

1 Q. **Depreciation**

2 Exhibit 11, page 13 of 628. The statement “Additionally, detailed asset retirement
3 information (where known) for upcoming retirement projects was incorporated
4 into the data files for the analysis of average service life.” Please confirm that the
5 Alberta Utility Commission in Decision 20272-D01-
6 2016 [http://www.auc.ab.ca/regulatory_documents/ProceedingDocuments/2016/2](http://www.auc.ab.ca/regulatory_documents/ProceedingDocuments/2016/20272-D01-2016.pdf)
7 [0272-D01-2016.pdf](http://www.auc.ab.ca/regulatory_documents/ProceedingDocuments/2016/20272-D01-2016.pdf) specifically denied such use of forecast retirement data “for the
8 data base that subsequently informs the retirement rate or traditional net salvage
9 analysis” (paragraph 390 of the Alberta Decision) after finding that “Gannett
10 Fleming has failed to clearly identify either the prior or continued use of forecast
11 data for the purposes of developing depreciation parameters in past depreciation
12 studies approved by this Commission” (paragraph 383 of the Alberta Decision).
13 Also, please provide a copy of the above noted paragraphs (including for context
14 paragraphs 358-402).

15

16

17 A. This response has been provided by Concentric Advisors.

18

19 Confirmed. Please refer to IC-NLH-23, Attachment 1 for a copy of the requested
20 extract of the AUC Decision 20272-D01-2016.

21

22 The intent of the statement referenced in this question was to provide the context
23 regarding the information provided to Concentric by Hydro which included some
24 asset retirement forecasts. However, the retirement information was not placed
25 into the data files, but rather were used as another information source for average
26 service life analyses purposes in Concentric’s recommendations. This is consistent

1 with the statements of the AUC in paragraph 399 of the attached Decision where
2 the AUC states:

3 *“This is not to say that the Commission opposes or discourages the use*
4 *of general information with respect to a utility’s forecast capital*
5 *programs involving asset retirements and associated costs of*
6 *retirement. On the contrary, information of this type can improve*
7 *management’s knowledge and understanding of upcoming projects or*
8 *programs and related decision making. In addition, sharing this*
9 *information with a utility’s depreciation expert can enhance the*
10 *credibility of depreciation studies completed using such knowledge for*
11 *the purpose of determining recommended depreciation parameters.”*

