATCO Gas's forecast capital tracker programs for 2016 and 2017. The Commission directs ATCO Gas in its compliance filing to update the forecast for the Rural Main Extensions and Service Lines program, the New Urban Service Lines program, the Urban Mains Extension program based on the Q4 CMHC report. In that application, the Commission will assess the scope, level, timing and forecast costs for the project requirements of Criterion 1.

6.3 New capital tracker projects or programs

364. This section deals with ATCO Gas's new projects or programs that have not been previously approved for capital tracker treatment on an actual or forecast basis. ATCO Gas only applied for one new capital tracker program in this application, the Emergency Supply program.

6.3.1 Emergency Supply

365. ATCO Gas requested capital tracker treatment for the Emergency Supply program on a forecast basis for 2016 and 2017. ATCO Gas explained that the purpose of its Emergency Supply program is to maintain service to customers in the event of an outage on the distribution system. ATCO Gas uses compressed natural gas (CNG) transportation trailers to deliver natural gas to customers who experience a loss of service. Under the Emergency Supply program, ATCO Gas

maintains a mobile emergency CNG supply in order to respond to emergencies.³⁸⁵ ATCO Gas provided information as to how the Emergency Supply program satisfies the project assessment criterion in Section 4.3.15 of its application.³⁸⁶ The business case was included in Appendix B15.³⁸⁷

- 366. ATCO Gas currently has eight CNG stations along with a number of CNG trailers. ATCO Gas explained that dispensing equipment at four existing CNG stations located in its southern distribution area are reaching the end of their useful lives and that replacement of these assets is scheduled for 2016 and 2017. ATCO Gas plans to add a CNG trailer in Grande Prairie in 2016 because there is currently a six-hour delay to transport the nearest CNG trailer to Grande Prairie from Edmonton, which ATCO Gas considered an unacceptable outage time. 388
- 367. During the hearing Mr. Smetaniuk, who appeared on behalf of ATCO Gas, confirmed that ATCO Gas has deployed CNG trailers in response to an emergency seven times since 2005. He noted that ATCO Gas is unable to predict how many emergencies it may be required to respond to in 2016 and 2017.³⁸⁹
- 368. In its business case, ATCO Gas explained that if the CNG facilities are not maintained, then ATCO Gas would be reliant on contract services, which may reduce ATCO Gas's ability to respond to emergencies in a timely manner.³⁹⁰ For example, Mr. Smetaniuk explained that in a recent emergency at Wabamun, it took approximately a day for contractors to respond and set up, while in responding to the same incident, ATCO Gas was able to respond within hours. He noted that ATCO Gas has not performed a cost-benefit analysis of utilizing contractors because contractors are unable to meet ATCO Gas's response requirements.³⁹¹
- 369. ATCO Gas forecast capital expenditures to be \$0.2 million in the north and \$0.1 million in the south, and \$0.0 million in the north and \$0.1 million in the south, in 2016 and 2017, respectively. Net capital additions are forecast to be \$0.2 million in the north and \$0.1 million in the south in 2016 and \$0.2 million in the north and \$0.1 million in the south in 2017.
- 370. ATCO Gas explained that the forecast for the Emergency Supply program is developed based on actual costs from similar recently completed projects. In this case, the 2016 and 2017 south forecasts are based on the costs of installing a new dispenser at the Whitehorn site in 2015 and the 2016 north forecast is based on the costs of a new CNG trailer purchased in 2013.³⁹³
- 371. In an IR response, ATCO Gas was asked to explain why the capital funding shortfall was higher than the capital expenditure forecast summary in the south for both 2016 and 2017. ATCO Gas stated, in part:

Specifically for the Emergency Supply Program in the South, ATCO Gas incurred higher expenditures in 2015, with the expenditures being reduced significantly in 2016 and

Exhibit 20604-X0009, application, paragraphs 497-498.

³⁸⁶ Exhibit 20604-X0009, application, Section 4.3.15.

Exhibit 20604-X0003, Appendix B15.

Exhibit 20604-X0003, Appendix B15, paragraphs 3-5.

Transcript, Volume 4, page 506, line 12 to page 507, line 8 (Mr. Smetaniuk).

Exhibit 20604-X0003, Appendix B15, paragraph 7.

Transcript, Volume 4, page 509, lines 1-15 (Mr. Smetaniuk).

Exhibit 20604-X0007, application, Schedule A2.

³⁹³ Exhibit 20604-X0003, Appendix B15, paragraphs 31-32.

- 2017. The higher expenditures in 2015 increase the rate base for this program to a point where the funding shortfall exceeds the materiality threshold in 2016 and 2017.³⁹⁴
- 372. In 2015, the forecast capital expenditures on the Emergency Supply program did not cause the program to pass the materiality test and, therefore, ATCO Gas mentioned that it did not apply for capital tracker treatment. The forecast expenditures were embedded in the I-X portion of the PBR formula for 2015 and ATCO Gas explained that the 2015 forecast, as approved in the prior compliance filing, was \$0.7 million. However, the current expected 2015 forecast, at the time of the application, was \$1.8 million, as shown in Table 3 of Appendix B15 of the application.³⁹⁵
- 373. In the hearing, Mr. Smetaniuk confirmed that ATCO Gas was on track to spend very close to \$1.8 million in 2015.³⁹⁶ In response to a Commission IR, ATCO Gas provided a list of the emergency supply assets expected to reach the end of their useful life in each of 2015, 2016 and 2017.³⁹⁷ Mr. Smetaniuk submitted that the overhaul schedules for these assets are a function of accumulated time put on the machinery, and that the assets replaced in 2015 had reached those limits.³⁹⁸
- 374. In an exchange between Commission counsel and Mr. Smetaniuk in relation to the variance between the expenditures originally forecast for 2015 and anticipated actual 2015 expenditures, Mr. Smetaniuk provided the following explanation:
 - Q. So, sir, why is the 2015 approved so much different than the 2015 forecast if ATCO Gas knew the run time for the life of the machinery?
 - A. MR. SMETANIUK: At the time that we were developing the 2015 forecast for application purposes, it became clear to us then that those overhauls would be required. It's a simple matter of them simply not being included in the previous year's -- or, I guess, the previous year's forecasting process.
 - Q. But, sir, if it's based on the run time for the assets, ATCO Gas could have been able to predict that these assets are reaching the end of their life; is that correct? Even a few years before the application for 2015 approved was filed?
 - A. MR. SMETANIUK: It appears to be a matter of a disconnect between those who manage the actual physical work and those pulling the forecasts together. I'd say, you know, more than a year ago.³⁹⁹

. . .

- Q. Sir, my question was whether ATCO Gas considered smoothing out those expenditures in 2016 and 2017.
- A. MR. SMETANIUK: In the case of the overhauls, they were necessary to be done. As I mentioned earlier, it's a function of frequency associated with time accumulated on the equipment. It would be prudent to do those repairs and overhauls at that time. In the case

³⁹⁴ Exhibit 20604-X0027, AG-AUC-2015AUG17-031.

³⁹⁵ Exhibit 20604-X0003, Appendix B15, Table 3.

Transcript, Volume 4, page 516, lines 17-18 (Mr. Smetaniuk).

Exhibit 20604-X0027, AG-AUC-2015AUG17-032.

Transcript, Volume 4, page 519, line 22 to page 520, line 4 (Mr. Smetaniuk).

Transcript, Volume 4, page 520, lines 5-22 (Mr. Smetaniuk).

of dispensers and cardlock systems, as I explained earlier, they were at end of life, no longer supported, and they needed to be replaced.⁴⁰⁰

- 375. In its argument, the CCA analysed peak hourly demand and CNG trailer capacities, and submitted that one CNG trailer would be able to supply the distribution network in Grande Prairie for a range of three minutes to 14 hours. The CCA argued that, as fill times are several hours, the existing CNG trailers cannot be used for all emergency loss of supply situations, and are only viable for supporting certain limited flow scenarios.⁴⁰¹
- 376. The CCA argued that "there is insufficient evidence for the use of the CNG trailers to merit Capital Tracker status as an Emergency Response program." The scope of work in this application is merely a continuation of a longstanding program, which means the program does not meet Criterion 1, which requires that the project must be outside of the normal course of the company's ongoing operations. Further, the CCA noted that the viability of an expanded Emergency Supply program has not been substantiated. In its reply argument, ATCO Gas submitted that the concept of normal course is mainly a financial and accounting consideration and further stated that it has shown that the Emergency Supply Program has a capital funding shortfall under the accounting test.
- 377. In its reply argument, ATCO Gas explained that it does not need to replace the demand of an entire distribution network when responding to an emergency situation. In the hearing, Mr. Smetaniuk explained that through the use of valving, ATCO Gas tries to reduce the number of customers impacted by an outage, and that CNG trailers are typically able to provide backup service for four to six hours. ATCO Gas noted that by deploying its own CNG trailers along with the services of contractors it is, in its view, effectively able to respond to emergencies.

Commission findings

378. ATCO Gas requested capital tracker treatment for the Emergency Supply program on a forecast basis for 2016 and 2017. As noted by ATCO Gas, it has not applied for capital tracker treatment of this program in past applications. Further, ATCO Gas did not request capital tracker treatment for this project in 2014 on an actual basis.

379. In Decision 2012-237, the Commission established three criteria for the approval of supplemental capital funding under a PBR plan by way of a capital tracker. Criterion 1 stated that the project must be outside of the normal course of the company's ongoing operations. 408 Subsequently in Decision 2013-435, the Commission defined "outside the normal course of the company's ongoing operations" by establishing two tests, an "accounting test" and a "project assessment" test, both of which much be met in order to satisfy Criterion 1. 409 The Commission indicated that the purpose of the project assessment is to demonstrate that a project or program

Transcript, Volume 4, page 521, lines 13-22 (Mr. Smetaniuk).

Exhibit 20604-X0140, CCA argument, paragraphs 107-110.

Exhibit 20604-X0140, CCA argument, paragraph 105.

⁴⁰³ Exhibit 20604-X0140, CCA argument, paragraphs 112-13.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 163.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 158.

Transcript, Volume 4, page 511, lines 10-18 (Mr. Smetaniuk).

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 162.

⁴⁰⁸ Decision 2012-237, paragraph 592.

do Decision 2013-435, paragraph 125.

