Alberta Electric System Operator
2017-2018 Deferral Account Reconciliation Application

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Alberta Electric System Operator

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Contents

Appendices

Tables

1 Introduction

1 Pursuant to sections 30 and 119 of the *Electric Utilities Act*, S.A. 2003, c. E-5.1 ("Act"), the Alberta Electric System Operator ("AESO") applies to the Alberta Utilities Commission ("Commission") for approval of its determination of deferral account balances for 2017 and 2018; and of changes to deferral account balances for 2016, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006.

2 This application seeks approval of the reconciled variances arising between the actual costs the AESO has incurred in providing system access service and the actual revenue recovered through base Rate DTS, *Demand Transmission Service* ("base rate") revenue; tariff revenue offsets;[1] and revenue recovered through prior deferral account reconciliations. The application also seeks approval of the allocation, collection, and refund of deferral account balances to market participants who received system access service under Rate DTS, *Demand Transmission Service* ("Rate DTS"), or Rate FTS, *Fort Nelson Demand Transmission Service* ("Rate FTS") of the Independent System Operator ("ISO") tariff during 2006 to 2018.

3 The balances included in this application result in a $154.1 million net deferral account shortfall after applying charges and refunds resulting from Rider C, *Deferral Account Adjustment Rider* ("Rider C") of the ISO tariff as well as any prior deferral account reconciliation settlements. The $154.1 million net shortfall is summarized in Table 1-1 below.

Table 1-1 Annual Deferral Account Balances Summary

Production Year	***(Shortfall) Surplus Amount (000 000)***	***Reconciliation No.***	***Previous Reconciliation***	***Previous Reconciliation Production Year Cut-off Date***	***DAR Methodology (Decision No.)****
2018	($77.0)	1	-	-	22942-D02-2019**
2017	($38.2)	1	-	-	22942-D02-2019**
2016	$3.1	2	2016 DAR	Dec 31, 2017	23802-D02-2018
2015	($12.4)	3	2016 DAR	Dec 31, 2017	21735-D02-2017
2014	($29.2)	4	2016 DAR	Dec 31, 2017	20866-D01-2016
2013	$3.9	4	2016 DAR	Dec 31, 2017	20866-D01-2016
2012	($3.4)	5	2016 DAR	Dec 31, 2017	2014-034
2011	($0.3)	6	2016 DAR	Dec 31, 2017	2013-034
2010	($0.2)	6	2016 DAR	Dec 31, 2017	2013-034
2009	($0.2)	5	2013-2014 DAR	Dec 31, 2014	2011-049
2008	($0.1)	6	2013-2014 DAR	Dec 31, 2014	2009-191
2007	($0.1)	7	2013-2014 DAR	Dec 31, 2014	2009-010
2006	($0.0)	6	2012 DAR	Dec 31, 2012	2009-010
Total	**($154.1)**				

* Decision No. for the methodology approved for the first reconciliation of that production year.

** The methodology used to prepare this 2017-2018 DAR application was approved on an interim basis in Decision 22942-D01-2017, 2018 ISO Tariff, issued November 28, 2017, at paragraph 12. The methodology was approved on a final basis in Decision 22942-D02-2019, 2018 ISO Tariff, issued September 22, 2019, at paragraph 279.

[1] "Tariff revenue offsets" comprise revenue collected or refunded other than through base Rate DTS, where such revenue relates to system access services provided under the ISO tariff. Additional detail is provided in Appendix D-4.

4 This application includes certain significant amounts that were accounted for on or after January 1, 2018 and up to the cut-off date of December 31, 2018,[2] and attributed to periods prior to the end of 2018 under the production month presentation used in this application. These significant prior-period adjustments include (but are not limited to) the following:

(a) a $70.0 million increase attributed to wires costs for the years 2017 and 2018 resulting from the final approval of ATCO Electric Ltd.'s ("ATCO Electric's") 2015-2017 general tariff application in Decision 22860-D01-2017 on November 21, 2017 and the revised filing of ATCO Electric's 2018-2019 general tariff application on September 4, 2018;

(b) a $39.7 million increase attributed to wires costs for 2014 and 2015 resulting from the filing of AltaLink Management Ltd.'s ("AltaLink's") 2014-2015 deferral account reconciliation application on February 15, 2019;

(c) a $33.4 million increase attributed to a refund through Rider C, in 2017 relating to an under forecast of wires costs relating to AltaLink's 2017-2018 transmission general tariff compliance application in Decision 23074-D01-2017 on November 2, 2017; and

(d) a $3.1 million increase attributed to tariff revenue offsets for the period 2006 to 2017 as a result of a billing error correction relating to a market participant eligible for Rate PSC, *Primary Service Credit* ("Rate PSC") but not credited with Rate PSC between 2006 and 2017. The error was identified in October 2017 and the amounts were refunded to the market participant in March 2018.

5 This application also seeks approval to collect and refund the market participant amounts included in this application through one-time charges or payments to market participants, as soon as practical on an interim refundable basis. Amounts collected or refunded to market participants on an interim refundable basis will be adjusted, if necessary, in accordance with the Commission's final approval.

1.1 Background

6 In accordance with the Act, the AESO provides system access service to market participants, including access to exchange electric energy and ancillary services. Rates charged for system access service provided by the AESO are specified in the ISO tariff approved by the Commission.

7 The ISO tariffs in effect during each of the years from 2006 to 2018 were approved in various decisions and orders of the Commission (or its predecessor, the Alberta Energy and Utilities Board) as follows:

[2] The AltaLink 2014-2015 deferral account reconciliation compliance filing application filed on February 15, 2019 was included in the determination of wires costs that relate to the 2015 and 2014, production years. The applicable Commission Decision 24329-D01-2019 issued on August 23, 2019, was not included in the determination of wires costs as it was issued after the start of the 2017-2018 deferral account reconciliation process in March 2019.

Table 1-2 Summary of ISO Tariff Decisions

Date ISO Tariff Effective	Decision No.	Date Decision Issued
January 1, 2006	Order U2005-464	December 20, 2005
August 1, 2008	Order U2008-217	June 25, 2008
October 1, 2009	Decision 2009-141	September 18, 2009
July 1, 2011	Decision 2011-275	June 24, 2011
October 1, 2013	Decision 2013-325	August 28, 2013
	Decision 2014-242	August 21, 2014
July 1, 2015	Decision 3473-D01-2015	June 17, 2015
April 1, 2016	Decision 21302-D01-2016	March 31, 2016
January 1, 2017	Decision 22093-D01-2016	December 2, 2016
January 1, 2018	Decision 23065-D01-2017	November 28, 2017

8 Deferral accounts are necessary to ensure that, in accordance with section 14 of the Act, the AESO is managed so that, on an annual basis, no profit or loss results from the AESO's operation. Deferral accounts allow the AESO to address differences between actual costs and revenue incurred in providing system access service to market participants, and are specifically provided for in subsections 122(2) and 122(3) of the Act.

9 Each of the ISO tariffs in effect during the years addressed in this application included either or both of:

- Rider B, *Working Capital Deficiency/Surplus Rider*, which was removed from the ISO tariff effective July 1, 2011, to recover unexpected increases in the AESO's working capital deficiency or to refund unexpected surpluses of working capital, and to restore the AESO's working capital deficiency to the AESO's annual average forecast,; and
- Rider C, to recover or refund accumulated deferral account balances and to restore the deferral account balance to zero (0) over the following calendar quarter, or such longer period as determined by the ISO to minimize rate impact.

10 These riders allow the AESO to manage its deferral account balances throughout the year. However, the AESO's deferral accounts are also subject to later reconciliation. Under the deferral account methodology most recently approved by the Commission,[3] the AESO reconciles, on a retrospective basis, the actual costs it has incurred in providing system access service to the revenues recovered relating to provision of that service. For each reconciliation, costs and revenues are attributed to the time period during which system access service was provided, which is referred to as reconciliation on a "production month" basis.

[3] Decision 22942-D02-2019 at paragraph 279.

11 The reconciliation of deferral account balances and the associated allocation of those balances to market participants for the years included in this application have previously been addressed by the Commission in:

Table 1-3 Summary of Deferral Account Reconciliation Decisions

Application	***Decision No.***	***Date Decision Issued***
2004-2007 Deferral Account Reconciliation	Decision 2009-010	January 27, 2009
2008 Deferral Account Reconciliation	Decision 2009-191	October 29, 2009
2009 Deferral Account Reconciliation	Decision 2011-049	February 10, 2011
2010-2011 Deferral Account Reconciliation	Decision 2013-034	February 7, 2013
2012 Deferral Account Reconciliation	Decision 2014-034	February 13, 2014
2013-2014 Deferral Account Reconciliation	Decision 20866-D01-2016	January 14, 2016
2015 Deferral Account Reconciliation	Decision 21735-D02-2017	March 14, 2017
2016 Deferral Account Reconciliation	Decision 23802-D02-2018	November 23, 2018

12 No transactions occurred from January 1, 2018 to December 31, 2018 that related, either in whole or in part, to any year prior to 2006. Accordingly, no deferral account reconciliations or adjustments are included in this application for years prior to 2006.

13 This application provides a first reconciliation of 2018 and 2017 deferral account balances as shown in Table 1-1 above. The deferral account reconciliations for production year 2018 and 2017 have been prepared on a retrospective, annual, and production year basis. This 2017-2018 deferral account reconciliation application relies on the final approval granted by the Commission in Decision 22942-D02-2019[4] to apply the revised deferral account reconciliation methodology for the 2017 and future production years discussed further in Section 2.2 below.

14 This application provides subsequent reconciliations for years 2016 to 2006 deferral account balances as shown in Table 1-1 above. The deferral account reconciliations for years 2016 to 2006 have been prepared on a retrospective, monthly, and production month basis, consistent with the method used in all reconciliations from 2004 to 2016 as reviewed and approved by the Commission.

15 The AESO will continue to use the applicable methodology to reconcile deferral accounts for each production year prior to 2017 as approved by the Commission and described in the deferral account application for the first reconciliation of that production year.

16 The deferral account reconciliation methodology establishes the AESO's process to calculate the balances that are charged or refunded to market participants on a production year or month basis. The deferral account balances sometimes represent a material adjustment to the annual revenue provided by a market participant. More detailed discussion of the annual deferral account balances is provided in the relevant sections of this application

[4] Approved on a final basis in Decision 22942-D02-2019 at paragraph 279.

1.2 Interim Settlement with Market Participants

17 The AESO is requesting that the Commission approve this application on both an interim refundable and final basis. Interim approval is being requested to immediately settle deferral account amounts with market participants. Immediate settlement will allow the AESO to collect from market participants an outstanding deferral account shortfall, or to refund to market participants an outstanding deferral account surplus, to the greatest extent possible without further delay. The Commission has approved[5] the interim settlement of all previously applied-for deferral account balances, with the exception of the 2013-2014 and the 2010-2011 applications.

18 The deferral account balances in this application have been determined based on recorded costs paid and recorded "total revenues" (which comprise base rate revenue and tariff revenue offsets) received by the AESO, and have been reconciled to the AESO's financial statements in the appendices. The AESO considers that the $154.1 million net shortfall balance reconciled in this application represents probable and material amounts for a number of market participants, which is one reason it is appropriate to request interim approval.

19 The allocation of deferral account balances to market participants has been prepared in this application using the methodology as described in the first reconciliation for a production year and using that same methodology for each subsequent reconciliation of that single production year; and the same software program updated annually as in previous deferral account reconciliation applications. The allocations in those applications were approved as filed, and the AESO expects that the allocation in this 2017-2018 application will also be found to be reasonable. Settlement with market participants through interim collection of the deferral account balances should therefore result in rate stability and intergenerational equity, which is another reason it is appropriate to request interim approval.

20 The AESO understands from prior deferral account reconciliation proceedings that it is customary to seek the views of stakeholders on a request for interim approval. If no party opposes interim settlement, the AESO further understands that settlement of the deferral account balances could potentially be approved on an interim, refundable basis without further process. Interim approval is discussed further in Section 10.1 of this application.

[5] For 2016 in Decision 23802-D01-2018, issued on October 2, 2018, for 2015 in Decision 21735-D01-2016, issued on September 29, 2016, for 2012 in Decision 2013-370, issued October 4, 2013, for 2009 in Decision 2010-209, issued May 13, 2010, for 2008 in Decision 2009-074, issued June 3, 2009 and for 2004-2007 in Decision 2009-010, issued January 27, 2009.

1.3 Organization of this Application

This application is organized into the following sections.

1 Introduction — Provides background on the application and specifies the relief requested.

2 Summary of Deferral Account Reconciliation Process — Summarizes the process used to determine deferral account amounts and other considerations affecting the deferral account reconciliation process.