Decision 20272-D01-2016

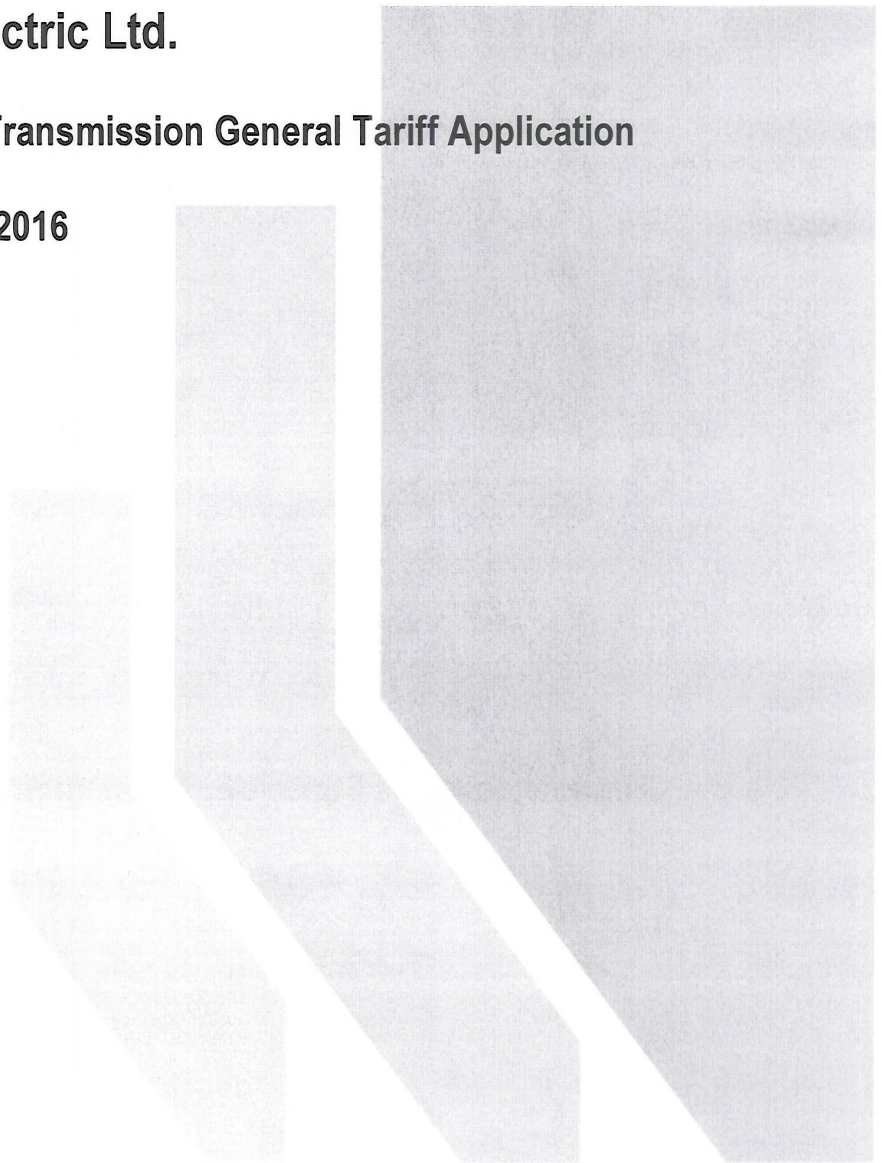
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ATCO Electric Ltd.

2015-2017 Transmission General Tariff Application

August 22, 2016



357. The Commission will advise parties in due course should it determine such a proceeding to be necessary and in the public interest.

8.3.2 Use of forecast data in the determination of service life, Iowa curves and net salvage percentages

358. The Gannett Fleming depreciation study included forecast costs of retirement (where known) for upcoming projects as incorporated within the actuarial data relied on in its traditional net salvage study. Known upcoming retirement forecasts were similarly included in the actuarial data relied on by Mr. Kennedy for the purposes of the retirement rate analysis.²⁵⁹

359. Thus, the inclusion of forecast retirements of plant assets (at original historical cost) in addition to forecast costs of retirement were used to inform the analysis underlying the estimation of the depreciation parameters of service life, Iowa curve and net salvage percentages. This also informed the development of forecast plant balances and corresponding depreciation rates. Mr. Kennedy stated that in doing so, all known impacts of retirements could be considered.

360. The following table illustrates the quantum of forecast retirements and costs of retirement Gannett Fleming has incorporated into its depreciation study for the purposes of estimating both depreciation parameters and depreciation rates.

Table 22. Summary of forecast retirements and costs of retirement used in depreciation study for the purposes of establishing depreciation parameters

Account (USA Account) – description	Forecast retirements 2015-2017	Forecast costs of retirement 2015-2017
		(\$)
451 (USA 350.1) – land rights	343,274	-
453 (USA 355) – poles and fixtures (wooden)	13,140,162	16,303,000
454 (USA 356) – overhead conductors poles (wooden poles)	4,458,130	5,876,000
457 (USA 353) – substation equipment - AC	18,000,216	23,021,000
Total used to establish depreciation parameters (X0621)	34,941,782	45,200,000

Source: Exhibit 20272-X0621, AET-AUC-2015OCT16-016, PDF page 4 of 776.

361. When asked in an IR if including forecast retirements and costs of retirement in data supporting depreciation parameter analysis constituted a departure from depreciation methodologies previously approved for use by ATCO Electric, Mr. Kennedy responded that including forecast information is not a change in depreciation methodology used by Gannett Fleming for ATCO Electric. In past depreciation studies, forecast additions were used by ATCO Electric to allow for better matching of forecast to actual depreciation expense.²⁶⁰

362. Gannett Fleming clarified its use of forecast capital additions in ATCO Electric depreciation studies in the following response to an undertaking:

²⁵⁹ Exhibit 20272-X0621, AET-AUC-2015OCT16-016, Attachment 3, Revised 2014 Depreciation Study, pages I-4, II-3 to II-7, II-11: referencing transmission plant Account 451 (USA 350.1 – land rights, Account 453 (USA 355) – poles and fixtures (wooden poles), Account 454 (USA 356) – overhead conductors poles (wooden poles) and Account 568 (USA 353) – substation equipment – AC.