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 that the forecasts or actual costs of the project or program are reasonable.⁴¹⁰

- 380. Decision 2012-237 clarified the requirements a program must satisfy in order to satisfy Criterion 1. These requirements are as follows:
 - 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.733 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.411
- 381. The Commission finds that the expenditures under the Emergency Supply program 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. Regarding the potential to employ contractors, the Commission is persuaded by Mr. Smetaniuk's submission that sole reliance on contractors would result in a significantly longer response time and a clear deterioration in service quality in the event of an emergency. However, the Commission has concerns with respect to the scope, level and timing of the expenditures under the Emergency Supply program.
- 382. Although the projects included in the business cases may require completion in 2016 and 2017, the Commission finds that ATCO Gas has not sufficiently demonstrated that the timing of the capital expenditures applied for are outside management's discretion and further that the capital service quality and safety cannot be maintained by continuing with O&M levels and capital spending at levels that are not substantially different from historical levels. ATCO Gas did not consider smoothing its 2015 expenditures over 2016 and 2017 and the resulting investments over the time period are lumpy in nature. The expected forecast spending at the time of this application for 2015 with respect to the Emergency Supply program was at least double the actual expenditures for all other years since 2010. If ATCO Gas considers that the Emergency Supply program may qualify for capital tracker treatment in 2015, the prudence of the actual 2015 expenditures could be tested in the upcoming 2015 capital tracker true-up proceeding.
- 383. This program passes the materiality threshold of the capital tracker test in 2016 and 2017 because higher than forecast expenditures in 2015 increased the program's rate base. The

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⁴¹⁰ Decision 2013-435, paragraph 278.

⁴¹¹ Decision 2012-237, paragraph 594.

Commission observes that at the time of the hearing, ATCO Gas continued to anticipate that it will spend two and a half times more than its approved forecast in 2015. Based on Table 3 of the business case, the 2015 expenditures represent an historical high for the Emergency Supply program and the expenditures in 2016 and 2017 are forecast to be at an historical low, as measured since 2010.

- 384. The Commission is not prepared to approve the forecast capital expenditures for 2016 and 2017 for capital tracker treatment at this time given that the 2015 actual amounts have not yet been tested. ATCO Gas is directed to remove any amounts associated with the Emergency Supply program from the K factor in the compliance filing to this decision.
- 385. As set out at paragraph 615 of Decision 2012-237, a company may choose to undertake a capital investment prior to applying for capital tracker treatment in a subsequent annual capital tracker filing. In other words, a company does not have to wait for the Commission's approval of its forecast for capital tracker treatment to proceed with projects required to maintain service reliability and safety at adequate levels. Consistent with these findings, ATCO Gas may apply for the Emergency Supply program on an actual basis at the time of the 2016 and 2017 capital tracker true-up applications.

7 Accounting test under Criterion 1 – The project must be outside of the normal course of the company's ongoing operations and Commission conclusion on Criterion 1

- 386. As explained in Decision 2013-435, the purpose of the accounting test is to determine whether a project or program (depending on the approved level of grouping) proposed for capital tracker treatment is outside the normal course of the company's ongoing operations. This is achieved by demonstrating that 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.⁴¹³
- 387. In Decision 2013-435, the Commission determined that the accounting test should be based on a "project net cost approach," which 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. Under this approach, the extent to which a project is underfunded by the I-X mechanism is calculated by 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 effect on revenue of any changes in billing determinants. ⁴¹⁴ The effect on revenue of any changes in billing determinants in any given PBR year, is referred to as the "Q"⁴¹⁵ or "Q factor."
- 388. As set out in Section 4.4 of Decision 2013-435, the accounting test, as it relates to revenue calculations, consists of two components. The first component is the revenue provided under the I-X mechanism for a project or program proposed for capital tracker treatment. As

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⁴¹² Exhibit 20604-X0003, Appendix B15, Table 3.

⁴¹³ Decision 2013-435, paragraphs 149-150.

⁴¹⁴ Decision 2013-435, paragraphs 262-263.

Decision 2013-435, paragraph 499.

explained in Decision 3434-D01-2015, this component of the accounting test utilizes the weighted average cost of capital (WACC) rate embedded in a company's approved going-in rates⁴¹⁶ and requires assumptions regarding the values for the I-X index and Q factor for each year.

- 389. The second component is the revenue requirement calculations based on the forecast or actual capital additions for that project or program for a given PBR year, approved by the Commission as part of the project assessment review under Criterion 1. As set out in Decision 3434-D01-2015, for purposes of the revenue requirement calculations, this component of the accounting test requires assumptions regarding the current year's WACC rate, namely, cost of debt, approved return on equity (ROE) and capital structure, including preferred shares.⁴¹⁷
- 390. ATCO Gas's calculation of the accounting test model for the 2014 capital tracker true-up and 2016 and 2017 capital tracker forecast was provided in Appendix A to the application.⁴¹⁸
- 391. In Decision 3267-D01-2015, the Commission established that the accounting test for a capital tracker true-up application for a given year should utilize the approved I-X index and the Q factor based on the final approved forecast of billing determinants for that year. For the 2014 capital tracker true-up, ATCO Gas used the 2014 I-X index of 1.59 per cent approved in Decision 2013-460. The 2014 Q factor of 2.34 per cent for the north and 1.70 per cent for the south were based on ATCO Gas's forecast billing determinants, also approved by the Commission in Decision 2013-460.
- 392. In the accounting test for 2016 and 2017, ATCO Gas used an I-X index value of 1.49 per cent for both years, 422 which is equal to the 2015 I-X index value approved in Decision 2014-363.423 ATCO Gas's 2016 and 2017 Q factor of 2.04 per cent for the north and 1.79 per cent for the south and 1.75 per cent for the north and 1.56 per cent for the south, respectively, were calculated based on the growth forecasts from the CMHC Housing Market Outlook published in the prior year. Consistent with past practice, ATCO Gas used the CMHC Housing Market Outlook in calculating the forecast for the 2016 and 2017 billing determinants.424
- 393. For the purposes of the 2014 capital tracker true-up and the 2016-2017 capital tracker forecast, ATCO Gas used the WACC rate of 6.76 per cent for 2014 and 6.56 per cent and 6.48 per cent respectively for 2016 and 2017. 425
- 394. With respect to the second component of the accounting test, for the 2014 capital tracker true-up, ATCO Gas used the actual 2014 WACC rate of 6.75 per cent, 426 based on the actual embedded cost of debt, the approved equity thickness of 38 per cent and the approved ROE of

⁴¹⁶ Decision 3434-D01-2015, paragraph 37.

Decision 3434-D01-2015, paragraph 40.

⁴¹⁸ Exhibit 20604-X0008.

⁴¹⁹ Decision 3267-D01-2015, paragraph 580.

⁴²⁰ Decision 2013-460, paragraph 97.

Exhibit 20604-X0009, application, paragraph 76.

Exhibit 20604-X0009, application, paragraph 76.

⁴²³ Decision 2014-363, paragraph 17.

Exhibit 20604-X0009, application, paragraph 78.

Exhibit 20604-X0009, application, paragraphs 79-80.

Exhibit 20604-X0009, paragraph 80.

- 8.3 per cent, as determined in Decision 2191-D01-2015. For the purposes of the 2016 and 2017 capital tracker forecasts, ATCO Gas used a WACC rate of 6.56 per cent and 6.48 per cent, are respectively. ATCO Gas noted that it had forecast debt issuances for 2016 and 2017 based on the rate that resulted from the company's most recent debt issuance in 2014.
- 395. Another factor of the revenue requirement calculation in the second component of the accounting test is income tax. In Decision 3267-D01-2015, the Commission stated the following:
 - In reviewing ATCO Gas's income tax calculations, which were provided as a single hard-coded number for each capital project or program in the accounting test spreadsheet in ATCO Gas's application, the Commission considers that the level of disclosure initially provided by ATCO Gas was not helpful to the Commission and interveners in understanding the mechanics of ATCO Gas's income tax calculations. There were several assumptions and allocations required as part of the income tax calculations, and the Commission considers that it is necessary for the company to disclose its assumptions and allocations in order for the Commission and interested parties to be able to assess whether those assumptions and allocations are reasonable. Accordingly, in future capital tracker applications, ATCO Gas is directed to provide a breakdown of its capital tracker income tax calculations into their component parts: return, interest, depreciation, capital cost allowance, indirect capital costs, removal costs and capitalized pension costs. In addition, in future capital tracker applications, ATCO Gas is directed to provide supporting calculations for any income tax components that were assigned to capital projects or programs using an allocation methodology, and provide an explanation of how the total amounts to be allocated were calculated. 429
- 396. In the application, ATCO Gas provided supporting calculations and a breakdown of the income tax calculations in its accounting model schedules. In allocating capital cost allowance, ATCO Gas stated that its calculations were consistent with the direction provided in Decision 3267-D01-2015.
- 397. No party raised issues with ATCO Gas's I-X and Q factor values, WACC rate used in the accounting test, the ROE or the capital structure components of the WACC forecast for 2016 and 2017. However, in reply argument, the CCA contested elements the of forecast cost of debt component of the 2016 and 2017 WACC rates. This issue is addressed in Section 7.1 of this decision.

Commission findings

398. In Decision 3267-D01-2015, the Commission gave the following direction regarding ATCO Gas's accounting test spreadsheets:

601. ... ATCO Gas is directed to provide a breakdown of its capital tracker income tax calculations into their component parts: return, interest, depreciation, capital cost allowance, indirect capital costs, removal costs and capitalized pension costs. In addition, in future capital tracker applications, ATCO Gas is directed to provide supporting calculations for any income tax components that were assigned to capital projects or

Decision 2191-D01-2015: 2013 Generic Cost of Capital, Proceeding 2191, Application 1608918-1, March 23, 2015.

Exhibit 20604-X0009, paragraph 80.

⁴²⁹ Decision 3267-D01-2015, paragraph 601.