3 2018 Financial Results and Deferral Account Balance — Discusses cost and revenue variances for 2018 and provides the deferral account balances for 2018.

4 2017 Financial Results and Deferral Account Balance — Discusses cost and revenue variances for 2017 and provides the deferral account balances for 2017.

5 2016 Financial Results and Deferral Account Balance — Discusses adjustments to cost and revenue that occurred after the first 2016 deferral account reconciliation and provides the outstanding deferral account balances for 2016.

6 2015 Financial Results and Deferral Account Balance — Discusses adjustments to cost and revenue that occurred after the second 2015 deferral account reconciliation and provides the outstanding deferral account balances for 2015.

7 2014 Financial Results and Deferral Account Balance — Discusses adjustments to cost and revenue that occurred after the third 2014 deferral account reconciliation and provides the outstanding deferral account balances for 2014.

8 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006 Financial Results and Deferral Account Balances — Discusses adjustments to cost and revenue that occurred after previous deferral account reconciliations and provides the outstanding deferral account balances for 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006.

9 Allocation to Market Participants — Discusses the process by which deferral account balances are allocated to market participants.

10 Proposed Method of Refunding and Collecting — Discusses the proposed method of refunding and collecting deferral account amounts.

11 Conclusion

Appendices A through Q of this application provide additional detail in support of the application, including market participant-level allocation of deferral account balances.

1.4 Relief Requested

22 Based on the entirety of the information provided with this application, the AESO requests approval of this application, including:

(a) the deferral account balance reconciliations for the calendar years 2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006 as presented in Sections 3 to 8 of this application;

(b) the methodology of allocating deferral account balances to market participants as presented in Section 2 and Appendices E through H of this application, for purposes of recovering and refunding outstanding variance amounts from and to market participants receiving system access service under Rate DTS or Rate FTS of the ISO tariff;

(c) the collection and refund by the AESO of amounts through the use of a one-time collection and refund option similar to that used for previous years' deferral account balances, as more particularly described in Section 10 of this application;

(d) the collection and refund by the AESO of the market participant amounts included in this application as soon as practical on an interim refundable basis, and with such amounts subject to adjustment in final approvals following a full regulatory review, as described in Section 10 of this application; and

(e) such further and other relief as the Commission deems appropriate.

2 Summary of Deferral Account Reconciliation Process

2.1 Data Included in this Application

23 In addition to amounts settled in prior deferral account reconciliations for 2016, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006, this application incorporates all costs paid and revenue collected by the AESO that:

- have not been settled in prior deferral account reconciliation filings;
- relate to 2018 or prior years for all costs except those related to losses and to provision of a wind forecasting service; and
- were accounted for up to December 31, 2018.[6]

24 This application includes wires costs based on:

- the AESO-forecasted or actual transmission facility owner ("TFO") wires costs according to the method described in the 2010 ISO tariff application and approved in Decision 2011-275 regarding the 2010 ISO tariff compliance filing (the method is further described in Section 2.2.2 of this application); and
- TFO deferral account reconciliation amounts or other adjustments approved by the Commission.

25 This application includes revenue based on Rate DTS and Rate FTS as applied to system access service provided under the ISO tariff and approved in various decisions and orders of the Commission listed in Section 1.1 of this application. As noted in the ISO tariff, Rider C applies only to Rate DTS and Rate FTS, and accordingly only revenue under those rates is included in a deferral account reconciliation. In addition, certain revenue related to other rates of the ISO tariff are included as tariff revenue offsets in the determination of total recorded revenue. Those tariff revenue offsets are provided in this application as they affect the deferral account balances attributable to Rate DTS and Rate FTS.

26 The ancillary services and the AESO's own administrative costs[7] included in the AESO's revenue requirement are generally those approved by the AESO Board (consisting of the "ISO members" appointed under section 8 of the Act) in accordance with the *Transmission Regulation*. The practice established by the AESO to carry out consultation on ancillary services, losses, and the AESO's own administrative costs is the Budget Review Process. The Budget Review Process is a transparent stakeholder process that provides a prudence review with input from stakeholders. At the conclusion of the Budget Review Process, AESO management proposes a business plan and budget to the AESO Board, including a request for approval of ancillary services costs, losses costs, and own administrative costs.

27 As part of the annual AESO Budget Review Process, AESO management consults with stakeholders in a planning process. Typically, in the third quarter of each year, the AESO reviews the business initiatives that had been advanced during the year and that would form the basis on which the AESO would operate and advance its strategic plan during the following year. After establishing the business initiatives, the AESO assesses the financial resources required to successfully deliver those initiatives.

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[6] As noted, in Footnote 2, one adjustment resulting from the AltaLink 2014-2015 deferral account reconciliation compliance filing application filed on February 15, 2019 was included.
[7] See Section 1(1)(g) of the *Transmission Regulation*.

28 As described in AESO's 2018 comprehensive tariff application,[8] the AESO intends to continue to file ISO tariff update applications in Q3 of each year.[9] In certain years, the AESO Budget Review Process is not completed by Q3 of the year proceeding the tariff year. As a result, the ancillary services and the AESO's own administrative costs included in the AESO's revenue requirement may be based on a preliminary forecast or a Board approved revenue requirement from the previous year. The objective of reducing DAR imbalances by filing early tariff updates is more significantly impacted by wires costs approvals than ancillary services and AESO's own administrative costs as wires costs comprise over 80% of the total Rate DTS revenue requirement and are the more significant contributor to deferral account balances.

29 For production years 2018 and 2017, the 2018 ISO tariff update and the 2017 ISO tariff update were filed with ancillary services costs and AESO's own administrative costs forecasts based on either initial proposed amounts (for 2018) or based on a previous year Board approved amounts (for 2017).

30 The AESO notes that Rider C revenue attributed to a specific year includes amounts collected or refunded during the calendar year. The AESO has prepared this 2017-2018 reconciliation after final settlement of 2018 volumes. Any deferral account year-end amounts remaining to be refunded or collected after December 31, 2018 are retained by the AESO for reconciliation in this 2017-2018 deferral account reconciliation application and will not be refunded or collected through Rider C during 2019.

31 This application does not reconcile any amounts with respect to 2005 or any prior year, as there were no costs paid or revenue collected by the AESO with respect to 2005 and prior years on or after January 1, 2018 and up to December 31, 2018.

2.1.1 Significant Variance Thresholds

32 Base rates exclude Rider C, which collects or refunds revenue during the year to align actual revenue with actual costs by rate and rate component. The AESO does not forecast Rider C amounts as part of its ISO tariff applications, and Rider C is therefore not included in this discussion of variances from forecast.

33 Base rate revenue also excludes tariff revenue offsets, consistent with the determination of base rate amounts in ISO tariff applications and ISO tariff updates approved by the Commission.

34 The AESO considers a line item variance to be significant when it exceeds approximately 10% of the general and administrative costs component of the AESO's revenue requirement. A line item variance smaller than the 10% of the general and administrative costs is also considered significant when it is both at least 1% of the general and administrative costs and at least ±10% of the approved line item amount..

35 The AESO considers it reasonable that specific explanations are not required for variances below these significance thresholds. The AESO also considers it reasonable to reduce the significance thresholds for subsequent reconciliations for a production year.

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[8] Exhibit 22942-X0008, para 32.

[9] It should be noted that the AESO intends to file its 2020tariff update application in Q4 2019 to align with the 2020 Budget Review Process (BRP) for proposed 2020 ancillary services and the AESO's own costs amounts. The AESO has historically initiated the BRP with its stakeholders by sending an invitation in August along with the proposed BRP schedule. However, on July 24, 2019, the Government of Alberta announced that Alberta will not transition to a capacity market and will continue with an energy-only market. As a result of this announcement, the AESO is not proceeding further with capacity market implementation activities, and additional time is needed to complete the development of the 2020 BRP.

2.1.2 *Forfeited Refunds of Generating Unit Owner's Contributions*

36 In accordance with section 29 of the *Transmission Regulation*, owners of generating units subject to Rate STS, *Supply Transmission Service*, are required to pay a generating unit owner's contribution in accordance with the ISO tariff. Such a contribution is refundable under section 10 of the ISO tariff, *Generating Unit Owner's Contribution*,[10] over a period of not more than ten (10) years, subject to satisfactory operation of the generating unit determined in accordance with section 505.2 of the ISO rules, *Performance Criteria for Refund of Generating Unit Owner's Contribution*.

37 Generating unit owner's contributions are held and administered by the AESO, reducing the working capital that the AESO would otherwise require and accordingly reducing the interest expense included in the revenue requirement recovered through Rate DTS and Rate FTS. In addition, any generating unit owner's contribution refunds that are forfeited (due to unsatisfactory operation of a generating unit during a year) are recognized as a recorded offset attributable to the connection charge component of Rate DTS and Rate FTS, and reduce the amounts that would otherwise be collected from market participants who receive system access service under those rates.

38 Table 2-1 summarizes the generating unit owner's contributions collected, refunded, and forfeited from 2018 to 2006 inclusive. Refunds of generating unit owner's contributions were first issued by the AESO in 2009, with amounts refunded and forfeited annually since then as provided in Table 2-1. In 2017, $7.7 million of generating unit owner's contributions were refunded and $0.5 million forfeited. In 2018, $8.6 million were refunded and $0.6 million were forfeited. Since 2006, about 5% of the refunds that would otherwise have occurred during a year have been forfeited due to unsatisfactory operation of a generating unit.

Table 2-1 Continuity of Generating Unit Owner's Contributions, $ 000 000

Line No.	*Description*	*Year(s) 2018*	*2017*	*2016 to 2006*	*Totals 2018 to 2006*
1	Contributions, Opening Balance	$52.5	$60.6	-	-
2	Additional Contributions During Year	5.2	0.2	80.3	85.7
3	Contribution Refunds During Year				
4	Refunds to Generating Unit Owners	(8.6)	(7.7)	(18.8)	(35.1)
5	Forfeited Refunds	(0.6)	(0.5)	(0.9)	(2.0)
6	Total Contribution Refunds During Year	(9.2)	(8.3)	(19.7)	(37.2)
7	**Contributions, Closing Balance**	**$48.5**	**$52.5**	**$60.6**	**$48.5**

Note: Numbers may not add due to rounding

2.1.3 *Adjustments Not Included*

39 Effective January 1, 2006, transmission system losses are no longer subject to retrospective deferral account reconciliation. The AESO has therefore not included reconciliation of losses amounts for the deferral account years in this application.

[10] 2017 ISO tariff and 2018 ISO tariff.

40 Rider J, *Wind Forecasting Service Cost Recovery Rider*, recovers from wind-powered generating units the costs paid by the AESO for provision of a wind forecasting service.[11] Rider J has been and will continue to be adjusted to recover actual costs of the wind forecasting service on a prospective basis. Costs paid by the AESO in 2016 related to the wind forecasting service are being recovered by the AESO through Rider J and are not subject to retrospective deferral account reconciliation. The AESO has not included reconciliation of wind forecasting service costs in this application.

41 Any adjustments relating to 2018 or prior years which occurred after December 31, 2018[12] are not included in this application, and will be addressed in a future deferral account reconciliation application.

2.2 Deferral Account Reconciliation Methodology

42 The AESO is not proposing any changes to the deferral account reconciliation methodology or Rider C in this application. The AESO notes that in Decision 2014-242 the Commission directed the AESO to discuss and report on matters of annual tariff updates, deferral account reconciliation processes, and Rider C design in its next comprehensive tariff application.[13]

43 As well, the AESO notes that in Decision 21735-D02-2017 the Commission provided the following further direction:

> *Nonetheless, the Commission expects the AESO to follow through on its commitment to further consult with stakeholders on this issue and directs the AESO to address whether changes to the deferral account allocation methodology and to Rider C are warranted given the concerns raised by the PS Group, as part of its next ISO tariff application.*[14]

44 In the 2018 comprehensive ISO tariff application filed by the AESO on September 14, 2017,[15] the AESO responded to both of these directions, and requested approval on an interim basis of proposed changes to its deferral account reconciliation methodology for production year 2017, and to Rider C and Rate PSC, effective January 1, 2018.[16] In Decision 22942-D01-2017 issued on November 28, 2017, the Commission approved the AESO's interim approval request. In Decision 22942-D02-2019 issued on September 22, 2019, the Commission approved the methodology on a final basis.

45 This 2017-2018 deferral account reconciliation application relies on the approval granted by the Commission in Decision 22942-D02-2019[17] to apply the revised deferral account reconciliation methodology for the 2017 and future production years.

46 The AESO will continue to use the applicable methodology to reconcile deferral accounts for each production year prior to 2017 as approved by the Commission and described in the deferral account application for the first reconciliation of that production year.