²⁶⁰ Exhibit 20272-X0437, AET-AUC-2015JUN08-127(a-d), PDF pages 52-55.

In prior depreciation studies, forecast capital additions were not used in the development of depreciation parameters. Forecast capital additions were only used in the calculation of depreciation rates in prior GTAs.²⁶¹

363. During questioning by Commission counsel, Mr. Kennedy agreed that, historically, ATCO Electric had not incorporated forecast plant retirements in determining its depreciation rates. Mr. Kennedy explained that while including retirement data in the calculation of rates is useful, the forecast transaction must be identified by vintage in order to be considered for inclusion. Mr. Kennedy stated that given the high level of retirement activity forecast for the test years, he had recommended that ATCO Electric spend the time and effort to estimate the vintage of the assets forecast to be retired.²⁶²

364. Mr. Kennedy confirmed that the current depreciation study included forecast retirements and costs of retirement in the plant balances used to determine depreciation rates.²⁶³

365. Mr. Kennedy then offered the following qualification. The use of forecast retirements in this application, which he described as a response to an anticipated period of increased retirement activity, may in future revert to the long-standing practice of examining only historical transactions.²⁶⁴

366. Mr. Kennedy stated that he has always recommended including forecast retirement data in depreciation study databases for determining average service life and net salvage estimates. He cited AltaLink Management Ltd.'s three most recent depreciation studies as evidence of his past endorsement of the approach, and noted that these studies had received AUC approval. Further, Mr. Kennedy stated that, for the past 15 years, AltaGas Utilities Inc.'s depreciation studies have included forecast capital programs and retirements that likewise received AUC approval.²⁶⁵

367. When questioned about the consistency of use of forecast capital additions and retirement information, Mr. Kennedy stated that he "...would definitely say the use of the additional -- addition -- capital additions and forecast retirement information for the depreciation rate development is much more common than the inclusion of those -- those transactions in the development of the depreciation parameter, being the average service life."²⁶⁶

368. Mr. Pous opposed using forecast data to determine depreciation parameters. He stated that in addition to issues with forecasting major capital projects and the required support, there was insufficient explanation or justification for how costs should be allocated between removing old plant and installing new replacement plant. Mr. Pous was also of the view that Mr. Kennedy's proposal to include forecast data in the development of depreciation parameters is inconsistent with industry practices and traditional analysis.

369. Mr. Pous stated that he was not aware of any regulatory body that has accepted the inclusion of forecast retirements or costs of retirement with the exception of cases, as noted in a

²⁶¹ Exhibit 20272-X1269, Undertaking 75 at Transcript, Volume 11, page 1954.

²⁶² Transcript, Volume 11, pages 1950-1952 and 1960.

²⁶³ Exhibit 20272-X1298, paragraph 181, PDF page 80.

²⁶⁴ Transcript, Volume 11, pages 1975-1976.

²⁶⁵ Exhibit 20272-X0437, AET-AUC-2015JUN08-127(c)-(e), PDF pages 54-55.

²⁶⁶ Transcript, Volume 11, page 1968.