Exhibit 20604-X0007, schedules 6.1-6.6.

programs using an allocation methodology, and provide an explanation of how the total amounts to be allocated were calculated.⁴³¹

- 399. Generally, the accounting test spreadsheets provided by ATCO Gas in the application provided a breakdown of its capital tracker income tax calculations. The calculations were linked and included working formulas.
- 400. The Commission has reviewed ATCO Gas's schedules that make up its accounting test analysis for the purposes of the 2014 capital tracker true-up and the 2016 and 2017 capital tracker forecasts and finds these schedules to be reasonable and generally consistent with the accounting test methodology approved by the Commission in Decision 2013-435. The Commission has also assessed the reasonableness of ATCO Gas's WACC, I-X and Q factor assumptions used in the first component of the accounting test, and WACC assumptions and income tax allocation calculations in the second component of the accounting test, for each of 2014, 2016 and 2017. The Commission's findings are set out below.
- 401. The Commission has verified that for the first component of the accounting test, ATCO Gas used the correct WACC rate of 7.12 per cent, embedded in its approved 2012 going-in rates, as required by Decision 3434-D01-2015. The Commission has also verified also that for the 2014 true-up, ATCO Gas used the correct values for the I-X index and Q factor, as approved by the Commission in Decision 2013-460.
- 402. The Commission observes that when the application was filed, ATCO Gas did not have approved values for either the I-X index or Q factor for 2016 or 2017. Therefore, it used the I-X index value that was approved for its 2015 PBR annual rate adjustment filing, equal to 1.49 per cent for both 2016 and 2017. ATCO Gas's 2016 Q factors of 2.04 per cent for the north and 1.79 per cent for the south and 2017 Q factors of 1.75 per cent for the north and 1.56 per cent for the south, were based on those approved by the Commission in Decision 2013-460.
- 403. ATCO Gas proposed to true up the forecast values of the I and Q factors to approved numbers as part of the 2016 and 2017 capital tracker true-up applications. However, regarding the 2016 forecast, the Commission observes that, since the filing of the application, the 2016 I-X index of 0.90 per cent and billing determinants forecast were approved in Decision 20820-D01-2015. To minimize future true-ups, the Commission directs ATCO Gas, in its compliance filing to this decision, to use the approved 2016 I-X index value and the Q factor based on the forecast billing determinants approved in Decision 20820-D01-2015 for purposes of its 2016 capital tracker forecast accounting test. For the purpose of this decision, the Commission considers ATCO Gas's forecast I and Q factor values for 2017 to be reasonable.
- 404. As discussed earlier in this section, in Decision 3434-D01-2015, the Commission determined that revenue requirement calculations in the second component of the accounting test should be based on the current year's WACC rate, which, in turn, is calculated based on the actual or forecast cost of debt, as well as the approved ROE and capital structure for that year.⁴³⁵

Exhibit 20604-X0009, application, paragraph 76.

⁴³¹ Decision 3267-D01-2015, paragraph 601.

Exhibit 20604-X0009, application, paragraph 78.

Exhibit 20604-X0009, application, paragraph 78.

⁴³⁵ Decision 3434-D01-2015, paragraph 40.

- 405. In Section 7.1 below, the Commission finds ATCO Gas's 2014 actual WACC of 6.76 per cent to be reasonable for purposes of the accounting test. The Commission also finds ATCO Gas's forecast WACC rates of 6.56 per cent and 6.48 per cent for 2016 and 2017, respectively, reflecting the 2014 actual debt rate, to be reasonable for purposes of the accounting test, subject to a true-up.
- 406. Therefore, the Commission finds ATCO Gas's 2014 actual WACC rate of 6.76 per cent used in the second component of its accounting test, as well as the approved equity thickness of 38 per cent and the approved ROE of 8.3 per cent from Decision 2191-D01-2015, to be reasonable. The Commission also finds ATCO Gas's forecast WACC rates of 6.56 per cent and 6.148 per cent for 2016 and 2017, respectively, to be reasonable. In future capital tracker true-up applications for 2016 and 2017, these forecast WACC rates will be trued up to the actual cost of debt and the approved ROE and capital structure for 2016 and 2017, which will be determined in a future generic cost of capital (GCOC) proceeding.
- 407. In Decision 3267-D01-2015, the Commission found that ATCO Gas's approach of isolating income tax was acceptable, stating:
 - 602. ... the Commission generally accepts ATCO Gas's approach of isolating the income tax included in the capital tracker accounting test to those income tax items that are directly attributable to capital additions included as part of a capital tracker. The Commission is aware that this may result in the company collecting more income tax-related revenue requirement through the capital tracker mechanism than the company actually paid to the Canada Revenue Agency. However, this situation would arise as a result of deductions and additions for tax purposes that are not related to capital tracker additions.
- 408. In the same decision, the Commission gave directions to ATCO Gas regarding the level of detail in its income tax allocation calculations that is required to assist the Commission and interveners in understanding the inputs and methods used. In this application, ATCO Gas provided a breakdown of its capital tracker income tax calculations into their component parts (return, interest, depreciation, capital cost allowance, capitalized pension, and removal costs). In addition, ATCO Gas provided supporting calculations for any income tax components that were assigned to capital projects or programs using its proposed methodology.
- 409. The Commission is satisfied with the income tax calculations provided by ATCO Gas in its accounting test model and continues to find ATCO Gas's approach acceptable. Accordingly, the Commission will not require ATCO Gas to recalculate the K factor to include the impact of these income tax deductions.
- 410. For the reasons above, the Commission is satisfied that ATCO Gas's accounting test model sufficiently demonstrates that all of the forecast or actual expenditures for a capital project are, or a portion of such a project is, outside the normal course of the company's ongoing operations, as required to satisfy the accounting test component of Criterion 1. The Commission's determinations on whether ATCO Gas's projects or programs proposed for capital tracker treatment in 2014 on an actual basis and in 2016 and 2017 on a forecast basis satisfy both the accounting test and the project assessment components of Criterion 1, are set out in Section 7.3.

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⁴³⁶ Decision 3267-D01-2015, paragraph 601.

7.1 2014 actual and 2016-2017 forecast debt rates used in the accounting test

- 411. As set out in Section 7, and consistent with the directions in Decision 3434-D01-2015, ATCO Gas used the actual 2014 WACC rate of 6.75 per cent, and the approved equity thickness of 38 per cent and ROE of 8.3 per cent from Decision 2191-D01-2015, in the second component of its accounting test for the 2014 true-up.
- 412. For the purposes of the 2016 and 2017 capital tracker forecast, ATCO Gas used the rate that resulted from its most recent debt issuance in 2014 to calculate the forecast WACC rates of 6.56 per cent and 6.48 per cent for 2016 and 2017, respectively.⁴³⁷
- 413. In its application, ATCO Gas confirmed that the assumptions used in forecasting the WACC for the 2016 to 2017 period is consistent with the assumptions approved by the Commission in Decision 3434-D01-2015. The Commission stated the following in paragraph 77 of that decision:
 - 77. The debt forecasts to be used in the second component of the accounting test for 2016 and 2017 should be based on the best information that is known by the companies at the time they make their forecasts, meaning that they should include the impacts of their most recent actual debt and preferred share issuances in developing their forecasts, along with all outstanding historical debt and preferred share issuances, but the companies are not required to forecast the movement of interest rates in the future. For example, if a company knows it will need to issue debt in a forecast year it may forecast the rate for that future debt issuance based on the rate that resulted from the company's most recent debt issuance. The Commission also notes that the cost of debt and preferred shares will ultimately be trued-up to actuals, as discussed further in Section 3.3.
- 414. In response to a CCA IR related to how ATCO Gas secures debt and whether it hedges foreign currency risk or uses interest rate future contracts, ATCO Gas explained that its financing is obtained through its parent company, CU Inc. (a wholly owned subsidiary of Canadian Utilities Limited) in order to achieve "more optimal sizing of public financings" and to "minimize the costs of market access." ATCO Gas's position was that forward curve contracting for debt is speculative because the timing and amount of future capital requirements are subject to change. ATCO Gas indicated that it would consider hedging foreign currency risk in the purchase of goods or services priced in currency other than Canadian dollars.⁴³⁹
- 415. The CCA argued that CU Inc.'s historically passive approach of relying on its size to get a good rate may have been reasonable in the past decades of falling interest rates; however, the CCA indicated that rates are forecast to rise and that, in a rising rate environment, such a passive approach may not secure the lowest rate, based on the best information available. The CCA submitted that the reasons to hedge foreign currency i.e., to protect against a change in exchange rate, should similarly apply to interest rates. 441

Exhibit 20604-X0009, application, paragraph 79.

Exhibit 20604-X0009, application, paragraph 79.

Exhibit 20604-X0035, AG-CCA-2015AUG17-002(a)-(c).

Exhibit 20604-X0140, CCA argument, paragraph 128.

Exhibit 20604-X0140, CCA argument, paragraph 146.

- 416. In the CCA's view, because debt costs are recovered from customers, ATCO Gas should be explicitly required to justify the prudency of its debt issuance. ⁴⁴² The CCA suggested that the prudency test occur on a go-forward basis at the next capital tracker true-up proceeding, and clarified that the test should:
 - ... include a consideration of the forward curve rates available at the time of this proceeding for debt issued at the time when AEL actually issues debt. These rates would be compared to the debt rate which AEL actually incurred in order to determine, in part, whether AG acted prudently.⁴⁴³
- 417. The CCA indicated that it was not proposing any change to paragraph 77 of Decision 3434-D01-2015 or that ATCO Gas change its forecast or accounting test. The CCA, however, recommended that the Commission take into account, at true-up, the forward curve rates that could have been locked in compared to the rates for actual debt issuances. This would assist the Commission in the instance where, "if AG issues debt at significantly higher rates than the current forward curve rate at which it can lock in a debt rate today for issuance in the future, then AG should have to justify why its actions were prudent."
- 418. In its reply argument, ATCO Gas refuted the CCA's characterization that CU Inc. takes a "passive approach" to securing debt, and explained that it continually monitors and assesses the market.⁴⁴⁵
- 419. ATCO Gas argued the following:

ATCO Gas submits that the comparison to a foreign currency hedge and a forward curve is an apples to oranges comparison. With respect to foreign currency exposure, it is company policy to hedge this exposure immediately when the risk is incurred. The risk is not incurred from the mere fact of forecasting that ATCO Gas may have foreign currency exposure in the future. ATCO Gas will hedge only when it actually executes a contract for goods or services. The precise amount and timing of foreign currency amounts are known with certainty. To do otherwise is considered speculative. Other terms and conditions of a debt issue, such as tenor, do not arise in the context of foreign currency hedging to pay for a specific purchase order.⁴⁴⁶

420. In argument the CCA submitted that the compliance filing should be updated to reflect actual 2015 debt rates. 447 ATCO Gas replied that as with any forecast, due to the passage of time, there will be more recent information available. ATCO Gas therefore argued that its debt forecast is reasonable and should be approved as filed. 448

Commission findings

421. The CCA's argument, as it relates to ATCO Gas's forecast cost of the debt component of its WACC, brings forward two issues: (i) whether ATCO Gas's forecast weighted average cost of debt (WACD) of 6.56 per cent and 6.48 per cent, based on its actual 2014 WACD for 2016

Exhibit 20604-X0140, CCA argument, paragraph 150.

Exhibit 20604-X0140, CCA argument, paragraph 150.

Exhibit 20604-X0140, CCA argument, paragraph 124.