2.2.1 Production Month and Year Presentation

47 All costs and revenue included in this application for production years 2006 through to 2016 are presented on a production month basis. For the production years 2006 through to 2016 included in this 2017-2018 deferral account reconciliation application, adjustments to costs or revenue arising after the month to which an initial invoice pertains are attributed back to that original month, with two exceptions.

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[11] Application 1605961, Proceeding 530, Exhibit 0070.00.ISO-530, Application (Revised) at pars 316-322.
[12] As noted, in Footnote 2, one adjustment from 2019 was included.
[13] Decision 2014-242 at para 704.
[14] Decision 21735-D02-2017 at para 108.
[15] Proceeding 22942, Exhibit X0002.01 at para 143, and Exhibit 22942-X0008.
[16] Proceeding 22942, Exhibit X0002.01 at Section 6.1 and Exhibit 22942-X0008.
[17] Decision 22942-D02-2019 issued on September 22, 2019 at paragraph 279.

48 The first exception to the production month presentation of costs concerns the AESO's own administrative costs, which comprise general and administrative costs, other industry costs, and capital costs of the AESO. These costs, by their nature, are not attributable to specific matters of "production" and have simply been attributed to the month in which they occur. In effect, for the AESO's own administrative costs, an accounting month basis is considered to be equivalent to a production month basis. The AESO's own administrative costs account for 5% to 9% of the AESO's annual revenue requirements, and attempts to analyze and attribute such costs to specific production months would be expected to have insignificant effects on the final allocations to market participants.

49 The second exception to the production month presentation of revenue is Rider C amounts, which are treated on an accounting month basis. Rider C amounts charge or refund forecast deferral account balances relating to the quarter in which the rider applies as well as accumulated balances from prior quarters. However, in deferral account reconciliation applications, deferral account balances for each production month are recalculated based on recorded costs and recorded revenue. Shortfalls and surpluses are allocated to market participants, and Rider C amounts are then netted against these shortfalls and surpluses to determine final amounts to be refunded to or collected from each market participant. Because of this recalculation of deferral account allocations, Rider C amounts result in the same net refunds or charges whether treated on a production month or accounting month basis.

50 All costs and revenue included in this application for production years 2017 and 2018 are presented on a production year basis. For these production years, adjustments to costs or revenue arising after the year to which an initial invoice pertains are attributed back to that original year. With the production year basis methodology, all costs and revenues including AESO's own administrative costs and Rider C amounts are consistently applied to production year.

51 Adjustments to costs and revenue also occur after the end of the calendar year to which the costs and revenue relate. Such adjustments arise for a variety of reasons, including:

- metered data adjustments, corrections, or restatements;
- Commission decisions on TFO costs and other matters;
- post-final adjustment mechanism ("PFAM") data restatements;
- vendor invoice corrections;
- revisions to contract terms; and
- revisions to rate calculations or application.

2.2.2 Transmission Facility Owners' Wires Costs Forecasts

52 The forecast of TFOs' wires costs has been calculated in accordance with the following approach, which was described in the 2010 ISO tariff application, approved in Decision 2011-275[18] and used in the calculations of wires costs in this 2017-2018 deferral account reconciliation application:

(a) If a TFO has received final Commission approval for its production year tariff, the AESO includes the approved cost for that TFO tariff.

(b) If a TFO has applied for its production year tariff, the Commission has issued an initial decision on the application, and the TFO has submitted a refiling in compliance with the decision, the AESO includes the TFO tariff costs included in the refiling.

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[18] Decision 2011-275 at para 98.

(c) If a TFO has applied for its production year tariff but the Commission has not yet issued an initial decision on the application or an initial decision has been issued but the TFO has not yet submitted its compliance refiling, the AESO includes the tariff costs most recently approved by the Commission on a final basis for the TFO plus 72% of any increase or decrease included in the TFO's production year tariff application above or below the prior approved costs.

(d) If a TFO has not yet applied for its production year tariff, the AESO includes the TFO tariff costs most recently approved by the Commission on either a final or interim basis.

53 ATCO Electric's TFO tariff costs are offset by payments to the AESO in respect of pool price for electric energy provided to isolated communities in accordance with the *Isolated Generating Units and Customer Choice Regulation*.

54 Similar to how the forecast wires costs includes applied-for and interim application amounts,[19] the AESO incorporates and records these costs as an "accrual".

55 The specific determinations of the forecast wires cost for each TFO are detailed in Appendix D-5, *Wires Forecast Detail (2006 to 2018),* to this application.

2.2.3 Allocation of Deferral Account Balances

56 The variances between costs and base rate revenue included in Table 2-3 affect the deferral account balances to be collected from or refunded to market participants. Base rate revenue results from Rate DTS and Rate FTS that were in place during the deferral account period, by year and month and by rate component.

57 Adjustments to base rate revenue received from individual market participants affects the allocation of the deferral account balances to those market participants, since deferral account balances are allocated based on a market participant's base rate revenue when a deferral account is subject to reconciliation as for all years in this application.

58 The final allocations to individual market participants are therefore dependent on both deferral account balances and base rate revenue for market participants receiving system access service under Rate DTS or Rate FTS. The allocations to individual market participants by year are provided in Appendices E, G, and H of this application.

59 Consistent with treatment in prior years, the deferral account balances for production years 2006 through to 2016 have been allocated to individual market participants based on each market participant's percentage of base rate revenue collected, with one exception described in AESO's 2016 deferral account reconciliation application.[20]

60 As discussed in Section 2.2 above, in its 2018 comprehensive ISO tariff application, the AESO's proposed changes to the terms of Rate PSC to include the application of Rider C were approved on an interim basis, effective January 1, 2018, and on a final basis in Commission Decision 22942-D02-2019 issued on September 22, 2019

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[19] Process described in Section 2.2.2 of this application.
[20] See paragraphs 214 – 216 of AESO's 2016 Deferral Account Reconciliation Application, Proceeding 23802, Exhibit X0002.

61 As a result of the interim approval[21] of the deferral account reconciliation methodology proposed in the 2018 comprehensive ISO tariff application, the deferral account balances for production years 2017 through to 2018 have been allocated to individual market participants based on each market participant's percentage of base rate revenue collected, offset by Rate PSC.

62 After the allocation of deferral account balances is determined by rate and rate component for each market participant, additional revenue already settled through Rider C or in prior deferral account reconciliations with each market participant is subtracted or added by rate and rate component. The remaining balance is the amount of the deferral account charge or refund attributed to the market participant on a production month or production year basis, by rate and rate component.

2.3 Deferral Account Balances

63 Table 2-2 summarizes the deferral account balances and adjustments addressed in this application for deferral account years 2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006.

64 Deferral account shortfalls or surpluses resulting from differences between costs and revenue, before any collections or refunds through Rider C or prior deferral account reconciliations, are shown in Column B in Table 2-2 below.The AESO notes that Rider C revenue attributed to a specific year includes amounts collected or refunded during the calendar year.

65 In each year, the deferral account balances were forecast on a quarterly basis and charged or refunded through Rider C during the relevant year. As well, all years except 2017 and 2018 have been subject to one or more prior deferral account reconciliations, previously filed with and reviewed by the Commission. The initial variances between costs and revenue summarized above have been, in large part, addressed through Rider C and prior deferral account reconciliations, such that the net deferral account balances remaining, which are included in this deferral account reconciliation, are shown in Column D in Table 2-2 below.

[21] On a final basis in Commission Decision 22942-D-02-2019 issued on September 22, 2019.

Table 2-2 *Annual Deferral Account Balances Before and After Rider C and Prior Deferral Account Reconciliations*

Production Year	***(Shortfall) Surplus Amount ($ 000 000) Before Rider C***	***% of Costs***	***(Shortfall) Surplus Amount ($ 000 000) After Rider C and Previous DAR reconciliations***	***% of Costs***
[A]	***[B]***	***[C]***	***[D]***	***[E]***
2018	($80.7)	(3.7%)	($77.0)	(3.6%)
2017	13.7	0.7%	($38.2)	(1.9%)
2016	(107.6)	(5.6%)	$3.1	0.2%
2015	(313.3)	(16.8%)	($12.4)	(0.7%)
2014	(157.8)	(9.7%)	($29.2)	(1.8%)
2013	(121.4)	(8.0%)	$3.9	0.3%
2012	(90.3)	(6.8%)	($3.4)	(0.3%)
2011	(136.8)	(11.3%)	($0.3)	(0.0%)
2010	(107.5)	(12.2%)	($0.2)	(0.0%)
2009	(107.9)	(13.7%)	($0.2)	(0.0%)
2008	(133.2)	(15.3%)	($0.1)	(0.0%)
2007	(50.2)	(6.8%)	($0.1)	(0.0%)
2006	0.1	0.0%	($0.0)	(0.0%)
Total	**($1,392.8)**	**(7.9%)**	**($154.1)**	**(0.9%)**

66 The net impact of the 2018 to 2006 deferral account reconciliations provided in this application is a net shortfall of $154.1 million, as provided in Table 2-2 above.

67 For comparison with Table 2-3, Table 2-4 provides a summary of comparable amounts as included in the most recent, applicable, previous deferral account reconciliation application by year. In addition, Table 2-5 summarizes the differences between Tables 2-3 and 2-4, which reflect the net impact on deferral account balances of all cost and revenue transactions that have not been included in a prior deferral account reconciliation application.

Table 2-3 Summary of 2017-2018 Deferral Account Reconciliation Application, $ 000 000

Component	2018	2017	2016	2015	2014	2013 - 2006	Totals 2018 to 2006
	Deferral Account Reconciliations						
Base Rate Revenue							
Connection	$1,794.9	$1,839.6	$1,722.3	$1,412.2	$1,301.6	$5,097.4	
Operating Reserve	266.3	103.0	84.1	144.1	180.0	1,706.0	
Transmission Constraint Rebalancing	0.0	0.0	0.0	-			
Voltage Control	5.5	4.2	3.4	0.9	1.8	319.9	
Other System Support Services	6.1	6.0	5.6	2.9	2.7	57.7	
Total Base Rate Revenue	**$2,072.9**	**$1,952.8**	**$1,815.5**	**$1,560.0**	**$1,486.1**	**$7,181.0**	**$16,068.3**
Tariff Revenue Offsets	**$11.2**	**$18.5**	**($8.4)**	**($9.8)**	**($10.7)**	**$98.4**	**$99.2**
Costs Paid							
Wires	($1,782.5)	($1,743.7)	($1,721.0)	($1,593.9)	($1,318.3)	($5,205.5)	
Ancillary Services	(277.8)	(115.0)	(93.3)	(171.2)	(213.9)	(2,233.7)	
Other Industry	(15.4)	(14.8)	(14.9)	(14.8)	(15.3)	(100.4)	
General & Administrative	(89.0)	(84.1)	(85.5)	(83.7)	(85.7)	(486.9)	
Total Costs Paid	**($2,164.8)**	**($1,957.6)**	**($1,914.7)**	**($1,863.5)**	**($1,633.3)**	**($8,026.4)**	**($17,560.3)**
Deferral Account							
(Shortfall) Surplus	($80.7)	$13.7	($107.6)	($313.3)	($157.8)	($747.1)	($1,392.8)
Rider C Collection (Refund) n	3.7	(51.9)	(70.1)	220.2	185.5	1,000.3	1,287.7
Prior DAR[1] Collection (Refund)	-	-	180.9	80.7	(56.9)	(253.7)	(49.0)
Net (Shortfall) Surplus	**($77.0)**	**($38.2)**	**$3.1**	**($12.4)**	**($29.2)**	**($0.4)**	**($154.1)**

Note: Numbers may not add due to rounding

[1] DAR means Deferral Account Reconciliation

Table 2-4 Summary of 2016 Deferral Account Reconciliation Application, $ 000 000

Component			Deferral Account Reconciliations				Totals
	2018	2017	2016	2015	2014	2013 - 2010	2018 to 2010
Revenue							
Connection			$1,722.3	$1,412.2	$1,301.6	$3,209.5	
Operating Reserve			84.1	144.1	180.0	1,104.6	
Transmission Constraint Rebalancing			0.0	-			
Voltage Control			3.4	0.9	1.8	117.3	
Other System Support Services			5.6	2.9	2.7	25.6	
Total Revenue			**$1,815.5**	**$1,560.0**	**$1,486.1**	**$4,457.0**	**$9,318.6**
Tariff Revenue Offsets			**($8.1)**	**($9.3)**	**($10.1)**	**$19.5**	**($8.1)**
Costs Paid							
Wires			($1,724.4)	($1,581.9)	($1,289.6)	($3,249.5)	
Ancillary Services			(93.2)	(171.2)	(213.9)	(1,315.0)	
Other Industry			(14.9)	(14.8)	(15.3)	(66.3)	
General & Administrative			(85.5)	(83.7)	(85.7)	(301.7)	
Total Costs Paid			**($1,918.0)**	**($1,851.6)**	**($1,604.6)**	**($4,932.4)**	**($10,306.6)**
Deferral Account							
(Shortfall) Surplus			($110.7)	($300.9)	($128.6)	($455.9)	($996.1)
Rider C (Refund) Collection			(70.1)	220.2	185.5	696.9	1,032.4
Prior DAR[1] Collection (Refund)			-	17.2	29.4	(56.7)	(10.1)
Net (Shortfall) Surplus			**($180.9)**	**($63.5)**	**$86.3**	**$184.2**	**$26.2**