NARUC publication, relating to interim additions of generation facilities, which often use depreciation methodologies incorporating life span analysis.²⁶⁷

370. With respect to forecast data being used in determining detailed depreciation rates for the years 2015, 2016 and 2017, Mr. Pous stated that doing so creates unnecessary calculations and complexities.²⁶⁸

371. According to Mr. Pous, issues associated with using forecasts to determine depreciation parameters and plant balances used in depreciation rates arise from insufficient certainty regarding the magnitude or the timing of the forecast expenditure. Mr. Pous stated that the information can only be captured with certainty in future depreciation studies after the (forecast) events have actually occurred.²⁶⁹

372. Mr. Pous stated that there was no widespread acceptance of forecasting test period plant balances used in depreciation rates but that it does happen. In his experience, the use of forecast data in the development of depreciation parameters was even less common. Mr. Pous stated that the problem with relying on forecasts is that they cannot be tested, add a layer of unpredictability, and require an understanding that the results will be used to “make a prediction for the future.”²⁷⁰

373. The RPG stated that using forecast costs of retirement for upcoming retirement projects can lead to major distortions in both the retirement rate (service life) and net salvage analysis thereby contributing to incorrect estimates of average service life, Iowa curves and net salvage percentages. The major reason cited for variances between forecast and actual cost components was market conditions related to labour, material and commodity prices and changing project objectives. The RPG was not aware of any precedent for including forecasts of the nature identified by ATCO Electric in its depreciation study.²⁷¹

374. ATCO Electric challenged Mr. Pous’ claim that using forecast retirements is not a normal practice and stated that Mr. Kennedy had specifically pointed out that “this has been an accepted practice in Alberta and was a topic that was specifically reviewed and approved in a recent AltaGas Proceeding.”²⁷²

375. The RPG recommended that the Commission direct ATCO Electric to file a revised depreciation study as part of its compliance filing by removing all forecast retirements from the study and instead providing depreciation information based only on historical information. In its view, the use of forecast retirements is not a normal practice because such forecasts, by their very nature, can alter the proposed depreciation parameter while still being subject to change. The RPG further recommended that the Commission direct ATCO Electric to file its future depreciation studies based only on historical databases.^{273 274}

²⁶⁷ Exhibit 20272-X0912, CCA-AUC-2016FEB01-007(d), PDF pages 9-10.

²⁶⁸ Exhibit 20272-X0912, CCA-AUC-2016FEB01-019, PDF pages 24-25.

²⁶⁹ Transcript, Volume 11, pages 2128-2129.

²⁷⁰ Transcript, Volume 12, pages 2142 and 2145.

²⁷¹ Exhibit 20272-X0811, RPG-AUC-2016FEB01-003, PDF pages 10-12.

²⁷² Exhibit 20272-X1309, paragraph 107, PDF 50.

²⁷³ Exhibit 20272-X1297, RPG argument, paragraph 355, PDF page 116.

²⁷⁴ Exhibit 20272-X1307, RPG reply argument, paragraph 286, PDF page 81.

Commission findings

376. In the Commission's view, there has been a measure of confusion between, and conflation of, the concept of forecasts being used to determine the *depreciation parameters* of average service life, Iowa curve and net salvage percentages, and forecasts being used to determine *depreciation rates*. The evidence put before the Commission has not consistently or clearly delineated between the two.

AltaGas example

377. In considering Mr. Kennedy's evidence with respect to past AltaGas regulatory proceedings, the Commission observes that in Decision 2005-127,²⁷⁵ Directive 28 in respect of AltaGas' 2005-2006 GRA,²⁷⁶ the EUB approved the use of 2005 and 2006 forecast plant balances to determine depreciation rates. In that case, the issue related to AltaGas basing its depreciation rates for the test years on forecast data as opposed to the last historical data year. The decision expressly noted that the historical aged vintage surviving balances had been determined on the basis of a computed mortality calculation, a practice used by AltaGas. AltaGas was directed to justify any future use of forecasts within its depreciation study at its next GRA.²⁷⁷

378. In a March 11, 2011 response to EUB Directive 28, Mr. Kennedy prepared additional evidence titled, "Use of forecast capital activity in the determination of depreciation rates."²⁷⁸ In his evidence in this proceeding, Mr. Kennedy asserted that "the cases described above" provided a precedent for using forecast retirement activity in developing average service life estimates in circumstances of large retirement programs. The Commission observes, however, that Mr. Kennedy provided no specific references to verifiable cases involving the determination of average service lives, only references to the determination of depreciation rates.