Exhibit 20604-X0146, ATCO reply argument, paragraph 175.

Exhibit 20604-X0146, ATCO reply argument, paragraph 189.

Exhibit 20604-X0140, CCA argument, paragraph 117.

Exhibit 20604-X0146, ATCO Gas reply argument, paragraph 169.

and 2017, respectively, is reasonable; and (ii) whether the Commission should use a forward curve debt rate in its assessment of the prudence of the incurred, actual cost of debt.

- In its argument, the CCA recommended that the Commission take into account, at trueup, the forward curve rates that could have been locked in as compared to the actual debt issuance rates. 449 The Commission recognizes that in Decision 3539-D01-2015 450 dealing with EPCOR Distribution & Transmission Inc.'s 2015-2017 transmission facility owner tariff, the Commission accepted the forward curve as a reasonable indicator of interest rates during the test period and directed EPCOR to reflect a forecast cost of debt for 2016 based on the 2016 forward curve cost of debt. 451 However, the Commission is cognizant of the differences in purpose between this decision and Decision 3539-D01-2015. The purpose of Decision 3539-D01-2015 was to set rates for EPCOR on a forecast basis, whereas the purpose of this decision is to establish forecast capital tracker amounts as part of a PBR plan for ATCO Gas. Unlike the approved revenue requirement for EPCOR, the 2016 and 2017 capital tracker forecasts approved in this application are subject to a full true-up proceeding (including cost of debt). In light of these differences, the Commission continues to consider that the debt forecasting methodology approved at paragraph 77 of Decision 3434-D01-2015 should continue to be used in ATCO Gas's capital tracker proceedings.
- 423. On the second issue, the CCA proposed to use the forward curve rates in considering the prudence of the incurred, actual debt rate. However, the CCA did not raise any issues, nor did it provide any evidence, on the available forward curve rates to assess the prudency of ATCO Gas's 2014 actual cost of debt. Rather, the CCA indicated that its proposal would be utilized to consider the prudence of the debt issuance in future capital tracker true-ups. In the Commission's view, the onus remains on the company to demonstrate that its actual debt costs, included in the capital tracker true-up accounting test for each year, are reasonable.
- In Decision 20522-D02-2016, 452 dealing with AltaGas Utilities Inc.'s 2014 capital tracker 424. true-up and 2016-2017 capital tracker forecast application, the Commission made the following determination regarding the review process to establish the reasonableness of a company's actual debt costs included in the capital tracker true-up accounting test:
 - 329. At paragraph 89 of Decision 3434-D01-2015, the Commission determined that "... the embedded debt rate used in the second component of the accounting test in the trueup process should match the rate that appears on the company's Rule 005 filing from the associated year, and if it does not match, the Commission directs the company to provide an explanation of why it does not match, in its capital tracker true-up application." Therefore, the Commission will accept, in the absence of any evidence that the actual incurred cost of debt was not reasonable, the company's embedded debt rate that appears on the company's Rule 005 filing from the associated year for purposes of the second component of the accounting test in the capital tracker true-up process. This approach recognizes the PBR incentives provided in Decision 2012-237, which allow companies to manage their businesses during the PBR term, to be followed by a prudence review upon re-basing or in a future rate application. Accordingly, the prudence of the debt rates

⁴⁴⁹ Exhibit 20604-X0140, CCA argument, paragraph 124.

Decision 3539-D01-2015: EPCOR Distribution & Transmission Inc., 2015-2017 Transmission Facility Owner Tariff, Proceeding 3539, Application 1611027-1, October 21, 2015.

Decision 3539-D01-2015, paragraphs 836-838.

Decision 20522-D02-2016: AltaGas Utilities Inc., 2014 Capital Tracker True-Up and 2016-2017 Capital Tracker Forecast Application, Proceeding 20522, January 21, 2016.

reported in the company's Rule 005 filing during the PBR term will be included in the prudence review at the time of rebasing for purposes of establishing the going-in rates on a go-forward basis for the next generation PBR plan or in a general rate application.⁴⁵³

- 425. Therefore, the Commission will accept, in the absence of any evidence that the actual incurred cost of debt was not reasonable, the company's embedded debt rate that appears on the company's Rule 005 filing from the associated year for purposes of the second component of the accounting test in the capital tracker true-up process. This approach recognizes the PBR incentives provided in Decision 2012-237, which allow companies to manage their businesses during the PBR term, to be followed by a prudence review upon re-basing or in a future rate application. Accordingly, the prudence of the debt rates reported in the company's Rule 005 filing during the PBR term will be included in the prudence review at the time of rebasing for purposes of establishing the going-in rates on a go-forward basis for the next generation PBR plan or in a general rate application.
- 426. Accordingly, consistent with paragraph 329 of Decision 20522-D02-2016 referenced above, and based on the evidence filed in this proceeding, the Commission finds ATCO Gas's 2014 actual WACD of 6.75 per cent to be reasonable for purposes of the second component of the accounting test in the 2014 true-up process. The prudence of this actual debt will be assessed at the time of rebasing for purposes of establishing the going-in rates on a go-forward basis for the next generation PBR plan, or alternately, in a GTA.
- 427. With regard to the CCA's recommendation that ATCO Gas include an update in its compliance filing to reflect the actual 2015 debt rates, the Commission is in agreement with ATCO Gas that under PBR, it does not serve regulatory efficiency to continually update forecasts. Therefore, the Commission finds that no update will be required in the compliance filing, but the rates will be reviewed in the 2015 capital tracker true-up application. Earlier in this section, the Commission indicated that ATCO Gas's debt forecast methodology, which uses the WACD rate reflecting the company's most recent debt issuance as a forecast rate for future debt issuances, is consistent with the preferred method approved in paragraph 77 of Decision 3434-D01-2015 for capital tracker applications.
- 428. Given the Commission's approval of the actual WACD rate of 6.75 per cent for 2014, the Commission also finds ATCO Gas's forecast WACD of 6.56 per cent and 6.48 per cent, based on its actual cost of debt in 2014, for 2016 and 2017, respectively, to be reasonable for purposes of the accounting test. The Commission considers that ATCO Gas's debt forecast methodology, which uses the WACD rate reflecting the company's most recent debt issuance as a forecast rate for future debt issuances, is consistent with the method approved at paragraph 77 of Decision 3434-D01-2015.
- 429. In future capital tracker true-up applications for 2016 and 2017, this forecast WACD will be trued up to the actual cost of debt for 2016 and 2017, as approved by the Commission.

Commission's conclusions on Criterion 1

430. In Section 6 of this decision, based on the project assessment under Criterion 1, the Commission approved the need, scope, level and timing for each projects or programs that ATCO Gas proposed for capital tracker treatment either on an actual basis for 2014 or on a

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Decision 20522-D02-2016, paragraph 329.

forecast basis for 2016 or 2017, with the exception of the forecast costs related to the SMR program for 2017, the Palliser and Bridlewood Gate Station project under the Transmission Driven Capital program, and the Emergency Supply program. The Commission also confirmed the prudence of actual capital additions for the true-up of each of the capital tracker projects or programs in 2014. As well, with the exception of the above noted programs, the Commission determined that ATCO Gas's forecast capital expenditures for the proposed 2016 and 2017 capital tracker projects are generally reasonable, subject to the adjustments and Commission directions applicable to all projects and programs set out in Section 6.2 and 6.3 of this decision.

- 431. In Section 7.1 of this decision, the Commission found the form of ATCO Gas's accounting test model to be reasonable and generally consistent with the accounting test methodology approved in Decision 2013-435.
- 432. Accordingly, although the Commission finds the general form of ATCO Gas's accounting test model to be reasonable and consistent with the methodology approved in Decision 2013-435, the Commission cannot make a determination in this decision as to whether any of ATCO Gas's projects or programs proposed for capital tracker treatment in 2016 and 2017 on a forecast basis satisfies the accounting test requirement of Criterion 1 and, accordingly, whether any of ATCO Gas's projects or programs satisfy Criterion 1 in its entirety.
- 433. The Commission directs ATCO Gas, in its compliance filing to this decision, to revise its accounting test for 2016 and 2017, based on approved final forecast or actual capital additions, the 2016 model assumptions and other directions as set out in this decision. ATCO Gas is further directed to provide a summary table in the compliance filing to this decision, showing for each capital tracker project or program, a comparison of the 2016 and 2017 forecast capital additions applied for in this proceeding and the 2016 and 2017 forecast capital additions, revised in accordance with the directions set out in this decision.

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

- 434. With respect to Criterion 2, the Commission clarified in Decision 2013-435 that in addition to asset replacement projects and projects required by an external party, 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. ⁴⁵⁴ Certain projects for capital tracker treatment that do not fall into any of the growth-related, asset replacement or external party related categories might also satisfy Criterion 2 in certain circumstances as discussed in Section 3.2.4 of Decision 2013-435. ⁴⁵⁵
- 435. As set out in Section 3 of this decision, for the purposes of the true-up of the 2014 capital tracker projects or programs for which the Commission undertook and approved the assessment against the Criterion 2 requirements in Decision 3267-D01-2015, there is no need to undertake a reassessment of the project or program against the Criterion 2 requirements unless the driver for

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⁴⁵⁴ Decision 2013-435, paragraph 309.

⁴⁵⁵ Decision 2013-435, paragraph 314.

the project or program has changed. In its application ATCO Gas confirmed that "all project or program drivers for previously approved trackers have not changed." Accordingly, ATCO Gas did not provide any additional evidence on how the projects or programs included in the 2014 capital tracker true-up satisfy the requirements of Criterion 2.

436. For 2016 and 2017 capital tracker programs that were previously approved by the Commission for capital tracker treatment in Decision 3267-D02-2015, ATCO Gas submitted "the drivers for these approved capital tracker programs have not changed and as such a reassessment under Criterion 2 is not needed." ATCO Gas provided information describing how the new Emergency Supply program proposed for capital tracker treatment in 2016 and 2017 on a forecast basis satisfies the requirements of Criterion 2. With respect to all projects, ATCO Gas provided a table which summarizes the project types in order to meet Criterion 2. The table is reproduced below:

Table 15. Applied-for 2016-2017 capital tracker projects or programs and Criterion 2 requirements

Project name	Criterion 2 project type
Steel Mains Replacement	Asset replacement or refurbishment
Plastic Mains Replacement	Asset replacement or refurbishment
Transmission Driven Capital	Third-party driven
Meter Relocation and Replacement	Asset replacement or refurbishment
Line Heater Reliability	Asset replacement or refurbishment
Cathodic Protection	Asset replacement or refurbishment
Regulating Meter Station Improvements	Asset replacement or refurbishment
Rural Main Replacement and Relocations	Third-party driven/asset replacement or refurbishment/growth
New Urban Service Lines	Growth
Service Line Replacements and Improvements	Asset replacement or refurbishment/third-party driven
Urban Feeder Mains	Growth
New Regulating Meter Stations	Growth
Urban Main Extensions	Growth
Urban Main Improvements	Growth
Urban Main Relocations	Third-party driven
Transportation Equipment	Asset replacement or refurbishment
Meter Set Improvements	Third-party driven/asset replacement or refurbishment
New program	
Emergency Supply	Asset replacement or refurbishment

437. Interveners did not provide evidence or argument on Criterion 2, except for the arguments raised by the UCA regarding the MRRP and the program's continued ability to satisfy the requirements of Criterion 2.The issue has been dealt with in Section 6.2.2.1 on MRRP.