Note: Numbers may not add due to rounding

[1] DAR means Deferral Account Reconciliation

Table 2-5 Summary of 2017-2018 Net Deferral Account Transactions Since Most Recent Previous Deferral Account Reconciliation, $ 000 000

			Deferral Account Reconciliation				Totals
Component	**2018**	**2017**	**2016**	**2015**	**2014**	**2013 - 2006**	**2018 to 2006**
Base Rate Revenue							
Connection	$1,794.9	$1,839.6	$0.0	$0.0	-	$0.0	
Operating Reserve	266.3	103.0	(0.0)	0.0	0.0	(0.0)	
Transmission Constraint Rebalancing	0.0	0.0					
Voltage Control	5.5	4.2	-	-	-	-	
Other System Support Services	6.1	6.0	-	-	-	-	
Total Base Rate Revenue	**$2,072.9**	**$1,952.8**	**($0.0)**	**$0.0**	**$0.0**	**$0.0**	**$4,025.7**
Tariff Revenue Offsets	**$11.2**	**$18.5**	**($0.3)**	**($0.4)**	**($0.5)**	**($1.7)**	**$26.7**
Costs Paid							
Wires	($1,782.5)	($1,743.7)	$3.5	($12.0)	($28.7)	$1.4	
Ancillary Services	(277.8)	(115.0)	(0.1)	-	-	(0.1)	
Other Industry	(15.4)	(14.8)	-	-	-	-	
General & Administrative	(89.0)	(84.1)	-	-	-	-	
Total Costs Paid	**($2,164.8)**	**($1,957.6)**	**$3.4**	**($12.0)**	**($28.7)**	**$1.3**	**($4,158.4)**
Deferral Account							
(Shortfall) Surplus	($80.7)	$13.7	$3.1	($12.4)	($29.2)	($0.4)	($106.0)
Rider C Collection (Refund)	3.7	(51.9)	-	-	-	-	(48.2)
Prior DAR[1] Collection (Refund)	-	-	-	-	-	-	-
Net (Shortfall) Surplus	**($77.0)**	**($38.2)**	**$3.1**	**($12.4)**	**($29.2)**	**($0.4)**	**($154.1)**

Note: Numbers may not add due to rounding

[1] DAR means Deferral Account Reconciliation

2.4 Cost Prudency Considerations

68 The prudency of TFO wires costs is assessed by the Commission as part of its approval of TFO tariff applications and TFO deferral account reconciliation applications. As discussed in Section 2.2.2 of this application, the wires costs included in this application reflect the approach approved by the Commission in Decision 2011-275.

69 The AESO's own administrative costs are approved by the AESO Board (consisting of the "ISO members" appointed under section 8 of the Act) in accordance with the *Transmission Regulation*. Once these costs are approved by the AESO Board, subsection 46(1) of the *Transmission Regulation* provides that the AESO's own administrative costs must be considered by the Commission to be prudent, unless an interested person satisfies the Commission otherwise.

70 Similarly, ancillary services costs and line losses costs are also approved by the AESO Board. However, as stated by the Commission in Decision 2014-242:

> *… there is no equivalent provision to Section 46 (1) of the Transmission Regulation that provides an interested party with the ability to argue the reasonableness of [ancillary service costs and costs for line losses] before the Commission. Instead, Section 20 of the Electric Utilities Act and sections 15, 17, 33 and 34 of the Transmission Regulation authorize and, in some instances, direct the AESO to establish rules related to the calculation and recovery of ancillary service costs and costs for line losses. Consequently, where ISO rules are proposed or created for the calculation and recovery of ancillary service costs or the costs for line losses, the Commission's oversight of these costs is addressed through the objection and complaint provisions found in sections 20 and 25 of the Electric Utilities Act, respectively.*[22]

71 With respect to the AESO's own administrative costs, despite the best efforts of the AESO, budgets and forecast costs occasionally do not fully accommodate the actual costs needed to accomplish the established business priorities and plans of the AESO and to continue to meet the AESO's legislated mandate. AESO management actively manages the organization's financial affairs on a timely basis, including receiving monthly updates of the AESO's financial results and regular updates on corporate goal achievement and key human resource statistics. The monthly financial review includes a comparison of actual costs to budget and forecast amounts, with analysis of material variances for ancillary services costs, losses costs, and the AESO's own administrative costs.

72 The AESO's budget review and approval process, developed in consultation with market participants, includes an agreed-upon practice when estimated costs are expected to exceed budgeted amounts, specifically with respect to own administrative costs. Variances above a specified threshold are first reviewed with market participants prior to presentation to the AESO Board for consideration and approval. A request for additional budget approval may be required to accomplish specific business priorities or to meet the AESO's mandate, and would only be made after consideration has been given to managing the timing or reducing the scope of other business priorities to remain within budget.

73 The AESO considers that the structure and approach described above provides an appropriate and adequate process to establish and manage the AESO's budget.

[22] Decision 2014-242 at para 36.

74 Where significant adjustments to 2016 or prior year costs are included in this deferral account reconciliation, this application and related proceeding are the proper venue for consideration of the prudence of those adjustments to such costs. The AESO notes, however, that the prudence of AESO costs incurred with respect to 2016 and prior years which were already included in the 2016 deferral account reconciliation application was considered in the 2016 deferral account reconciliation application and prior proceedings, and should not be reviewed again.

75 In this current application, the presentation of subsequent (i.e. second, third, fourth, fifth, sixth and seventh) reconciliations for production years already applied for in prior deferral account applications does not imply that all costs relating to those applications are again subject to review. Rather, the subsequent reconciliations are provided to appropriately allocate all costs related to those years to market participants, not to re-examine the prudency of costs which have already been approved.

76 The AESO has accordingly provided schedules and explanations of significant variances by line item for 2017 and 2018 and of significant adjustments to costs for 2016 and prior years where such adjustments have not previously been included in a deferral account reconciliation application, in Sections 3, 4, 5, 6, 7 and 8 of this application.

2.5 Reconciliation to Financial Statements

77 The AESO's audited financial statements present costs and revenue on a financial or accounting year basis rather than on a production month or year basis as discussed in Section 2.2 of this application. The audited financial statements include costs and revenue which were known as of the end of the year. In contrast, deferral account reconciliations in this application include actual and anticipated cost and revenue adjustments which may be settled after the financial statements are audited.

78 Therefore, costs, revenue and deferral account balances included in this application have been reconciled to the costs and revenue reported in the AESO's audited income statements and balance sheets for the years included in this application. The reconciliations are provided in Appendices A and B of this application.

79 The AESO's financial results or annual reports for the years included in the application (which include audited financial statements) are provided in Appendix C.

2.6 Deferral Account Reconciliation Process Controls

80 The AESO's deferral account reconciliation process includes controls to ensure complete and accurate deferral account reconciliations. The controls include:

- input controls such as reconciling data transferred to the deferral reporting system with source data and ensuring all values are assigned to production months; and
- process controls such as reconciling individual report totals to summary reports, testing and verifying the calculations embedded in the deferral reporting system, and reconciling balances to audited financial statements as provided in Appendices A and B.

81 As discussed above, the AESO's deferral account reconciliation process utilizes a software program for the preparation and filing of its deferral account reconciliation applications, including this application. Some of the controls discussed above are integrated into the software program.

82 The AESO modifies and validates the software program used to prepare deferral account reconciliations and allocations for each annual reconciliation.

83 In summary, the AESO has prepared and filed this 2017-2018 deferral account reconciliation in the same manner as its previous applications and accordingly considers that this application continues to reflect the accuracy of the deferral reporting system and related AESO processes.

2.7 Market Participant Confidentiality

84 This application details the allocation of deferral account balances to individual market participants receiving system access service under Rate DTS and Rate FTS of the ISO tariff, which requires the disclosure of base rate revenue received from individual market participants. The application also includes the refunds to and collections from those individual market participants.

85 Regulated distribution utilities will normally include their deferral account refunds and collections in their own distribution tariff applications to the Commission or city councils and thereby make the deferral account amounts public. Those utilities — namely, ATCO Electric, ENMAX Power Corporation (“ENMAX”), EPCOR Distribution & Transmission Inc. (“EPCOR”), FortisAlberta Inc. (“FortisAlberta”), the City of Lethbridge, and the City of Red Deer — are therefore identified by name in the allocation tables in the appendices of this application.

86 The confidentiality of AESO direct-connect Rate DTS and Rate FTS market participants is protected by assigning a number to each AESO direct-connect market participant. The numbers assigned to a specific market participant are not necessarily the same for each deferral account year in this application, and are not necessarily the same as those used in prior applications.

87 After filing this application, the AESO will distribute to each Rate DTS and Rate FTS market participant the applicable numbers for the deferral account reconciliation years included, as discussed in more detail in Section 9.1 of this application.

2.8 Future Deferral Account Reconciliations

88 For future deferral account reconciliations, the AESO expects to:

- continue to use its deferral account reconciliation software;
- prepare the reconciliation applications based on initial settlement volumes and a December 31 data cut-off date;
- exclude year-end balances from the calculation of following-year Rider C amounts; and
- begin preparation of future deferral account reconciliation applications in February of each year.

89 The AESO accordingly includes no proposals for further changes to Rider C or the deferral account reconciliation process in this application

3 2018 Financial Results and Deferral Account Balance

90 The AESO's 2018 costs that are subject to retrospective deferral account reconciliation in this application are those related to wires, ancillary services, and the AESO's own administrative costs (which include other industry costs, general and administrative costs, and capital costs). The AESO's 2018 revenue that is subject to retrospective deferral account reconciliation in this application is related to Rate DTS and Rate FTS.

91 Refer to Appendix Q for a description of the deferral account reconciliation categories as itemized in the annual cost tables in Appendix P.[23]

92 In determining the financial results and deferral account balance for 2018, all cost and revenue transactions that occurred from January 1, 2018, to December 31, 2018 and that relate to 2018 have been included in the reconciliation. These transactions establish the 2018 production year data for deferral account reconciliation purposes in this application. The result of these transactions is shown in Table 2.3 above.

3.1 2018 Cost Variances

93 The AESO's 2018 revenue requirement includes costs either subject to approval by the Commission (for TFOs) or approved by the AESO Board (for ancillary services and the AESO's own administrative costs).

94 The TFO wires costs included in the AESO's 2018 revenue requirement were based on the TFO tariffs approved by the Commission for, or applied for by, each TFO at the time the AESO prepared the 2018 ISO tariff update[24] in late 2017. The Commission approved the 2018 ISO tariff update application in Decision 23065-D01-2017, issued on November 28, 2017, for rates to be effective January 1, 2018. The TFO wires costs reflected the status of each TFO's application for its 2018 tariff in accordance with the approach described above in Section 2.2.2 of this application.

95 Following consultation with stakeholders, AESO management submitted the *AESO 2017-2018 Business Plan and Budget Proposal* to the AESO Board on May 29, 2017. This document detailed the consultation process and proposals for the AESO's business plan and budget as it related to forecast ancillary services costs, forecast losses costs, and the AESO's business priorities and own administrative budget for 2018. The *AESO 2017-2018 Business Plan and Budget Proposal* was also provided to stakeholders and posted on the AESO website and is included as Appendix M in this application.

96 The *AESO Board Decision 2017-2018-BRP-001* dated January 2017[25] approved the 2018 forecast costs for ancillary services, losses, and the AESO's own administrative costs and is included as Appendix N in this application. The 2018 forecast costs approved in *AESO Board Decision 2017-2018-BRP-001* were the amounts included in the 2018 revenue requirement included in AESO's 2018 ISO tariff update[26].

97 After approval of the 2017 ISO tariff update on November 28, 2017, the *AESO Board Decision 2018-BRP-001* dated April 2018[27] approved an additional $4.7 million as the transmission portion for the Capacity Market design and implementation, Renewable Electricity Program, and Critical Infrastructure Protection initiatives and included as Appendix O in this application.