379. Mr. Kennedy pointed to forecast capital activity being included in the depreciation rate calculations in AltaGas' negotiated settlement proceedings leading to Decision 2002-027,²⁷⁹ Decision 2004-063²⁸⁰ and Decision 2005-127, and the AltaLink proceeding leading to Decision 2007-019 [-012].²⁸¹

380. With respect to forecasts used for determining depreciation parameters, Mr. Kennedy stated in his response to the directive that the forecast of compression equipment retirement was included in the average service life estimates in an NGTL depreciation study approved in Decision 2004-069.²⁸²

²⁷⁵ Decision 2005-127: AltaGas Utilities Inc., 2005/2006 General Rate Application – Phase I, Application 1378000-1, November 29, 2005.

²⁷⁶ Application 1378000-1, AltaGas Utilities Inc. 2005-2006 GRA.

²⁷⁷ Decision 2005-127, pages 31-32.

²⁷⁸ Proceeding 904, Exhibit 0030.01.AUI-904, AUI 2010-2012 GRA Ph I, Tab 1.0, PDF pages 355-359.

²⁷⁹ AltaGas Utilities Inc. and Bonnyville Gas Company Limited, General Rate Application for Test Years 2000/2001/2002, Application 2000283 (1237650), File 1402-8, April 12, 2002.

²⁸⁰ Decision 2004-063: AltaGas Utilities Inc., 2003/2004 General Rate Application – Phase I, Request for Approval of Negotiated Settlement and Memorandum of Agreement, Application 1305995-1, August 3, 2004.

²⁸¹ The Commission observes that the correct decision reference should have been to Decision 2007-012: AltaLink Management Ltd. / TransAlta Utilities Corporation, 2007/2008 TFO Tariff Application, Application 1456797-1; AltaLink Management Ltd., Settlement of Self Insurance Reserve Account for the Period, May 1, 2004 to December 31, 2005, Application 1468229-1, February 16, 2007.

²⁸² Decision 2004-069: NOVA Gas Transmission Ltd., 2004 General Rate Application, Phase I, Application 1315423-1, August 24, 2004.

381. In evidence filed in Proceeding 904, the AltaGas Utilities Inc. 2010-2012 GRA, Mr. Kennedy summarily stated that “[t]he use of capital addition and retirement forecast[s] has been approved within the depreciation studies for utilities regulated by the AUC for a number of years.”²⁸³

382. Gannett Fleming stated in its subsequent depreciation study for AltaGas’ 2010-2012 GRA, that “[t]he depreciation rates developed in the depreciation study have been based on the forecast average of the plant in service balances over the period of December 31, 2010 through December 31, 2012.”²⁸⁴ And further that “[t]he estimated survivor curves and estimated net salvage per cents used in this report are based on studies incorporating data through 2009 for most accounts.”²⁸⁵

383. In light of the foregoing, the Commission finds that Gannett Fleming has failed to clearly identify either the prior or continued use of forecast data for the purposes of developing depreciation parameters in past depreciation studies approved by this Commission.

AltaLink example

384. When questioned on the nature of the use of forecasts in depreciation studies at the ATCO Electric oral hearing, Mr. Kennedy stated the following with respect to AltaLink:

In the case of AltaLink, AltaLink has always included in – not always -- in the last three cases for AltaLink have included the plant additions and retirements in the aged balance distribution that I used, not necessarily in the average service life estimation phase. We did include net salvage parameters in the life estimates in a case for AltaLink in I think it was 2009 that was allowed by this Commission.²⁸⁶

...

The -- in the cases of AltaLink, they were used in the retirement rate analysis and salvage analysis used in the determination of the depreciation parameters. And I say, there's -- that would be the case for at least the last three AltaLink proceedings.²⁸⁷

385. The Commission finds these statements, on a plain reading, to be contradictory and therefore cannot assign significant weight to the conclusions Mr. Kennedy draws from them.

386. The Commission has examined the most recent AltaLink depreciation study filed in Proceeding 3524 and concludes that AltaLink has not relied on forecast data in the manner depicted by Mr. Kennedy in his ATCO Electric evidence.