Exhibit 20604-X0009, application, paragraph 123.

Exhibit 20604-X0009, application, paragraph 122.

Commission findings

- 438. Consistent with the determinations in Section 3 of this decision, because the driver or drivers (e.g., replacement of existing assets, external party, growth) for each project or program included in ATCO Gas's 2014 capital tracker true-up have not changed since the Commission undertook and approved the proposed capital tracker projects and programs against the Criterion 2 requirements in Decision 3267-D01-2015, 458 the Commission finds that here is no need to undertake a reassessment of these projects or programs against the Criterion 2 requirements.
- 439. The Commission reminds ATCO Gas that the following direction from Decision 3267-D01-2015 continues to apply for subsequent capital tracker true-up applications:
 - 639. In subsequent capital tracker true-up applications, the Commission directs ATCO Gas to address whether the driver for any of the previously approved forecast projects or programs has changed, so as to warrant a reassessment under Criterion 2. In the event that the driver of the project or program has changed since the forecast project or program was approved, ATCO Gas is directed to identify such projects and programs and to provide evidentiary support that each project or program continues to satisfy the requirements of Criterion 2. 459
- 440. The Commission has reviewed the evidence and the reasons provided by ATCO Gas in support of its applied-for 2016-2017 capital tracker projects and programs, as summarized in Table 15 above. As set out in Section 3 of this decision, for capital tracker projects or programs for which the Commission undertook and approved the assessment against the Criterion 2 requirements in prior capital tracker decisions, there is no need to undertake a reassessment of the project or program against the Criterion 2 requirements unless the driver for the project or program has changed. ATCO Gas confirmed that "all project or program drivers for previously approved trackers have not changed." 460
- 441. With respect to the new Emergency Supply program, the Commission has denied this program for capital tracker treatment in Section 6.3 of this decision. Accordingly, the Commission does not need to assess this project under Criterion 2.

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

- 442. Section 7 of this decision addressed ATCO Gas's accounting test, which determines whether 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. This is established by demonstrating that 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 proposed for capital tracker treatment.
- 443. In accordance with the Commission's determinations in Decision 2013-435, 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, calculated as part of the accounting test, is

Exhibit 20604-X0009, application, paragraph 122.

⁴⁵⁹ Decision 3267-D01-2015, paragraph 639.

⁴⁶⁰ Exhibit 20604-X0009, paragraph 122.

then assessed against the two-tiered materiality test under Criterion 3. The first tier of the materiality threshold, a "four basis point threshold," is applied at a project level, grouped in the manner approved by the Commission. The second tier of the materiality threshold, a "40 basis point threshold," is applied to the aggregate revenue requirement proposed to be recovered by way of all capital trackers. ⁴⁶¹

- 444. In Decision 2013-435, the Commission calculated the four basis point threshold and the 40 basis point threshold based on the dollar value of ATCO Gas's ROE in 2012. The Commission indicated that in subsequent PBR years, the four basis point threshold and the 40 basis point threshold are to be calculated by escalating the 2012 amount by I-X. 462
- 445. For the 2014 capital tracker true-up, ATCO Gas used the 2014 four basis point threshold of \$0.147 million for the north and \$0.121 million for the south and the 2014 40 basis point threshold of \$1.47 million for the north and \$1.21 million for the south. Inflation factors previously approved in Decision 3267-D01-2015, 463 calculated by escalating the 2012 amount by the approved 2013 and 2014 I-X index values. ATCO Gas used these approved materiality threshold values in its 2014 true-up application to demonstrate that the applied-for 2014 capital tracker programs satisfied the requirements of Criterion 3.
- 446. For the 2016 and 2017 capital tracker forecast, ATCO Gas calculated the materiality thresholds following the methodology set out in Decision 2013-435. However, as discussed in Section 7.1, since at the time the application was filed, ATCO Gas did not have the approved I factors for either 2016 or 2017, it used the 2015 I-X index value of 1.49 per cent for 2016 and 2017.
- 447. ATCO Gas calculated the 2016 four basis point threshold of \$0.152 million and \$0.124 million for the north and south respectively by escalating the 2012 amount by the approved I-X index values for 2013, 2014, and 2015, and employed a similar method to the forecast I-X index value for 2016. Similarly, ATCO Gas calculated the 40 basis point threshold to be \$1.52 million and \$1.24 million for the north and south respectively for 2016. Using the same methodology, ATCO Gas calculated the 2017 four basis point threshold to be \$0.154 million and \$0.126 million for the north and south respectively and the 2017 40 basis point threshold to be \$1.54 million and \$1.26 million for the north and south respectively.
- 448. ATCO Gas then assessed each of the capital tracker projects or programs included in the 2016 and 2017 forecast against the four basis point threshold, and the total K factor amount associated with all capital tracker projects or programs in each of 2016 and 2017 against the 40 basis point threshold. ATCO Gas submitted that its proposed capital tracker projects or programs satisfy the materiality test requirement of Criterion 3.465
- 449. No party took issue with ATCO Gas's calculation of its 2016 or 2017 materiality thresholds under Criterion 3.

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⁴⁶¹ Decision 2013-435, paragraphs 382-385.

⁴⁶² Decision 2013-435, paragraphs 378 and 384.

⁴⁶³ Decision 3267-D01-2015, paragraph 651.

Exhibit 20604-X0009, application, paragraph 76.

Exhibit 20604-X0009, application, paragraph 1555.

Commission findings

- 450. For its 2014 true-up calculations, ATCO Gas used the first and second tier materiality thresholds approved in Decision 3267-D01-2015, 466 based on the approved 2013 and 2014 I-X index values. For 2016 and 2017, ATCO Gas calculated the first and second tier materiality thresholds by escalating the respective 2012 values by the approved 2013, 2014, and 2015 I-X indexes, and then used the approved 2015 I-X index value as a placeholder for its 2016 and 2017 I-X index values. As discussed in Section 7.1, given that ATCO Gas did not have an approved I factor for either 2016 or 2017 when it filed the application, it used the approved 2015 I-X index value as a placeholder for 2016 and 2017. The Commission accepts, in principle, the use of this forecasting method given that final approved numbers were not available.
- 451. However, since the filing of the application, the 2016 I-X index of 0.90 per cent was approved by the Commission in Decision 20820-D01-2015. Consistent with the findings in Section 7.1, to minimize future true-ups, the Commission directs ATCO Gas, in its compliance filing to this decision, to use the approved 2016 I-X index value of 0.90 per cent to calculate the first and second tier materiality thresholds for 2016.
- 452. The Commission has reviewed ATCO Gas's calculations, and is generally satisfied that ATCO Gas interpreted and applied the Criterion 3 two-tiered materiality test properly for the purposes of its 2014 true-up and 2016 and 2017 capital tracker forecasts based on the projects and assumptions included in the application. However, as discussed earlier in this section, the two-tiered materiality test under Criterion 3 is applied to 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, calculated as part of the accounting test. In Section 7.3, the Commission directed ATCO Gas, in its compliance filing to this decision, to revise its accounting test based on approved 2016 and 2017 forecast capital additions and changes to the 2016 model assumptions to reflect the approved 2016 I-X index value. Accordingly, because ATCO Gas's accounting test for each of 2016 and 2017 needs to be revised, the Commission cannot determine in this decision whether any of ATCO Gas's projects or programs proposed for capital tracker treatment in 2016 and 2017 on a forecast basis satisfy the materiality test requirement of Criterion 3. In addition, as set out in sections 6.2 and 6.3 of this decision, the Commission directed ATCO Gas, in its compliance filing to this decision, to remove all forecast costs related to the SMR program for 2017, the Palliser and Bridlewood Gate Station project under the Transmission Driven Capital program, and the Emergency Supply program.
- 453. Given these findings, the Commission directs ATCO Gas, in its compliance filing to this decision, to reassess whether its projects or programs proposed for capital tracker treatment in 2016 and 2017 on a forecast basis, satisfy the two-tiered materiality test requirement of Criterion 3. For this reassessment, the Commission directs ATCO Gas to use the approved 2014 threshold amount, as well as revised 2016 threshold amounts, as directed above.

10 2014 true-up and 2016-2017 forecast K factor calculations

454. In Decision 2014-296, the Commission approved a 90 per cent placeholder for ATCO Gas's 2014 capital tracker K factor. In Decision 20385-D01-2015, the Commission approved the

⁴⁶⁷ Decision 2020-D01-2015, paragraph 16.

⁴⁶⁶ Decision 3267-D01-2015, paragraph 647.

2014 forecast K factor of \$13.1 million for the north and \$5.9 million for the south to be recovered from ATCO Gas's customers on an interim basis. As part of the 2014 capital tracker true-up, ATCO Gas calculated its actual 2014 K factor to be \$12.1 million in the north and \$5.2 million in the south, resulting in a proposed 2014 K factor true-up adjustment of \$977,000 for the north and \$645,000 for the south to be refunded to customers, as shown in Table 1 from Section 4 of this decision.

455. In Decision 20820-D01-2015,⁴⁷⁰ the Commission approved a 90 per cent placeholder for ATCO Gas's 2016 capital tracker K factor quantities. This 90 per cent placeholder was based on the proposed 2016 K factor amount under consideration in this application. As summarized in Table 2 from Section 4 of this decision, ATCO Gas calculated the 2016 forecast K factors to be \$28.9 million for the north and \$18.5 for the south and the 2017 forecast K factor to be \$37.2 million and \$26.8 million.⁴⁷¹

Commission findings

456. In Section 6 of this decision, the Commission confirmed the prudence of actual capital additions associated with ATCO Gas's projects or programs included in the 2014 capital tracker true-up. Accordingly, the Commission approves the 2014 K factor adjustment of \$977,000 for the north and \$645,000 for the south for ATCO Gas as final, and in the compliance filing to this decision, directs ATCO Gas to propose how the difference between the 2014 K factor amount included in ATCO Gas's 2014 interim rates application and the approved 2014 K factor true-up adjustment will be refunded to its customers in its rates.