[23] See "3-1a 2018 Costs", "3-1b 2018 Costs", "4-1a 2018 Costs" and "4-1b 2017 Costs" tabs of Appendix P workbook.
[24] Proceeding 23065, Exhibit X0002 – Appendix C, 'C-1 Rev Req', as filed October 27, 2017.
[25] Decision on *AESO 2017-2018 Business Plan and Budget Proposal*.
[26] Proceeding 23065, X0002 – Appendix C, C-1 Rev Req.
[27] Decision on Amended 2018 General and Administrative Budget.

98 Additional information on the AESO's business priorities and own administrative costs budget for 2018 is available on the AESO website at www.aeso.ca by following the path AESO ► About the AESO Business Planning and financial reporting ► Business plan and budget: 2017-2018 and 2018.

99 Table 3-1a of Appendix P presents the AESO's 2018 revenue requirement as amounts included in AESO's 2018 ISO tariff update[28], including amounts that are approved by the Commission (for TFOs) and by the AESO Board (for ancillary services and the AESO's own administrative costs) in *AESO Board Decision 2017-2018-BRP-001* as discussed above.

100 Table 3-1b of Appendix P presents the AESO's 2018 revenue requirement as amounts that are approved by the Commission (for TFOs) and by the AESO Board (for ancillary services and the AESO's own administrative costs) in *AESO Board Decision 2018- BRP-001* as discussed above. Variance explanations between *AESO Board Decision 2017-2018-BRP-001* and *AESO Board Decision 2018-BRP-001* are contained in *AESO Board Decision 2018-BRP-001*. Significant variances between AESO's revenue requirement (including Commission approved amounts for TFOs and final AESO board approved amounts for ancillary services and the AESO's own administrative costs) are explained below in this section of the application,

101 Table 3-1a and Table 3-1b of Appendix P also includes recorded costs as incurred or accrued for 2018, and variances between approved and recorded costs in both dollar amounts and as a percentage of approved costs.

102 Total 2018 recorded costs are $159.8 million (or 8.0%) higher than the total 2018 approved forecast. This significant[29] variance[30] includes 2018 recorded costs being:

- $62.3 million (or 3.6%) higher than the 2018 approved costs for wires; and
- $98.6 million (or 55.0%) higher than the 2018 approved costs for ancillary services.

103 Variances arise due to a number of factors, including TFO tariff applications to the Commission, finalization of TFO wires costs through Commission decisions, variances from forecast of volumes and pool price, changes in AESO schedules and priorities, and generally-expected differences between recorded and forecast costs.

104 Significant variances exceeding thresholds, described above in Section 2.1.1 are shaded in Table 3-1b of Appendix P, with explanations provided by row number in the following discussion.

3.1.1 Wires Costs – Significant Variances

105 The AESO's 2018 wires costs approved forecast is based on the 2018 ISO tariff update application.[31] The specific determinations of the forecast wires cost for each TFO, shown in rows 13-22 of column (a) of Table 3-1b of Appendix P are detailed in Appendix D-5, *Wires Forecast Detail (2006 to 2018),* to this application. Variances result from TFO applications also documented in this file.

Row 14 ATCO Electric

106 The 2018 recorded cost for ATCO Electric wires is $686.5 million, which is $61.1 million (or 9.8%) higher than the 2018 forecast of $625.4 million.

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[28] Proceeding 23065, Exhibit X0002, Tab C-1 Rev Req.
[29] Refer to Table 3-1b of Appendix P for details of the significant thresholds.
[30] More detail can be found in Table 3-1b of Appendix P.
[31] Proceeding 21302, Exhibit 0005, Appendix C– 2016 Rates Calculations, Tab C-1 2016 Updated Forecast Costs.

107 The first reconciliation recorded costs reflect ATCO Electric's revised 2018-2019 general tariff filing on September 4, 2018.

Row 20 TransAlta Corporation

108 The 2018 recorded cost for TransAlta Corporation wires is $6.8 million, which is $1.8 million (or 36.8%) higher than the 2018 forecast of $4.9 million.

109 The first reconciliation recorded costs reflect TransAlta Corporation's 2017-2018 general tariff application filing on September 17, 2018.

Row 27 Location Based Credit Standing Offer ("LBC SO")

110 The 2018 recorded cost for the LBC SO program was $2.7 million, which is $0.8 million (or 22.9%) lower than the 2018 approved forecast of $3.5 million. Annual costs are a combination of payments for availability and activation. In 2018, the units were dispatched less than forecast.

3.1.2 Ancillary Services – Significant Variances

Rows 34 to 37 Active Operating Reserve

111 2018 recorded cost for active reserves was $195.4 million, which is $69.9 million (or 55.7%) higher than the 2018 approved forecast of $125.5 million, and comprise the following amounts:

- For active regulating reserve, the 2018 recorded cost was $56.1 million, which is $18.5 million (or 49.2%) higher than the 2018 approved forecast of $37.6 million.
- For active spinning reserve, the 2018 recorded cost was $80.2 million, which is $24.5 million (or 44.1%) higher than the 2018 approved forecast of $55.7 million.
- For active supplemental reserve, the 2018 recorded cost was $59.1 million, which is $26.9 million (or 83.6%) higher than the 2018 approved forecast of $32.2 million.

112 The 2018 recorded average pool price was $50.34/MWh, which is $7.76/MWh (or 18.2%) higher than the 2018 approved forecast average pool price of $42.58/MWh. The 2018 recorded active operating reserve volumes were 5,803 GWh, which is 356 GWh (or 6.5%) higher than the 2018 approved forecast of 5,447 GWh. Higher costs are mainly attributable to higher pool prices, higher volumes and are also associated with changes to offer behavior.

Rows 39 to 42 Standby Operating Reserve

113 2018 recorded cost for standby reserves was $44.4 million, which is $22.0 million (or 98.1%) higher than the 2018 approved forecast of $22.4 million, and comprise the following amounts:

- For standby regulating reserve, the 2018 recorded cost was $6.2million, which is $1.6 million (or 34.0%) higher than the 2018 approved forecast of $4.6 million.
- For standby spinning reserve, the 2018 recorded cost was $28.3 million, which is $15.3 million (or 118.9%) higher than the 2018 approved forecast of $12.9 million.
- For standby supplemental reserve, the 2018 recorded cost was $10.0 million, which is $5.1 million (or 103.9%) higher than the 2018 approved forecast of $4.9 million.

114 In total, 2018 recorded standby operating reserve volumes were higher than the 2018 approved forecast. Standby premium volumes were 1,971 GWh which is 40 GWh (or 2.1%) higher than the 2018 approved forecast of 1,931 GWh. Standby activation volumes were 345 GWh which is 228 GWh (or 194.9%) higher than the 2018 approved forecast of 117 GWh. Higher costs are mainly attributable to higher pool prices, higher volumes, specifically for volumes of activated standby spinning and supplemental reserves.

Row 44 Trading Fees and Other Related Charges

115 The 2018 recorded cost for trading fees paid to the operating reserve market operator, Alberta Watt Exchange and other related charges was a credit of $3.8 million, which is $2.6 million (or 210.2%) higher than the 2018 approved forecast credit of $1.2 million. The forecast included recoveries related to non-compliance and liquated damages of $2.0 million compared to recorded recoveries of $4.6 million. The recorded trading costs were $0.7 million which are comparable to the forecast.

Rows 48 to 55 Other Ancillary Services

116 The 2018 recorded cost of other ancillary services was $41.8 million, which is $9.2 million (or 28.3%) higher than the 2018 approved forecast of $32.6 million.

117 The 2018 recorded costs for black start was $2.2 million, which is $2.1 million (or 48.6%) lower than the 2018 approved forecast of $4.3 million. Black start costs were lower than forecast in 2018 as additional black start resource services were not procured in 2018 as was initially planned.

118 The 2018 recorded cost for transmission must-run (TMR) was $3.4 million, which is $1.9 million (or 35.5%) lower than the 2018 approved forecast of $5.3 million. The decrease is due to lower conscripted TMR costs than forecast. As these services are required to mitigate the overloading of transmission lines associated with line outages, system conditions in real time or the loss of generation in an area, the number of conscription events and event-related costs are difficult to forecast.

119 The 2018 recorded cost for load shed service for imports (LSSi) was $31.0 million, which is $13.7 million (or 78.9%) higher than the 2018 approved forecast of $17.3 million. LSSi costs are impacted by volume availability, contract prices and requirements for arming and tripping. In 2018, higher LSSi arming costs were incurred to allow for higher import volumes on the Alberta-British Columbia intertie attributable to higher prices in Alberta compared to the Mid-Columbia prices.

3.1.3 Other Industry Costs – Significant Variances

120 The 2018 recorded other industry cost was $15.4 million, which is $0.01 million (or 0.1%) lower than the 2018 approved forecast of $15.5 million.

Row 63 Regulatory Process Costs

121 The 2018 recorded cost of regulatory process costs was $1.6 million, which is $1.2 million (or 257.8%) higher than the 2018 approved forecast of $0.5 million, primarily due to the number of proceedings and related cost awards. The AESO's involvement in regulatory proceedings is not discretionary and the number and complexity of proceedings is difficult to forecast.

3.1.4 General and Administrative Costs – Significant Variances

122 The 2018 recorded general and administrative cost was $89.0 million, which is $1.0 million (or 1.1%) lower than the approved forecast of $90.1 million.

Row 71 Contract Services and Consultants

123 The 2018 recorded cost of contract services and consultants cost was $5.5 million, which is $1.6 million (or 22.2%) lower than the 2018 approved forecast of $7.1 million, primarily due to shifting resources toward the Capacity Market design and implementation; and Renewable Electricity Programs in 2018.

Row 74 Computer and Telecomm Services and Maintenance

124 The 2018 recorded cost of computer and telecomm services and maintenance cost was $7.0 million, which is $1.3 million (or 15.2%) lower than the 2018 approved forecast of $8.3 million due to fewer IT maintenance and managed service costs being allocated to the transmission function than budgeted. This was primarily due to greater resource allocation toward the Capacity Market design and implementation; and Renewable Electricity Programs in 2018.

Row 79 Amortization

125 The 2018 recorded cost of amortization cost was $18.5 million, which is $4.4 million (or 31.4%) higher than the 2018 approved forecast of $14.1 million, primarily due to shifts in the timing and magnitude of projects and the dates they were placed into service.

3.1.5 Capital – Significant Variances

126 Total capital cost recorded in 2018 was $25.3 million, which is $9.1 million (or 26.5%) lower than the 2018 approved forecast of $34.4 million as provided in Table 3-2 of Appendix P. At the end of 2018, capital projects were allocated among AESO business functions on a project-by-project basis, resulting in 65% of the total recorded capital being allocated to transmission and as a result capital costs allocated for the AESO's transmission function were $16.5 million.

127 Although retaining its total capital budget, the AESO's portfolio prioritization process results in project changes during a year. Some projects may be deferred into a future year while others may be advanced into the current year as more detailed understanding of requirements, priorities, and interdependencies is gained as a project progresses.

128 The 2018 recorded cost for other capital initiatives was $6.4 million, which is $1.1 million (or 14.2%) lower than the 2018 approved forecast of $7.5 million, primarily due to fewer funds expended towards the Energy Market Systems ("EMS") upgrade project than forecast.

129 The 2018 recorded cost for life cycle funding was $5.2 million, which is $1.3 million (or 19.9%) lower than the 2018 approved forecast of $6.5 million primarily due to the movement of lifecycle funds to the Market Systems Replacement ("MSR") Phase III project. The remaining work was considered to be lifecycle in nature and the funds were allocated accordingly.

130 The 2018 recorded cost for the MSR Phase III was $1.3 million, which is $1.3 million higher than the 2018 approved forecast of $0.0 million costs originally budgeted as explained above in paragraph 129.

131 The 2018 recorded cost for the System Control Centre ("SCC") Expansion was $8.1 million, which is $7.9 million (or 49.4%) lower than the 2018 approved forecast of $16.0 million due to the timing of a number of planned expenditures for this multi-year program.

3.2 2018 Revenue Variances

132 Table 3-3 of Appendix P presents AESO revenue forecast to be collected from Rate DTS and Rate FTS base rates in effect during 2018. The table also includes recorded revenue as collected through 2018 base rates, as well as variances between forecast and recorded base rate revenue in both dollar amounts and as a percentage of forecast revenue.

133 The base rates which were in effect during the period January 1, 2018 to December 31, 2018 were approved on a final basis in Decision 23065-D01-2017 issued on November 28, 2017. Those rates were based on the AESO's 2018 revenue requirement and 2018 forecast billing determinants for January 1, 2018 to December 31, 2018.