387. The Commission observes that AltaLink provided the following response, which was tendered in the oral hearing as an aid to questioning,²⁸⁸ when asked to identify the years or parts of years in which actual, as opposed to forecast data, was used with respect to its depreciation study developing depreciation rates for its test years 2015 and 2016:

²⁸³ Proceeding 904, Exhibit 0030.01.AUI-904, AUI 2010-2012 GRA Ph I, Tab 1.0, PDF page 357.

²⁸⁴ Proceeding 904, Exhibit 0030.01.AUI-904, AUI 2010-2012 GRA Ph I, Tab 1.0, PDF page 356.

²⁸⁵ Proceeding 904, Exhibit 0049.01.AUI-904, AUI 2010-2014 Depreciation study, PDF page 7.

²⁸⁶ Transcript, Volume 11, page 1932.

²⁸⁷ Transcript, Volume 11, page 1933.

²⁸⁸ Exhibit 20272-X1237, AUC aid to questioning 10 – depreciation.

Actual addition, retirement and net salvage data was used for vintage years 1941 through 2013 for the purposes of developing the average service life and net salvage estimates. However, forecasted additions and retirements were used for study years 2014 through 2016 which were used only in the calculation of the depreciation rates. Forecasted cost of removal and gross salvage were used for 2014.²⁸⁹

388. The Commission finds that the above-referenced statement does not support Mr. Kennedy's written and oral testimony in this proceeding concerning the use of forecast data for the purposes of developing depreciation parameters.

389. While the Commission agrees that it has approved the use of forecasts in the past, there is no clear evidence provided by parties that this has been allowed or definitively established for any purpose other than the development of depreciation rates as determined within a depreciation study and the course of a GTA.

390. The Commission does not agree that it is, or has been, standard depreciation methodology in this province to develop depreciation parameters on the basis of incorporating forecast retirements or costs of retirement into an actuarial data base that subsequently informs the retirement rate or traditional net salvage analysis.

391. The Commission has summarized at a high level, the evolution of ATCO Electric's 2014-2017 forecast/actual plant additions and retirements, net salvage and adjustments in the following table:

²⁸⁹ Proceeding 3524, AltaLink 2015-2016 TFO GTA, Exhibit 3524-X0039, AML-AUC-2015JAN20-010(a), PDF page 20.

Table 23. Summary of transmission plant additions and retirements, net salvage and adjustments

Exhibit	Date	2014F	2014A	2015F	2015A	2016F	2017F	Total	
(\$ million)									
Transmission plant additions:									
X0004	Mar-15	458.1		2,239.6		278.5	784.2	3,760.5	Schedule 10-2
X0599	Oct-15		451.2	2,139.3		293.2	515.9	3,399.6	Schedule 10-2
X1101	Feb-16		451.2	2,113.2		315.6	317.5	3,197.6	Schedule 10-2
X1264	Mar-16				2,144.0				Undertaking
Transmission plant retirements, net salvage and adjustments:									
X0004	Mar-15	40.1		19.9		15.6	4.2	79.9	Schedule 10-3
X0599	Oct-15		37.2	31.3		35.9	4.3	108.7	Schedule 10-3
X1101	Feb-16		37.2	31.3		35.9	4.3	108.7	Schedule 10-3
X1263	Mar-16				27.8				Undertaking
Transmission plant retirements, net salvage and adjustments used in retirement rate analysis* and/or net salvage study:									
X0621	Oct-15							80.1	PDF page 4

*In Exhibit 20272-X1246, Undertaking 79, Transcript, Volume 11, page 2030, Mr. Kennedy confirmed \$18 million in plant retirements were not included in the retirement rate analysis for Account 457 - substation equipment - AC. The \$18 million is included in the \$80.1 million figure shown above.

392. The Commission observes inconsistencies and problems associated with the use of the forecast information, as noted in the following paragraphs.

393. For example, as shown in Table 23 above, there is a disparity in the forecast retirements and net salvage that were used for the purposes of determining revenue requirement in the MFR schedules (\$108.7 million) compared to the forecast retirements and net salvage (\$80.1 million) used in the depreciation study.