457. With respect to the 2016 and 2017 forecast K factors, the Commission finds that ATCO Gas has used the correct inputs in its calculations. The Commission has also reviewed the K factor calculations and is satisfied that the calculations have generally been performed correctly and in accordance with previous Commission directions. However, as set out in sections 6.2.3.5, 6.2.4 and 6.3.1 of this decision, the Commission directed ATCO Gas, in its compliance filing to this decision, to remove certain or all costs related to the 2017 SMR forecast, the Palliser and Bridlewood Gate Station project under the Transmission Driven Capital program, and the Emergency Supply program, from its K factor calculations. With the exception of these projects, the Commission determined that ATCO Gas's forecast capital expenditures for the proposed 2016 and 2017 capital tracker projects or programs were generally reasonable. In sections 7.3 and 9, the Commission directed ATCO Gas, in its compliance filing to this decision, to revise its accounting test assessment under Criterion 1 and the two-tiered materiality test assessment under Criterion 3 for 2016. Because these revisions will result in changes to the 2016 and 2017 forecast K factor amounts, the Commission cannot approve 2016 or 2017 K factor adjustments for ATCO Gas, on a final basis, in this decision.

458. Nevertheless, the Commission has reviewed ATCO Gas's calculations and finds that ATCO Gas's methodology to determine the 2014 K factor true-up amount and the 2016 and 2017 K factor forecast amounts is generally consistent with the requirements set out in Decision 2012-237 and Decision 2013-435.

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⁴⁶⁸ Decision 20385-D01-2015, paragraph 50.

⁴⁶⁹ Exhibit 20604-X0009, application, Table 50.

decision 20820-D01-2015, paragraph 59.

Exhibit 20604-X0009, application, Table 2.

- 459. Consistent with ATCO Gas's past practices, the Commission considers that ATCO Gas should propose a method to collect the difference between the respective 2016 and 2017 K factor placeholder amounts and the approved 2016 and 2017 K factor forecast amounts in its compliance filing application. The final 2016 and 2017 K factor amounts will be reviewed by the Commission in the compliance filing to this decision.
- 460. In summary, the Commission directs ATCO Gas to update the 2016 forecast amounts of \$28.9 million for the north and \$18.5 million for the south and the 2017 forecast amounts of \$37.2 million for the north and \$26.8 million for the south, in the compliance filing to this decision, to give effect to:
 - The 2016 I-X index and the Q factor, as addressed in the recently released in Decision 20820-D01-2015, and as directed in Section 7.1 of this decision.
 - The revised 2017 SMR approved forecast.
 - The revised 2017 Transmission Driven forecast.
 - The denial of the Emergency Supply program for capital tracker treatment.

11 Compliance with previous Commission directions

- 461. In Decision 3267-D01-2015, the Commission provided a number of directions to ATCO Gas that were applicable to its future capital tracker applications. In Decision 3434-D01-2015, relating to the Commission-initiated review of assumptions used in the accounting test for capital trackers and in Decision 3558-D01-2015, related to Commission-initiated review to consider modifications to the minimum filing requirements for capital tracker applications, the Commission also provided clarifications on the capital tracker mechanism and issued a number of related directions to companies under PBR, including ATCO Gas.
- 462. In the application, ATCO Gas stated that it has addressed the Commission's previous directions and provided explanations to demonstrate its compliance with the Commission's directions from Decision 3267-D01-2015, Decision 3434-D01-2015, Decision 3558-D01-2015 and Decision 2013-435.

Commission findings

- 463. In previous sections of this decision, the Commission dealt with ATCO Gas's compliance with certain directions from Decision 3267-D01-2015, as well as Decision 3434-D01-2015 and Decision 3558-D01-2015.
- 464. Specifically, ATCO Gas provided descriptions of its non-capital tracker projects or programs in Appendix C of the application. In doing so, the Commission has reviewed ATCO Gas's description of the nature, scope and timing of its non-capital tracker projects, which ATCO Gas provided so that parties could gain a better understanding of the proposed groupings of the capital projects and programs for which ATCO Gas is seeking capital tracker treatment, and finds that ATCO Gas has complied with the direction outlined in Decision 3558-D01-2015.
- 465. The Commission also finds that ATCO Gas has complied with the direction in Decision 3558-D01-2015 to provide actual and forecast capital additions for all capital tracker projects and programs along with supporting calculations for allocated costs, as provided in Appendix A of the application. As discussed in Section 6.1.2 of this decision, the Commission found that

ATCO Gas complied with the direction in Decision 3558-D01-2015 to provide a summary of the services provided by or to an affiliate, and the related costs and an explanation of how those amounts were determined, and to describe its formal project management policies and procedures.

- 466. In its application, ATCO Gas also stated that it incorporated the Commission's directions from Decision 3434-D01-2015. The Commission considers that ATCO Gas has complied with the directions in Decision 3434-D01-2015, and the WACC rates utilized in the accounting test are fully discussed in Section 7of this decision.
- 467. As discussed in Section 6.2.2.1, the Commission directed ATCO Gas in Decision 3267-D01-2015 to reconsider the design of its demerit point system and to propose revisions to the demerit point system for the SMR program in the current capital tracker application. These revisions were to include any proposed changes of factors should be eliminated from, or added to, the system and for changes to current weighting for the program. ATCO Gas did not provide any information in this regard in the current application, because it will provide further detail in its 2017 capital tracker true-up application. As such, the Commission considers, and as acknowledged by ATCO Gas, that ATCO Gas is non-compliant with Direction 11 of Decision 3267-D01-2015. ATCO Gas is expected to provide its compliance with the previous Commission directions regarding the demerit point system from Decision 3267-D01-2015, and the further directions in Section 6.2.2.1, in its 2017 capital tracker true-up application.
- 468. As discussed in Section 7.1, the Commission also directed ATCO Gas in Decision 3267-D01-2015 to provide a breakdown of its capital tracker income tax calculations in any future capital tracker application.⁴⁷³ In this direction, ATCO Gas was to include a breakdown of the income tax calculations into their component parts: return, interest, depreciation, capital cost allowance, indirect capital costs, removal costs and capitalized pension costs. ATCO Gas was also directed to provide supporting calculations for any income tax components that were assigned to capital projects or programs using an allocation methodology, and to provide explanations of how the total amounts to be allocated were calculated. Based on Direction 15 of Decision 3267-D01-2015, the Commission finds that ATCO Gas provided sufficient details regarding its income tax calculations and also provided an accounting test model with linked and working formulas.
- 469. The Commission has reviewed ATCO Gas's responses to the directions of the Commission not specifically addressed in the previous sections of this decision. The Commission is generally satisfied that ATCO Gas complied with these directions in the proceeding, with the exception of Direction 11 of Decision 3267-D01-2015. Further detail is provided in Appendix 4 of this decision.

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Decision 3267-D01-2015, paragraph 321.

Decision 3267-D01-2015, paragraph 601.

12 Order

- 470. It is hereby ordered that:
 - (1) ATCO Gas and Pipelines Ltd. is directed to file a compliance filing application in accordance with the directions contained within this decision on or before May 12, 2016.

Dated on April 14, 2016.

Alberta Utilities Commission

(original signed by)

Mark Kolesar Vice-Chair

(original signed by)

Willie Grieve, QC Chair

(original signed by)

Bill Lyttle Commission Member

Appendix 1 – Proceeding participants

Name of organization (abbreviation)
Company name of counsel or representative

ATCO Gas and Pipelines Ltd. (ATCO Gas or AG)
Bennett Jones LLP

AltaLink Management Ltd.

Office of the Utilities Consumer Advocate (UCA)
Brownlee LLP

Consumers Coalition of Alberta (CCA)

The City of Calgary

McLellan Ross Barristers & Solicitors

Alberta Utilities Commission

Commission panel

M. Kolesar, Vice-Chair

W. Grieve, QC, Chair

B. Lyttle, Commission Member

Commission staff

- A. Sabo (Commission counsel)
- J. Graham (Commission counsel)
- B. Whyte
- P. Genderka
- N. Mahbub
- C. Runge
- D. Ryan (Visiting Scholar in Economics)

Appendix 2 – Oral hearing – registered appearances

Name of organization (abbreviation) Name of counsel or representative	Witnesses
ATCO Gas and Pipelines Ltd. (ATCO Gas or AG) L. E. Smith K. Illsey	V. Berger G. Feltham B. Smetaniuk M. Whittall R. Germaine
Consumers' Coalition of Alberta (CCA) J. Wachowich S. Gibbons	
The City of Calgary D. Evanchuk	
Office of the Utilities Consumer Advocate (UCA) T. Marriott A. Preda	R. Bell

Alberta Utilities Commission

Commission panel

M. Kolesar, Vice-Chair

W. Grieve, QC, Chair

B. Lyttle, Commission Member

Commission staff

A. Sabo (Commission counsel)

J. Graham (Commission counsel)

B. Whyte

P. Genderka

N. Mahbub

C. Runge

D. Popowich

D. Ryan (Visiting Scholar in Economics)

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. In Decision 3267-D01-2016, the Commission approved separate project groupings for the Urban Feeder Mains, Urban Main Improvements and Urban Main Relocations programs for the purposes of that decision only. No issues related to these groupings arose in this proceeding. As a result, the Commission accepts the separate project grouping of these three programs for the purposes of this decision. However, the Commission considers that on a go forwards basis further information regarding the grouping in these programs is required as it considers that these programs may not be sufficiently distinct to justify continued separation of each of these programs and resulting groups in future years. Accordingly, ATCO Gas is directed to consider, in its next capital tracker application, the possibility of grouping the Urban Feeder Mains, Urban Main Improvements, and Urban Main Relocations programs into a single grouping. If it remains unwarranted to group these programs into a single grouping, ATCO Gas shall provide its rationale with supporting evidence on why these programs are dissimilar for capital tracker purposes.

 Paragraph 65
- 2. The Commission has reviewed ATCO Gas's project management policies and procedures in light of the Commission's findings in paragraph 661 of Decision 3267-D01-2015. In this application, ATCO Gas provided an explanation of its controls and accountability procedures with respect to project identification, initiation, planning, execution, monitoring and control, and closure of its capital projects, as evidence of whether the scope, level, timing and costs of forecast capital projects are reasonable and the actual costs are prudently incurred. Accordingly, the Commission finds that ATCO Gas has complied with the direction set out at paragraph 661 of Decision 3267-D01-2015. In future capital tracker applications, ATCO Gas is directed to continue providing its formal management policies and procedures and identify any changes from the previous year.