134 To calculate the 2018 forecast base rate revenue presented in Table 3-3 of Appendix P, the AESO applied the rates in effect during 2018 to its corresponding forecast of billing determinants for 2018. Those billing determinants were based on the 2018 DTS energy forecast in the AESO's *2017 Long-term Outlook*, which was the AESO's long-term demand forecast prepared in accordance with the AESO's duties under the Act and the *Transmission Regulation*.

135 On an annual basis, base rate revenue depends on approved transmission tariff rates, operating reserve costs, TCR events, and billed volumes of demand and energy. Revenue variances arise due to unanticipated changes from forecasts of billing volumes and operating reserve costs.

136 The 2018 recorded base rate revenue in column (b) of Table 3-3 of Appendix P totaled $2,072.9 million, which is $58.8 million (or 2.9%) higher than the 2018 forecast base rate revenue of $2,014.1 million. The base rate revenue variances for individual Rate DTS components varied from 65.0% lower than forecast to 58.3% higher than forecast, as discussed below.

3.2.1 Connection Base Rate Revenue – Significant Variances

137 The 2018 recorded connection base rate revenue was $1,794.9 million, which is $39.7 million (or 2.2%) lower than the 2018 forecast of $1,834.6 million. The decrease results from recorded volumes, on average, lower than forecast for 2018. Coincident metered demand volumes were lower than forecast by 1.9% and metered energy volumes were lower than forecast by 0.5%.

Table 3-3 2018 Recorded and Forecast Billing Determinants

Rate DTS Billing Determinant	Units	2018 Recorded	2018 Forecast	Increase (Decrease)	
				Amount	%
Coincident Metered Demand	MW-months	95,806.9	97,697.5	(1,890.6)	(1.9%)
Billing Capacity					
Total Billing Capacity	MW-months	157,737.2	156,984.4	752.8	0.5%
First (7.5×SF) MW	MW-months	36,414,.6	36,498.4	(83.7)	(0.2%)
Next (9.5×SF) MW	MW-months	34,230.1	34,526.1	(296)	(0.9%)
Next (23×SF) MW	MW-months	42,975.1	43,063.7	(88.6)	(0.2%)
All Remaining MW	MW-months	44,117.4	42,896.3	1,221.1	2.8%
Highest Metered Demand	MW-months	121,845.0	122,370.3	(525.2)	(0.4%)
Metered Energy (All Hours)	GWh	61,016.8	61,303	(286.2)	(0.5%)
DTS Market Participants	customer-months	5,285.1	5,309.0	(23.9)	(0.5%)
Pool Price	$/MWh	50.20	42.89	$7.30	14.5%
Average Increase/(Decrease) Weighted by Revenue					(1.0%)

3.2.2 Operating Reserve Base Rate Revenue – Significant Variances

138 The 2018 recorded operating reserve base rate revenue was $266.3 million, which is $98.1 million (or 58.3%) higher than the 2018 forecast of $168.2 million. Operating reserve costs are allocated hourly to market participants under Rate DTS and Rate FTS.

3.3 2018 Deferral Account Balance

139 The deferral account balances for 2018 are summarized in Table 3-4 of Appendix P, and reflect the 2018 recorded costs and revenue provided in Tables 3-1b and 3-3 of Appendix P, respectively. Table 3-4 of Appendix P also includes tariff revenue offsets, which decrease the amount of revenue that would otherwise need to be collected through Rate DTS and Rate FTS.

140 Rider C collections and refunds for 2018 did not maintain the annual deferral account balance at a reasonable level of less than ±2% of costs.

3.3.1 Connection Component – Significant Variances

141 An under-collection of $77.9 million (or 4.1%) existed for the connection component mainly due to an increase in recorded costs discussed in Section 3.1 above and a decrease in recorded revenue as discussed in Section 3.2 above.

4 2017 Financial Results and Deferral Account Balance

142 The AESO's 2017 costs that are subject to retrospective deferral account reconciliation in this application are those related to wires, ancillary services, and the AESO's own administrative costs (which include other industry costs, general and administrative costs, and capital costs). The AESO's 2017 revenue that is subject to retrospective deferral account reconciliation in this application is that related to Rate DTS and Rate FTS.

143 In determining the financial results and deferral account balance for 2017, all cost and revenue transactions that occurred from January 1, 2017, to December 31, 2018 and that relate to 2017 have been included in the reconciliation. These transactions establish the 2017 production year data for deferral account reconciliation purposes in this application. The result of these transactions is shown in Table 2.3 above.

4.1 2017 Cost Variances

144 The AESO's 2017 revenue requirement includes costs either subject to approval by the Commission (for TFOs) or approved by the AESO Board (for ancillary services and the AESO's own administrative costs).

145 The TFO wires costs included in the AESO's 2017 revenue requirement were based on the TFO tariffs approved by the Commission for, or applied for by, each TFO at the time the AESO prepared the 2017 ISO tariff update[32] in late 2016. The Commission approved the 2017 ISO tariff update application on in interim basis in Decision 22093-D01-2016, issued on December 2, 2016, for rates to be effective January 1, 2017. The Commission provided approval on a final basis in Decision 22093-D02-2017, issued on April 4, 2017. The TFO wires costs reflected the status of each TFO's application for its 2017 tariff in accordance with the approach described above in Section 2.2.2 of this application.

146 As discussed in Section 2.1 above, the AESO intends to file the annual ISO tariff update in Q3 of each year. As consultation for AESO's business plan and budget for 2017 was not submitted or approved by the end of Q3 2016, the AESO included the amounts approved in *AESO Board Decision 2016-BRP-001* dated December 16, 2015 as forecast ancillary services, losses and AESO's own administrative costs in the forecast 2017 revenue requirement included in AESO's 2017 ISO tariff update application. *AESO 2016 Business Plan and Budget Proposal*, dated October 29, 2015 and *AESO Board Decision 2016-BRP-001* are included as Appendix I and Appendix J, respectively, in this application.

147 Following consultation with stakeholders, AESO management submitted the *AESO 2017 Business Plan and Budget Proposal* to the AESO Board on November 7, 2016. This document detailed the consultation process and proposals for the AESO's business plan and budget as it related to forecast ancillary services costs, forecast losses costs, and the AESO's business priorities and own administrative budget for 2017. The consultation for this proposal, the AESO's business initiatives and AESO's own administrative costs was limited to the first six months of 2017 (with the exception of other industry costs). The *AESO 2017 Business Plan and Budget Proposal* was also provided to stakeholders and posted on the AESO website and is included as Appendix K in this application.

148 The *AESO Board Decision 2017-2018-BRP-001* dated June 2017[33] approved the 2017 forecast costs for ancillary services, losses, and the AESO's own administrative costs and is included as Appendix N in this application.

[32] Proceeding 22093, Exhibit X0003, Appendix C, C-1 Rev Req, as filed October 20, 2016.
[33] Decision on AESO 2017 Business Plan and Budget Proposal.

149 On May 29, 2017, the AESO Board amended the 2017 own administrative costs as submitted in the *AESO 2017-2018 Business Plan and Budget Proposal*. This proposal reflected the full twelve months of 2017 and updated AESO's own costs for 2017. The *AESO 2017-2018 Business Plan and Budget Proposal* was provided to stakeholders and posted on the AESO website and is included as Appendix M in this application.

150 The *AESO Board Decision 2017-2018-BRP-001* dated January 2017[34] reflects an increase to $83.1 million for AESO's own administrative costs for the transmission portion for the revised 2017 amounts, and is included as Appendix N in this application.

151 Additional information on the AESO's business priorities and own administrative costs budget for 2017 is available on the AESO website at www.aeso.ca by following the path AESO ► About the AESO Business Planning and financial reporting ► Business plan and budget: 2017 and 2017-2018.

152 Table 4-1a of Appendix P presents the AESO's 2017 revenue requirement as amounts included in AESO's 2017 ISO tariff update[35], including amounts that were approved by the Commission (for TFOs) and by the AESO Board (for ancillary services and the AESO's own administrative costs) in *AESO Board Decision 2016- BRP-001* as discussed above.

153 Table 4-1b of Appendix P presents the AESO's 2017 revenue requirement as amounts that are approved by the Commission (for TFOs) and by the AESO Board (for ancillary services and the AESO's own administrative costs) in *AESO Board Decision 2017-2018-BRP-001* as discussed above. Variance explanations between *AESO Board Decision 2016-BRP-001* and *AESO Board Decision 2017-2018-BRP-001* are contained in *AESO Board Decision 2017-2018-BRP-001*. Significant variances between AESO's revenue requirement (including Commission approved amounts for TFOs and final AESO board approved amounts for ancillary services and the AESO's own administrative costs) are explained below in this section of the application,

154 Table 4-1a and Table 4-1b of Appendix P also include recorded costs as incurred or accrued for 2017, and variances between approved and recorded costs in both dollar amounts and as a percentage of approved costs.

155 Total 2017 recorded costs are $10.6 million (or 0.5%) higher than the total 2017 approved forecast. This significant[36] variance[37] consists of 2017 recorded costs being:

- $14.3 million (or 0.8%) higher than the 2017 approved costs for wires;
- $3.9 million (or 3.3%) lower than the 2017 approved costs for ancillary services; and
- $1.0million (or 1.2%) higher than the 2017 approved costs for general and administrative costs.

156 Variances arise due to a number of factors, including finalization of TFO wires costs through Commission decisions, variances from forecast of volumes and pool price, changes in AESO schedules and priorities, and generally-expected differences between recorded and forecast costs.

157 Variances exceeding these thresholds are shaded in Table 4-1b of Appendix P, with explanations provided by row number in the following discussion.

[34] Decision on AESO 2017-2018 Business Plan and Budget Proposal.
[35] Proceeding 22093, Exhibit X0003, Appendix C, C-1 Rev Req.
[36] Refer to Table 4-1b of Appendix P for details of the significant thresholds.
[37] More detail can be found in Table 4-1b of Appendix P.

4.1.1 *Wires Costs – Significant Variances*

158 The AESO's 2017 wires costs forecast is based on the 2017 ISO tariff update application[38]. The specific determinations of the forecast wires cost for each TFO, shown in rows 13-22 of column (a) of Table 4-1a and Table 4-1b of Appendix P are detailed in Appendix D-5, *Wires Forecast Detail (2006 to 2018),* to this application. Variances result from TFO applications also documented in this file.

Row 14 ATCO Electric

159 The 2017 recorded cost for ATCO Electric wires is $673.0 million, which is $8.2 million (or 1.2%) higher than the 2017 forecast of $664.8 million.

160 The first reconciliation recorded costs reflect Commission Decision 22860-D01-2017 on November 21, 2017 regarding ATCO Electric's 2015-2017 general tariff compliance filing.

Row 15 ATCO Electric – Isolated Generation

161 The 2017 recorded payments to the AESO for ATCO Electric isolated generation is $1.6 million, which is $1.4 million (or 46.1%) lower than the 2017 forecast of $3.0 million. The lower than expected payments result from the 2017 recorded pool price of $22.19/MWh, which is $9.63/MWh (or 30.3%) lower than the 2017 approved forecast pool price of $31.82/MWh.

Row 17 ENMAX Power Corporation

162 The 2017 recorded cost for ENMAX Power Corporation is $81.4 million, which is $7.4 million (or 10.0%) higher than the 2017 forecast of $73.9 million.

163 The first reconciliation recorded costs reflect Commission Decision 23315-D01-2018 on June 19, 2018 regarding ENMAX Power Corporation's 2016-2017 general tariff compliance filing.

Row 20 TransAlta Corporation

164 The 2017 recorded cost for TransAlta Corporation wires is $6.8 million, which is $1.9 million (or 37.6%) higher than the 2017 forecast of $4.9 million.

165 The first reconciliation recorded costs reflect TransAlta Corporation's 2017-2018 general tariff application filing on September 17, 2018.

Row 27 Location Based Credit Standing Offer

166 The 2017 recorded cost for the LBC SO program was $3.0 million, which is $1.0 million (or 25.3%) lower than the 2017 approved forecast of $4.0 million. Annual costs are a combination of payments for availability and activation. In 2017, the units were dispatched less than forecast.

4.1.2 *Ancillary Services – Significant Variances*

Rows 34 to 37 Active Operating Reserve

167 2017 recorded active operating reserve cost was $67.2 million, which is $1.7 million (or 2.4%) lower than the 2017 approved forecast of $68.8 million, and comprise the following amounts:

- For active regulating reserve, the 2017 recorded cost was $26.9 million, which is $5.6 million (or 26.0%) higher than the 2017 approved forecast of $21.3 million.
- For active spinning reserve, the 2017 recorded cost was $28.6 million, which is $5.2 million (or 15.4%) lower than the 2017 approved forecast of $33.8 million.

[38] Proceeding 22093, Exhibit 0001, Appendix C– 2017 Rates Calculations, Tab C-1 Rev Req.