394. Further, in response to an undertaking, ATCO Electric confirmed that for Account 457 (USA 353) – transmission – substation equipment – AC, forecast costs of retirement in the amount of \$23 million and the associated retirement in the amount of \$18 million were included in the traditional net salvage analysis, but the retirement in the amount of \$18 million was excluded from the retirement rate analysis.²⁹⁰

395. In another example, in response to an undertaking, ATCO Electric confirmed that for Account 453 (USA 355) – transmission – poles and fixtures (wooden), forecast costs of retirement in the amount of \$16.3 million for the test years were included in the traditional net salvage analysis conducted by Mr. Kennedy, and were subsequently updated to a \$6.2 million forecast cost of retirement for the test years without a corresponding modification to the traditional net salvage analysis or the proposed net salvage parameter of -175.0 per cent.²⁹¹

²⁹⁰ Exhibit 20272-X1246, Undertaking 79, Transcript, Volume 11, page 2030.

²⁹¹ Exhibit 20272-X1262, Undertaking 76, Transcript, Volume 11, page 2018: Comparing Exhibit 20272-X0621, AET-AUC-2015OCT26-015, Attachment 1, page 2 of 2, PDF page 137 with Exhibit 20272-X0623, AET-AUC-2015OCT15-016, Attachment 1, PDF page 4.

396. Additionally, in examining the response to an IR providing a breakdown by account and by year of the forecast retirements, net salvage and adjustments that were included in the depreciation study, it is apparent that the largest impact from these forecasts is experienced in the 2015 and 2016 test years, but for the 2017 test year the forecasts have declined significantly to approximately 6.0 per cent of what had been forecast in the two prior years.²⁹² This can also be observed in Table 23, above.

397. The Commission considers that the above examples illustrate legitimate concerns with respect to the difficulties inherent in forecasting, generally, which are further complicated by the use of this information for the purposes of estimating depreciation parameters. The observed lack of consistency with respect to the data being used for one aspect of the depreciation study (for example, the net salvage analysis) but not another (for example, the retirement rate analysis), is concerning. Furthermore, the forecasts do not appear to reflect long-term trends. Instead, they appear to markedly decline in the 2017 test year. In the Commission's view, this phenomenon raises doubts as to the reasonableness of incorporating short-term trends into depreciation parameters that will remain in place until a new depreciation study is conducted. The Commission considers that the foregoing evidence highlights the difficulties alleged by Mr. Pous and the RPG to be directly associated with the proposal of ATCO Electric and Mr. Kennedy to include forecast information for the purposes of determining depreciation parameters.

398. The Commission also detects an inherent circularity in the proposal to use forecast information in developing depreciation parameters that are to be applied prospectively. The Commission prefers the use of consistent practices that result in stable outcomes based on verifiable events.

399. This is not to say that the Commission opposes or discourages the use of general information with respect to a utility's forecast capital programs involving asset retirements and associated costs of retirement. On the contrary, information of this type can improve management's knowledge and understanding of upcoming projects or programs and related decision making. In addition, sharing this information with a utility's depreciation expert can enhance the credibility of depreciation studies completed using such knowledge for the purpose of determining recommended depreciation parameters.

400. On the basis of the foregoing, the Commission denies ATCO Electric's proposed use of forecast information in its actuarial database for the purpose of developing depreciation parameters and directs ATCO Electric in its next depreciation study to revert to its currently approved methodology which provides for the use of forecast capital additions solely for the purpose of determining depreciation rates.

401. Having made this finding, and with respect to the four accounts affected by the above direction, the Commission, in subsequent sections of this decision, will evaluate the depreciation parameter proposals for the accounts in question, on the basis of other evidence provided by ATCO Electric and the intervening parties.

402. For the purposes of calculating its depreciation rates for the test years, ATCO Electric is directed in its compliance filing to this decision, to incorporate the capital additions approved

²⁹² Exhibit 202725-X0623, AET-AUC-2016OCT16-015, Attachment 1, PDF pages 136-137. Calculated from information on line numbers 12 and 44 as $(\$4.3 / (\$31.3 + \$35.9))$.