 Paragraph 75
- 3. In response to a Commission IR, ATCO Gas stated that in its view, the new demerit point system does not require approval from the Commission. However, the Commission notes that any changes to the demerit point system, which may alter the forecasts for capital tracker treatment of its SMR program must be tested by the Commission in order for capital tracker programs to be approved. Should ATCO Gas choose to not apply for capital tracker treatment of the SMR program, then such a change would not require Commission approval. Based on ATCO Gas's response to a Commission IR, it is the Commission's understanding that the new demerit point system will be completed prior to June 2016. As such, ATCO Gas is directed to provide details of the new demerit point system, including an example demerit point analysis from the 2017 projects, if such an example is available, at the time of ATCO Gas's 2015 capital tracker true-up application. ATCO Gas is further directed to provide, as part of its 2015 true-up application, its proposed revisions to the demerit point system to account for the previous directions of the Commission in Decision 3267-D01-2015, which stated:

- The Commission accepts ATCO Gas's view that it may not be possible to design a demerit point system that can be used as the sole decision maker in every instance. The Commission considers that the professional judgement of ATCO Gas engineers should continue to play an important role in the assessment of ATCO Gas steel mains. Nevertheless, the Commission considers that using an objective tool, like the demerit point system, to assess the safety and reliability of ATCO Gas's system that is based primarily on the physical attributes of the pipe being considered and the environment in which it is placed, is helpful in assessing the need for pipe replacements. This type of assessment provides the Commission and interveners with evidence to help verify the reasonableness of proposed capital expenditures. Accordingly, the Commission directs ATCO Gas to reconsider the design of its current demerit point system and to propose revisions to the demerit point system for consideration in its next capital tracker application, including providing suggestions for which factors should be eliminated from, or added to, the system and for changes to current weighting. ATCO Gas should provide reasons for all proposed changes to factors and weightings. ATCO Gas should also provide a timeline for the possible implementation of the revised demerit point system.
- 232. ... In its proposed revisions to the demerit point system, the Commission directs ATCO Gas to consider whether the leak frequency data should continue to be included in the demerit point system, in addition to considering it separately when completing an engineering assessment. If it prefers to continue to include the leak frequency data in the demerit point system, ATCO Gas shall provide a full explanation as to its reasons.

Paragraph 168

- 6. ATCO Gas confirmed in the hearing that it routinely records cathodic protection levels on the system and determines the adequacy of the cathodic protection levels by reviewing that history. In its argument, the CCA expressed the view that reviewing the cathodic protection records may be helpful in determining the SMR projects required in a test period. In order to assess the relevance and probative value of these records, ATCO Gas is directed to provide a description and an outline of the information in ATCO Gas's

- cathodic protection records and to comment on the feasibility of providing more detailed information in future capital tracker applications with SMR projects, in the compliance filing to this decision.

 Paragraph 173

- 10. In light of the above considerations, the Commission finds that, for purposes of capital tracker treatment in 2017 on a forecast basis, the scope of the SMR program should be limited to emergency repairs. The Commission directs ATCO Gas, in its compliance filing to this decision, to recalculate the accounting test, the first tier of the materiality test and the K factor amount associated with this program based only on capital additions for the emergency repairs component of the SMR program for 2017. Paragraph 182
- 11. In particular, substituting the Commission-calculated region-specific service densities from Table 12 into the estimated regression equations in Table 14 would likely yield different forecast unit costs. Therefore, these different forecast unit costs, when multiplied by forecast km, and added to emergency replacement costs, will likely yield forecast total costs for the PMR program that differ from those provided in the application and reproduced in Table 13. Accordingly, the Commission directs ATCO Gas in the compliance filing to this decision to re-estimate the two regression equations, provided in Table 10, using only the data points that satisfy the specified criteria outlined by ATCO Gas. ATCO Gas is also directed to explain any discrepancies between the data points used by ATCO Gas in the compliance filing and the data points listed in Appendix

- 12. At this time, no Commission approvals have been requested from ATCO Pipelines for facilities related to the Southwest Calgary Connector project. Accordingly, the Commission directs ATCO Gas to remove the 2017 forecast costs of \$8.3 million for the Palliser and Bridlewood Gate project from the capital tracker forecasts for 2017.

 Paragraph 274

- 15. The Commission is not prepared to approve the forecast capital expenditures for 2016 and 2017 for capital tracker treatment at this time given that the 2015 actual amounts have not yet been tested. ATCO Gas is directed to remove any amounts associated with the Emergency Supply program from the K factor in the compliance filing to this decision.

 Paragraph 384
- 17. The Commission directs ATCO Gas, in its compliance filing to this decision, to revise its accounting test for 2016 and 2017, based on approved final forecast or actual capital additions, the 2016 model assumptions and other directions as set out in this decision. ATCO Gas is further directed to provide a summary table in the compliance filing to this

- decision, showing for each capital tracker project or program, a comparison of the 2016 and 2017 forecast capital additions applied for in this proceeding and the 2016 and 2017 forecast capital additions, revised in accordance with the directions set out in this decision.

 Paragraph 433
- 18. However, since the filing of the application, the 2016 I-X index of 0.90 per cent was approved by the Commission in Decision 20820-D01-2015. Consistent with the findings in Section 7.1, to minimize future true-ups, the Commission directs ATCO Gas, in its compliance filing to this decision, to use the approved 2016 I-X index value of 0.90 per cent to calculate the first and second tier materiality thresholds for 2016. ... Paragraph 451
- 19. Given these findings, the Commission directs ATCO Gas, in its compliance filing to this decision, to reassess whether its projects or programs proposed for capital tracker treatment in 2016 and 2017 on a forecast basis, satisfy the two-tiered materiality test requirement of Criterion 3. For this reassessment, the Commission directs ATCO Gas to use the approved 2014 threshold amount, as well as revised 2016 threshold amounts, as directed above. Paragraph 453
- 21. In summary, the Commission directs ATCO Gas to update the 2016 forecast amounts of \$28.9 million for the north and \$18.5 million for the south and the 2017 forecast amounts of \$37.2 million for the north and \$26.8 million for the south, in the compliance filing to this decision, to give effect to:
 - The 2016 I-X index and the Q factor, as addressed in the recently released in Decision 20820-D01-2015, and as directed in Section 7.1 of this decision.
 - The revised 2017 SMR approved forecast.
 - The revised 2017 Transmission Driven forecast.
 - The denial of the Emergency Supply program for capital tracker treatment.

Paragraph 460

22. (1) ATCO Gas and Pipelines Ltd. is directed to file a compliance filing application in accordance with the directions contained within this decision on or before May 12, 2016.

Paragraph 470

Appendix 4 – Table of compliance with previous Commission directions

(return to text)

Decision reference	Commission direction	ATCO Gas's compliance with this direction and corresponding application reference
Decision 3267-D01-2015,	The Commission directs ATCO Gas to	ATCO Gas complied with this
paragraph 101	group the Bare Main Replacement program and the SMR program and adjust for any changes to the accounting test in a compliance filing.	direction in the compliance filing to Decision 3267-D01-2015 and in the application.
Decision 3267-D01-2015, paragraph 102	The Commission directs ATCO Gas is to consider, in its next capital tracker application, the possibility of grouping all five new metering-related projects and programs into a single grouping, and whether such a grouping is warranted. If it remains unwarranted to group all metering-related costs into a single grouping, ATCO	ATCO Gas provided a full explanation of why the continued grouping of the five programs separately is warranted. Section 2.1.1.2
	Gas shall provide a full explanation.	
Decision 3267-D01-2015, paragraph 104	The Commission directs ATCO to consider, in its next capital tracker application, the possibility of grouping the urban main extensions and new urban service lines into a single grouping. If it remains unwarranted to group these costs into a single grouping, ATCO Gas shall provide a full explanation.	ATCO Gas provided a full explanation of why the continued grouping of the two programs separately is warranted. Section 2.1.1.3
Decision 3267-D01-2015, paragraph 108	The Commission directs ATCO Gas to provide a clear and concise delineation of any changes to, and any reasons for changes to, its groupings in future capital tracker applications. The Commission will be reluctant to authorize any change to groupings proposed by ATCO Gas unless there are significant technological changes or non-management driven reasons for the change. The Commission directed ATCO Gas to include a section in its future capital tracker applications specifically addressing this matter.	ATCO Gas has complied with this direction because it has not changed any of its groupings in the application. Section 2.1.1.4

Decision reference	Commission direction	ATCO Gas's compliance with this direction and corresponding application reference
Decision 3267-D01-2015, paragraph 155	The Commission directs ATCO Gas to include a table in each business case outlining capital expenditures and capital additions.	ATCO Gas has complied with this direction and has included a table in each business case outlining capital expenditures and capital additions. Section 2.1.2.1
Decision 3267-D01-2015, paragraph 192	The Commission directs ATCO Gas to provide a greater level of detail on its actual costs in future capital tracker true-up applications in order for the Commission to be able to assess actual costs and cost variances adequately.	ATCO Gas has complied with this direction by providing a greater level of detail on its actual costs for the SMR program in Section 5 of the application. Section 2.1.2.2
Decision 3267-D01-2015, paragraph 220	The Commission directs ATCO Gas to use this accounting method in a compliance filing, assuming the expenditures would have been incurred evenly over the three years 2015, 2016 and 2017.	That treatment was reflected in the compliance filing to Decision 3267-D01-2015 and has also been incorporated in the application (Appendix A, Schedule A7). Section 2.1.2.3
Decision 3267-D01-2015, paragraph 231	The Commission directs ATCO Gas to reconsider the design of its current demerit point system and to propose revisions to the demerit point system for consideration in its next capital tracker application, including providing suggestions for which factors should be eliminated from, or added to, the system and for changes to current weighting. ATCO Gas should provide reasons for all proposed changes to factors and weightings. ATCO Gas should also provide a timeline for the possible implementation of the revised demerit point system.	ATCO Gas has not complied with this direction because it is currently in the process of reviewing its demerit point model. Beyond the current factors considered, ATCO Gas stated that it will review additional risk factors including, but not limited to pipe size, pipe reparability, security of supply, proximity to buildings, municipal work and factors impacting gas migration in the event of a leak. Any other changes to the weighting of existing factors and those listed above will be determined. ATCO Gas is directed to provide its compliance with this direction in its 2017 true-up application.