- For active supplemental reserve, the 2017 recorded cost was $11.7 million, which is $2.0 million (or 14.7%) lower than the 2017 approved forecast of $13.7 million.

168 The 2017 recorded average pool price was $22.19/MWh, which is $9.63/MWh (or 30.3%) lower than the 2017 approved forecast average pool price of $31.82/MWh. The 2017 recorded active operating reserve volumes did not vary significantly from the 2017 forecast, at 5,449 GWh recorded, which is 140 GWh (or 2.6%) higher than the 2017 approved forecast of 5,309 GWh. Cost variances are also associated with changes to offer behavior.

Rows 39 to 42 Standby Operating Reserve

169 2017 recorded standby operating reserve cost was $13.9 million, which is $6.0 million (or 30.2%) lower than the 2017 approved forecast of $19.8 million, and comprise the following amounts:

- For standby regulating reserve, the 2017 recorded cost was $3.3 million, which is $1.9 million (or 37.0%) lower than the 2017 approved forecast of $5.2 million.
- For standby spinning reserve, the 2017 recorded cost was $7.8 million, which is $3.4 million (or 30.1%) lower than the 2017 approved forecast of $11.2 million.

170 The 2017 recorded average pool price was $22.19/MWh, which is $9.63/MWh (or 30.3%) lower than the 2017 approved forecast average pool price of $31.82/MWh This effect was offset by total 2017 recorded standby operating reserve volumes that were higher than the 2017 approved forecast. Standby premium volumes were 2,058 GWh, which is 131 GWh (or 6.8%) higher than the 2017 approved forecast of 1,927 GWh. Standby activation volumes were 235 GWh, which is 133 GWh (or 130.4%) higher than the 2017 approved forecast of 102 GWh. Contributing to the higher standby reserve costs is the impact of the premium and activation price, which is dependent on market conditions and offer behavior.

Rows 48 to 56 Other Ancillary Services

171 The 2017 recorded cost of other ancillary services was $34.3 million, which is $3.6 million (or 11.7%) higher than the 2017 forecast of $30.7 million.

172 The 2017 recorded cost for TMR was $3.5 million, which is $1.3 million (or 26.1%) lower than the 2017 approved forecast of $4.8 million due to fewer operational requirements. As these services are required to mitigate the overloading of transmission lines associated with line outages, system conditions in real time or the loss of generation in an area, the number of conscription events and event-related costs are difficult to forecast.

173 The 2017 recorded cost for LSSi was $22.9 million, which is $4.9 million (or 27.0%) higher than the 2017 forecast of $18.1 million. LSSi costs are impacted by volume availability, contract prices and requirements for arming and tripping. The increase is primarily due to higher availability associated with the lower average pool price and higher import volumes.

4.1.4 General and Administrative Costs – Significant Variances

174 The 2017 recorded general and administrative cost was $84.1 million, which is $1.0 million (or 1.2%) higher than the approved forecast of $83.1 million

Row 71 Contract Services and Consultants

175 The 2017 recorded cost of contract services and consultants cost was $6.9 million, which is $1.1 million (or 18.1%) higher than the 2017 approved forecast of $5.9 million, primarily due to increased consulting and contract service costs for application and infrastructure support.

Row 79 Amortization

176 The 2017 recorded cost of amortization cost was $14.1 million, which is $1.4 million (or 10.6%) higher than the 2017 approved forecast of $12.7 million, primarily due to shifts in the timing and magnitude of projects and the dates they are placed into service.

4.1.5 Capital – Significant Variances

177 Total capital cost recorded in 2017 was $23.7 million, which is $3.2 million (or 11.9%) lower than the 2017 approved forecast of $27.0 million as provided in Table 4-2 of Appendix P. At the end of 2017, capital projects were allocated among AESO business functions on a project-by-project basis, resulting in 88% of the total recorded capital being allocated to transmission and as a result capital costs allocated for the AESO's transmission function were $20.9 million.

178 Although retaining its total capital budget, the AESO's portfolio prioritization process results in project changes during a year. Some projects may be deferred into a future year while others may be advanced into the current year as more detailed understanding of requirements, priorities, and interdependencies is gained as a project progresses.

179 The 2017 recorded cost for key capital initiatives was $2.7 million, which is $3.9 million (or 59.0%) lower than the 2017 approved forecast of $6.6 million primarily due to the re-prioritization and deferral of components of the program, in particular market systems replacement, information technology/cyber security advancements and critical infrastructure protection. Short-term actions were taken to mitigate any risks related to project postponements.

180 The 2017 recorded cost for the SCC expansion was $1.8 million, which is $1.1 million (or 38.9%) lower than the 2017 approved forecast of $2.9 million due to the timing of a number of planned expenditures for this multi-year program.

4.2 2017 Revenue Variances

181 Table 4-3 of Appendix P presents AESO revenue forecast to be collected from Rate DTS and Rate FTS base rates in effect during 2017. The table also includes recorded revenue as collected through 2017 base rates, as well as variances between forecast and recorded base rate revenue in both dollar amounts and as a percentage of forecast revenue.

182 The base rates which were in effect during the period January 1, 2017 to December 31, 2017 were approved on a final basis in Decision 22093-D02-2017 issued on April 4, 2017. Those rates were based on the AESO's 2017 revenue requirement, as discussed in Section 4.1 above, and 2017 forecast billing determinants for January 1 to December 31, 2017.

183 To calculate the 2017 forecast base rate revenue presented in Table 4-3 of Appendix P, the AESO applied the rates in effect during 2017 to its corresponding forecast of billing determinants for 2017. Those billing determinants were based on the 2017 demand forecast in the AESO's *2016 Long-term Outlook* ("2016 LTO"), which was the AESO's long-term demand forecast prepared in accordance with the AESO's duties under the Act and the *Transmission Regulation*. The 2017 billing determinants for the 2017 ISO tariff update were adjusted by a reduction of 0.5% to reflect expected changes in electricity consumption in 2016 due to a decline in economic growth rate compared to that included in the 2016 LTO.

184 On an annual basis, base rate revenue depends on approved transmission tariff rates, operating reserve costs, TCR events, and billed volumes of demand and energy. Revenue variances arise due to unanticipated changes from forecasts of billing volumes and operating reserve costs.

185 The 2017 recorded base rate revenue in column (b) of Table 4-3 of Appendix P totaled $1,952.8 million, which is $5.4 million (or 0.3%) lower than the 2017 forecast base rate revenue of $1,958.2 million.

4.3 2017 Deferral Account Balance

186 The deferral account balances for 2017 are summarized in Table 4-4 of Appendix P, and reflect the 2017 recorded costs and revenue provided in Tables 4-1 and 4-3 of Appendix P respectively. Table 4-4 of Appendix P also includes tariff revenue offsets, which decrease the amount of revenue that would otherwise need to be collected through Rate DTS and Rate FTS.

187 Rider C collections and refunds for 2017 maintained the annual deferral account balance at a reasonable level of less than ±2.0% of costs.

4.3.1 Connection Component – Significant Variances

188 An under collection of $38.7 million (or 2.1%) existed for the connection component as a result of Rider C refunds in 2017 based on forecast TFO wires costs in 2017.

5 2016 Financial Results and Deferral Account Balance

189 The AESO's 2016 costs that are subject to retrospective deferral account reconciliation in this application are those related to wires, ancillary services, and the AESO's own administrative costs (which include other industry costs, general and administrative costs, and capital costs). The AESO's 2016 revenue that is subject to retrospective deferral account reconciliation in this application is that related to Rate DTS and Rate FTS.

190 Only 2016 costs and revenue adjustments which arise from transactions that occurred after the first reconciliation are discussed in this application. These transactions establish the 2016 production month data for second reconciliation purposes in this application.

191 Specifically, the 2016 cost and revenue adjustments which occurred after the first deferral account reconciliation and which are included in this second reconciliation are those transactions that:

- relate to 2016;
- occurred after the cut-off date of December 31, 2017 for data included in the 2016 first reconciliation; and
- occurred up to December 31, 2018.

5.1 2016 Deferral Account Second Reconciliation

192 The AESO filed a first reconciliation of its 2016 deferral accounts as part of its 2016 deferral account reconciliation application submitted to the Commission on August 1, 2018. That first reconciliation included all relevant costs and revenue that occurred from January 1, 2016, to December 31, 2017 and that related to 2016. The first reconciliation deferral account balance for 2016 was a shortfall of $180.9 million as provided in Table 2-4 of Appendix P in this application. The first reconciliation balance was settled with market participants in October 2018 in accordance with the interim approval of the 2016 deferral account reconciliation ("2016 interim DAR decision").[39] The Commission issued Decision 23802-D02-2018 on November 23, 2018 approving the AESO's 2016 deferral account reconciliation as filed ("2016 DAR decision").[40]

193 The first reconciliation resulted in $1,918.0 million in costs and $1,737.2 million in market participant revenue (including tariff revenue offsets and net Rider C collections and refunds being attributed to 2016.

194 The inclusion of additional transactions decreases the 2016 recorded costs to $1,914.7 million and the 2016 recorded total revenue, plus revenue collected or refunded through Rider C and previous deferral account reconciliation amounts, is $1,917.7 million.

5.2 2016 Cost Adjustments after First Reconciliation

195 Variances of recorded cost adjustments from the 2016 approved forecast were explained in the first reconciliation of the 2016 deferral account (for those transactions included in that first reconciliation). Only cost adjustments which arise from transactions that occurred after the first reconciliation are discussed in this application and summarized in Table 5-1 of Appendix P.

196 There were no significant cost adjustments during this period.

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[39] Decision 23802-D02-2018, 2016 Deferral Account Reconciliation Interim Settlement, October 2, 2018.
[40] Decision 23802-D02-2018, 2016 Deferral Account Reconciliation, November 23, 2018.

197 The 2016 second reconciliation costs were $1,914.7 million, which is $3.4 million (or 0.2%) lower than the first reconciliation costs of $1,918.0 million.

5.3 2016 Revenue Adjustments after First Reconciliation

198 Variances of recorded total revenue from the 2016 forecast base rate revenue were explained in the first reconciliation of the 2016 deferral account (for those transactions included in that first reconciliation). Only revenue adjustments which arise from transactions that occurred after the first reconciliation are discussed in this application. The deferral account balances for the 2016 second reconciliation are provided in Table 5-2 of Appendix P.

199 There were no 2016 revenue adjustments and the 2016 second reconciliation recorded base rate revenue remains at $1,815.5 million.

5.4 2016 Second Reconciliation Deferral Account Balance

200 Costs and base rate revenue variances attributed to a year give rise to deferral account balances. The deferral account balances for the 2016 second reconciliation are summarized in Table 5-3 of Appendix P, and reflect the 2016 second reconciliation of costs and revenue provided in Tables 5-1 and 5-2 of Appendix P respectively. Table 5-3 of Appendix P also includes tariff revenue offsets, which increase the amount of revenue that would otherwise need to be collected through Rate DTS and Rate FTS.

201 The first reconciliation of the 2016 deferral account in the AESO's 2016 deferral account reconciliation application resulted in a $180.9 million shortfall attributed to 2016, as illustrated in Table 2-4 in Section 2.3 of this application. The first reconciliation shortfall was collected from market participants in the October 2018 settlement in accordance with the 2016 interim DAR decision and 2016 DAR decision. First reconciliation settlement amounts attributed to 2016 are provided in column (f) of Table 5-3 of Appendix P, and restored all 2016 deferral account balances to zero based on the transactions included in the 2016 first reconciliation.

202 However, this second reconciliation includes adjustments to costs and revenue that occurred after the first reconciliation of the 2016 deferral account, as discussed in Sections 5.2 and 5.3 where explanations were provided when the resulting line item adjustments were significant.

203 The impact of all 2016 cost and revenue adjustments is a deferral account net balance increase to an over collection of $3.1 million (or 0.2% of recorded costs), compared to the zero balance that existed after settlement of amounts included in the first reconciliation.

6 2015 Financial Results and Deferral Account Balance

204 The AESO's 2015 costs that are subject to retrospective deferral account reconciliation in this application are those related to wires, ancillary services, and the AESO's own administrative costs (which include other industry costs, general and administrative costs, and capital costs). The AESO's 2015 revenue that is subject to retrospective deferral account reconciliation in this application is that related to Rate DTS and Rate FTS.

205 Only 2015 cost and revenue adjustments which arise from transactions that occurred after the second reconciliation are discussed in this application. These transactions establish the 2015 production month data for third reconciliation purposes in this application.

206 Specifically, the 2015 cost and revenue adjustments which occurred after the second deferral account reconciliation and which are included in this third reconciliation are those transactions that:

- relate to 2015;
- occurred after the cut-off date of December 31, 2017 for data included in the 2015 second reconciliation; and
- occurred up to December 31, 2018[41].