Decision reference	Commission direction	ATCO Gas's compliance with this direction and corresponding application reference		
Decision 3267-D01-2015, paragraph 232	The Commission directs ATCO Gas to consider whether the leak frequency data should continue to be included in the demerit point system, in addition to considering it separately when completing an engineering assessment. If it prefers to continue to include the leak frequency data in the demerit point system, ATCO Gas shall provide a full explanation as to its reasons.	ATCO Gas has complied with this direction. It explained that the leak frequency data should continue to be included in the demerit point system as well as in the engineering assessment. There is no double-counting for the leak frequency data in this approach. Section 2.1.3.2		
Decision 3267- D01-2015, paragraph 671	The Commission directs ATCO Gas to include in business cases filed in future capital tracker applications, the types of information and level of detail provided in the rebuttal evidence relating to available O&M options. In the case where an O&M alternative is not reasonable or not possible, ATCO Gas is directed to provide a brief reason why there is no O&M alternative to this program, similar to what it has done in its rebuttal evidence, in this proceeding.	ATCO Gas has complied with this direction. It has included information relating to available operational options, similar to the information provided in its rebuttal evidence (Proceeding 3267) in the business cases included in the application. Section 2.1.3.4		
Decision 3267-D01-2015, paragraph 672	The Commission directs ATCO Gas to provide details of the decision making process resulting in the selection of least cost alternatives and at least two examples at the project-by-project level that contain all alternatives considered by ATCO Gas, for each applied-for capital tracker program.	The Commission has given further direction on this matter in Section 6.2.2.1 of this decision. ATCO Gas has partially complied with this direction. ATCO Gas provided the project alternatives for each applied-for capital tracker can be found in Appendix D of the application. ATCO Gas has not included project examples for SMR, Transmission and Emergency Supply as these programs are project specific and the decision making process is explained in detail in the individual business cases and engineering assessments which are included in the application. Section 2.1.3.5		

Decision reference	Commission direction	ATCO Gas's compliance with this direction and corresponding application reference		
Decision 3267-D01-2015, paragraph 673	The Commission directs ATCO Gas to provide at least two capital alternatives, where possible, for all larger projects and programs, or to explain why only one alternative is available.	ATCO Gas has complied with this direction. In each of the business cases included in Appendix B of the application, In Alternative 1 the O&M alternative was included. Descriptions for projects or program where only one alternative was available were included in the application.		
Decision 3267-D01-2015, paragraph 38	The Commission finds that until ATCO Gas is directed to move to an Alberta-wide rate model with one rate base, it will be required to maintain its current practice of calculating rate base and performing its grouping and accounting test calculations utilizing its separate north and south calculations.	Section 2.1.3.5. ATCO Gas has complied with this direction by maintained the current practice of calculating rate base and performing groupings and the accounting test calculations utilizing separate north and south calculations. Section 2.1.4.1		
Decision 3267-D01-2015, paragraph 147	The Commission directs ATCO to limit the total pool of overheads for each of 2013, 2014 and 2015 to the lower of the amounts in this application or amounts reflecting increases by I-X, for each year, applied to the 2012 total pool of overheads approved in Decision 2011-450 dealing with ATCO Gas's 2012 rates. This recalculated total pool of overheads should then be allocated to ATCO Gas's 2013 actual capital expenditures and 2014-2015 forecast capital expenditures, including capital tracker projects, consistent with the company's capitalization and allocation methodologies.	ATCO Gas complied with this direction in the compliance filing to Decision 3267-D01-2015. ATCO Gas provided detailed descriptions supporting its allocated indirects for 2013-2014 actuals and for its 2016-2017 forecasts in Section 4.2.3 of the application. Section 2.1.4.3		
Decision 3267-D01-2015, paragraph 588	The Commission directs ATCO Gas to incorporate into its compliance filing to this decision all changes to 2013, 2014 and 2015 WACC rates directed by the Commission in Decision 3434-D01-2015, including changes, if any, that result from the Commission's decision in Proceeding 2191.	ATCO Gas has complied with this Direction. In the application, ATCO Gas has incorporated the Commission's directions from Decision 3434-D01-2015. The WACC rates utilized in the accounting test are more fully discussed in Section 3 of the application. Section 2.1.4.5		

Decision reference	Commission direction	ATCO Gas's compliance with this direction and corresponding application reference
Decision 3267-D01-2015, paragraph 601	The Commission directs ATCO to provide supporting calculations for any income tax components that were assigned to capital projects or programs using an allocation methodology, and provide an explanation of how the total amounts to be allocated were calculated.	In the application, ATCO Gas provided similar information supporting the income tax calculation as provided in Proceeding 3267 through information responses and undertakings. This is more fully discussed in Section 3 of the application. In addition, the Commission directed ATCO Gas to adopt the alternative method for allocating capital cost allowances (CCA) to the capital programs consistent with Exhibit 0080.01 of Proceeding 3267. ATCO Gas complied with this direction as demonstrated by the CCA calculations and allocations shown in Appendix A, Schedules A6.1-A6.6 of this application.
Decision 3267-D01-2015, paragraph 639	The Commission directs ATCO Gas to address whether the driver for any of the previously approved forecast projects or programs has changed, so as to warrant a reassessment under Criterion 2. In the event that the driver of the project or program has changed since the forecast project or program was approved, ATCO Gas is directed to identify such projects and programs and to provide evidentiary support that each project or program continues to satisfy the requirements of Criterion 2.	ATCO Gas has complied with this direction. ATCO Gas noted that the drivers of each of the applied for capital tracker programs have not changed and no reassessment under Criterion 2 was required. Section 2.1.4.7

Decision reference	Commission direction	ATCO Gas's compliance with this direction and corresponding application reference
Decision 3558-D01-2015, paragraph 44	The Commission directs the companies in their future capital tracker applications, starting with the 2014 true-up and 2016-2017 forecast capital tracker applications, to provide, in Excel format with linked and working formulas, the actual and forecast capital additions for all projects and programs, including both capital tracker and non-capital tracker capital projects and programs. Companies are also directed to provide supporting calculations for any component of capital additions or capital-related revenue requirement that involves the allocation of an aggregated amount of dollars among projects and programs showing how the allocations were performed, including a breakdown of the amount of depreciation, overheads and income tax allocated to each capital tracker project and program and non-capital tracker project and program reconciled to the total amount of depreciation, overheads and income tax for all projects and programs. The Commission has added this requirement to its revised minimum filing requirements in Appendix 3.	ATCO Gas has complied with this direction by providing linked and working schedules, as well as supporting schedules for the requested information in Appendix A of the application. Section 2.2.1
Decision 3558-D01-2015, paragraph 50	The Commission directs the companies are directed in their future capital tracker applications, starting with the 2014 true-up and 2016-2017 forecast applications, to provide descriptions of the types of capital for non-capital tracker projects or programs. The Commission has added this requirement to its revised minimum filing requirements in Appendix 3.	ATCO Gas has complied with this direction. It provided a description of its non-capital tracker programs in Appendix C of the application. Expenditure information related to these programs was included in Schedule A2 of Appendix A. Section 2.2.2
Decision 3558-D01-2015, paragraph 50	The Commission directs the companies to include in their business cases a summary of the services provided by or to an affiliate, the related costs and an explanation of how those amounts were determined. This requirement has been included in the Commission's revised minimum filing requirements in Appendix 3.	ATCO Gas has complied with this direction. It provided the requested information in Section 4 of the application. ATCO Gas included the requested information under bullet point b) for each Capital Tracker program discussed in Section 4. Section 2.2.3

Appendix 5 – Data used in Commission regressions reported in Table 12

(return to text)

The data listed in this appendix are obtained directly from Exhibit 20604-X0113. A project was chosen for inclusion from Exhibit 20604-X0113 if: (i) it had a service density of at least eight; (ii) included at least 10 services; and (iii) was not listed for either 2013 or 2014 under the heading "Projects not included." The number of services, which is not provided in Exhibit 20604-X0113, was calculated as service density (services per km) multiplied by km.

Project name	Year	Region	km	Service density	Cost per km (\$)	Services
Repl PE 33-51-22-4 Area 20	2013	N	4.1	14.7	255,023.00	60.27
801 - Repl PVC 10-52-23-4	2013	N	2.2	13.4	210,934.00	29.48
801 - Repl PE 12-51-22-4 Area 15	2013	N	5.3	10.3	206,677.00	54.59
801 - Repl TWP 33-52-22-4	2013	N	2.4	8	205,200.00	19.2
801 - Repl PE 11-51-22-4 Area 7	2013	N	3.6	8.2	194,760.00	29.52
G50394 801 - Repl PE 23-51-22-	2014	N	1	29.6	458,153.63	29.6
G50398 801 - Repl PE 27-51-22-	2014	N	1.7	12.1	223,141.63	20.57
G60936 801 - Repl Sherwood Place	2014	N	3.2	19.7	332,007.02	63.04
G60940 801 - Repl Eastern Acres	2014	N	7.9	8.9	155,779.13	70.31
G60941 801 - Repl Daly Drive	2014	N	3.3	8.5	171,754.71	28.05
G61052 831 - Repl Lindbrook Ph	2014	N	2	8	158,899.84	16
G61062 838 - Repl Saddlelake	2014	N	2.1	14	193,811.54	29.4
G62959 801 - Repl PE 33-51-22-04	2014	N	2.7	8.5	248,060.37	22.95
	1					
Shepard RMR Ph. 2 (SW 18-23-28-4)	2013	S	2.1	23.4	323,576.00	49.14
Bearspaw Ph.2 (13-26-3-5)	2013	S	4.7	10.5	207,278.00	49.35
Chestermere Lake Phase 3A (NW36 23-28-W4M)	2013	S	3.4	9.9	145,605.00	33.66
G58162 Rural Mains Replacement	2014	S	2.1	9.8	226,275.42	20.58
G58163 Rural Mains Replace	2014	S	5.8	8.4	171,050.33	48.72
G61195 Calgary West Rural Ph 1	2014	S	2.3	9.6	142,802.94	22.08
G61201 Lloyd Lake SE PMR	2014	S	1.7	9	203,082.94	15.3
G61273 PMR Brooks West Rural P	2014	S	4.6	8.7	135,246.40	40.02
G61335 PMR Chestermere Lake P	2014	S	2.7	8.7	159,761.89	23.49
G61336 PMR Chestermere Lake Ph	2014	S	3.1	11.3	199,042.34	35.03
G61990 Lloyd Lake SE Ph 2 PMR	2014	S	2.3	9.2	145,013.53	21.16