6.1 2015 Deferral Account Third Reconciliation

207 The AESO filed a second reconciliation of its 2015 deferral accounts as part of its 2016 deferral account reconciliation application submitted to the Commission on August 1, 2018. That second reconciliation included all relevant costs and revenue that occurred from January 1, 2016, to December 31, 2017 and that related to 2015. The second reconciliation deferral account balance for 2015 was a shortfall of $63.5 million as provided in Table 2-4 of Appendix P in this application. The second reconciliation balance was settled with market participants in October 2018 in accordance with the 2016 interim DAR decision and 2016 DAR decision.

208 The second reconciliation resulted in $1,851.6 million in costs and $1,788.1 million in market participant revenue (including tariff revenue offsets and net Rider C collections and refunds, as well as prior DAR reconciliation collections and refunds) being attributed to 2015.

209 The inclusion of additional transactions increases the 2015 recorded costs to $1,863.5 million and the 2015 recorded total revenue, plus revenue collected or refunded through Rider C and previous deferral account reconciliation amounts, is $1,851.1 million.

6.2 2015 Cost Adjustments after Second Reconciliation

210 Variances of recorded cost adjustments from the 2015 approved forecast were explained in the first reconciliation of the 2015 deferral account (for those transactions included in that first reconciliation). Only cost adjustments which arise from transactions that occurred after the second reconciliation are discussed in this application and summarized in Table 6-1 of Appendix P.

211 Two significant cost adjustments occurred during this period:

- $9.2 million increase attributed to AltaLink wires costs; and
- $3.1 million increase attributed to ENMAX Power Corporation wires costs.

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[41] As noted in Footnote 2, one adjustment related to 2015 and resulting from the AltaLink 2014-2015 deferral account reconciliation compliance filing application filed on February 15, 2019 was included.

212 The 2015 third reconciliation costs were $1,863.5 million, which is $12.0 million (or 0.6%) higher than the second reconciliation costs of $1,851.6 million.

6.2.1 Wires Costs – Significant Variances

213 The third reconciliation recorded costs were based on billings by the TFOs and accruals for 2015. Wires forecast costs by TFO discussed below are detailed in Appendix D-5 to this application.

Row 14 AltaLink

214 The 2015 third reconciliation recorded cost for AltaLink wires was $753.3 million, which is $9.2 million (or 1.2%) higher than the second reconciliation recorded cost of $744.0 million.

215 The third reconciliation recorded costs reflect AltaLink's 2014-2015 deferral account reconciliation filing of February 15, 2019 in Proceeding 24329 as detailed in Appendix D-5 to this application.

Row 18 ENMAX Power Corporation

216 The 2015 third reconciliation recorded cost for ENMAX Power Corporation wires was $77.0 million, which is $3.1 million (or 4.1%) higher than the second reconciliation recorded cost of $73.9 million.

217 The third reconciliation recorded costs reflect the Commission Decision 23333-D01-2018 on March 8, 2018 regarding ENMAX Power Corporation's 2014-2015 deferral account reconciliation application.

6.3 2015 Revenue Adjustments after Second Reconciliation

218 Variances of recorded total revenue from the 2015 forecast base rate revenue were explained in the first and second reconciliations of the 2015 deferral account (for those transactions included in the first and second reconciliations). Only revenue adjustments which arise from transactions that occurred after the second reconciliation are discussed in this application. The deferral account balances for the 2015 third reconciliation are provided in Table 6-2 of Appendix P.

219 There were no 2015 revenue adjustments and the 2015 third reconciliation recorded base rate revenue remains at $1,560.0 million.

6.4 2015 Third Reconciliation Deferral Account Balance

220 Costs and base rate revenue variances attributed to a year give rise to deferral account balances. The deferral account balances for the 2015 third reconciliation are summarized in Table 6-3 of Appendix P, and reflect the 2015 third reconciliation of costs and revenue provided in Tables 6-1 and 6-2 of Appendix P respectively. Table 6-3 of Appendix P also includes tariff revenue offsets, which increase the amount of revenue that would otherwise need to be collected through Rate DTS and Rate FTS.

221 The second reconciliation of the 2015 deferral account in the AESO's 2016 deferral account reconciliation application resulted in a $63.5 million shortfall attributed to 2015, as illustrated in Table 2-4 in Section 2.3 of this application. The second reconciliation shortfall was collected from market participants in the settlement in October 2018 in accordance with the interim approval of the 2016 deferral account reconciliation. Prior reconciliation settlement amounts attributed to 2015 are provided in column (f) of Table 6-3 of Appendix P, and restored all 2015 deferral account balances to zero based on the transactions included in the 2015 second reconciliation.

222 However, this third reconciliation includes adjustments to costs and revenue that occurred after the second reconciliation of the 2015 deferral account, as discussed in Sections 6.2 and 6.3 where explanations were provided when the resulting line item adjustments were significant.

6.4.1 Connection Component – Significant Variances

223 The deferral account balance for connection has decreased to an under collection of $12.4 million (or 0.7% of recorded costs), primarily due to adjustments for TFO wires costs in 2015 as discussed above in Section 6.2.

6.4.2 Tariff Revenue Offsets – Significant Variances

224 The recorded tariff revenue offsets has decreased to an under collection of $0.4 million (or 4.5% of recorded tariff revenue offsets) resulting from the correction of a billing error related to a market participant eligible for Rate PSC but not credited with Rate PSC for the 2006 to 2017 time period.

225 The impact of all 2015 cost and revenue adjustments is a deferral account net balance decrease to an under collection of $12.4 million (or 0.7% of recorded costs), compared to the zero balance that existed after settlement of amounts included in the second reconciliation.

7 2014 Financial Results and Deferral Account Balance

226 The AESO's 2014 costs that are subject to retrospective deferral account reconciliation in this application are those related to wires, ancillary services, and the AESO's own administrative costs (which include other industry costs, general and administrative costs, and capital costs). The AESO's 2014 revenue that is subject to retrospective deferral account reconciliation in this application is that related to Rate DTS and Rate FTS.

227 Only 2014 cost and revenue adjustments which arise from transactions that occurred after the third reconciliation are discussed in this application. These transactions establish the 2014 production month data for fourth reconciliation purposes in this application.

228 Specifically, the 2014 cost and revenue adjustments which occurred after the third deferral account reconciliation and which are included in this fourth reconciliation are those transactions that:

- relate to 2014;
- occurred after the cut-off date of December 31, 2017 for data included in the 2014 third reconciliation; and
- occurred up to December 31, 2018[42].

7.1 2014 Deferral Account Fourth Reconciliation

229 The AESO filed a third reconciliation of its 2014 deferral accounts as part of its 2016 deferral account reconciliation application submitted to the Commission on August 1, 2018. That third reconciliation included all relevant costs and revenue that occurred from January 1, 2016, to December 31, 2017 and that related to 2014. The third reconciliation deferral account balance for 2014 was a surplus of $86.3 million as provided in Table 2-4 of Appendix P in this application. The third reconciliation balance was settled with market participants in October 2018 in accordance with the 2016 interim DAR decision and 2016 DAR decision.

230 The third reconciliation resulted in $1,604.6 million in costs and $1,690.9 million in market participant revenue (including tariff revenue offsets and net Rider C collections and refunds, as well as prior reconciliation collections and refunds) being attributed to 2014.

231 The inclusion of additional transactions increases the 2014 recorded costs to $1,633.3 million and the 2014 recorded total revenue, plus revenue collected or refunded through Rider C and previous deferral account reconciliation amounts, decreased to $1,604.0 million.

7.2 2014 Cost Adjustments after Third Reconciliation

232 Variances of recorded cost adjustments from the 2014 approved forecast were explained in the first reconciliation of the 2014 deferral account (for those transactions included in that first reconciliation). Only cost adjustments which arise from transactions that occurred after the third reconciliation are discussed in this application and summarized in in Table 7-1 of Appendix P.

233 Three significant cost adjustments occurred during this period:

- $30.5 million increase attributed to AltaLink wires costs;
- $4.6 million decrease attributed to ATCO Electric Ltd. wires costs; and

[42] As noted in Footnote 2, one adjustment related to 2014 and resulting from the AltaLink 2014-2015 deferral account reconciliation compliance filing application filed on February 15, 2019 was included.

- $2.8 million increase attributed to ENMAX Power Corporation wires costs.

234 The 2014 fourth reconciliation costs were $1,633.3 million, which is $28.7 million (or 1.8%) higher than the third reconciliation costs of $1,604.6 million.

7.2.1 Wires Costs – Significant Variances

235 The fourth reconciliation recorded costs were based on billings by the TFOs and accruals. Wires forecast costs by TFO discussed below are detailed in Appendix D-5 to this application.

Row 14 AltaLink

236 The 2014 fourth reconciliation recorded cost for AltaLink wires was $582.8 million, which is $30.5 million (or 5.5%) higher than the third reconciliation recorded cost of $552.4 million.

237 The fourth reconciliation recorded costs reflect AltaLink's 2014-2015 deferral account reconciliation filing in Proceeding 24329 on February 15, 2019.

Row 15 ATCO Electric

238 The 2014 fourth reconciliation recorded cost for ATCO Electric wires was $557.1 million, which is $4.6 million (or 0.8%) lower than the third reconciliation recorded cost of $561.7 million.

239 The fourth reconciliation recorded costs reflect Commission Decision 23144-D01-2018 on May 16, 2018 regarding ATCO Electric's 2013-2014 deferral account reconciliation compliance filing.

Row 18 ENMAX Power Corporation

240 The 2014 fourth reconciliation recorded cost for ENMAX Power Corporation was $68.0 million, which is $2.8 million (or 4.3%) higher than the third reconciliation recorded cost of $65.2 million.

241 The fourth reconciliation recorded costs reflect the Commission Decision 23333-D01-2018 on March 8, 2018 regarding ENMAX Power Corporation's 2014-2015 deferral account reconciliation application.

7.3 2014 Revenue Adjustments after Third Reconciliation

242 Variances of recorded total revenue from the 2014 forecast base rate revenue were explained in the first, second and third reconciliations of the 2014 deferral account (for those transactions included in the first, second and third reconciliations). Only revenue adjustments which arise from transactions that occurred after the third reconciliation are discussed in this application. The deferral account balances for the 2014 fourth reconciliation are provided in Table 7-2 of Appendix P.

243 The were no 2014 revenue adjustments and the 2014 fourth reconciliation recorded base rate revenue remains at $1,486.1 million.

7.4 2014 Fourth Reconciliation Deferral Account Balance

244 Costs and base rate revenue variances attributed to a year give rise to deferral account balances. The deferral account balances for the 2014 fourth reconciliation are summarized in Table 7-3 of Appendix P, and reflect the 2014 fourth reconciliation of costs and revenue provided in Tables 7-1 and 7-2 of Appendix P respectively. Table 7-3 of Appendix P also includes tariff revenue offsets, which increase the amount of revenue that would otherwise need to be collected through Rate DTS and Rate FTS.

245 The third reconciliation of the 2014 deferral account in the AESO's 2016 deferral account reconciliation application resulted in a $86.3 million surplus attributed to 2014, as illustrated in Table 2-4 in Section 2.3 of this application. The third reconciliation surplus was refunded to market participants in the settlement in October 2018 in accordance with the interim approval of the 2016 deferral account reconciliation. Third reconciliation settlement amounts attributed to 2014 are provided in column (f) of Table 7-3 of

Appendix P, and restored all 2014 deferral account balances to zero based on the transactions included in the 2014 third reconciliation.

246 However, this fourth reconciliation includes adjustments to costs and revenue that occurred after the third reconciliation of the 2014 deferral account, as discussed in Sections 7.2 and 7.3 where explanations were provided when the resulting line item adjustments were significant.

7.4.1 Connection Component – Significant Variances

247 The deferral account balance for the connection component has decreased to an under collection of $29.2 million (or 2.0% of recorded costs), primarily due to adjustments for TFO wires costs in 2014 as discussed above in Section 7.2.

7.4.2 Tariff Revenue Offsets – Significant Variances

248 The recorded tariff revenue offsets has decreased to an under collection of $0.5 million (or 5.3% of recorded tariff revenue offsets) resulting from the correction of a billing error related to a market participant eligible for Rate PSC but not credited with Rate PSC for the 2006 to 2017 time period.

249 The impact of all 2014 cost and revenue adjustments is a deferral account net balance decrease to an under collection of $29.2 million (or 1.8% of recorded costs), compared to the zero balance that existed after settlement of amounts included in the third reconciliation.

8 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006 Financial Results and Deferral Account Balances

250 The AESO's 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006 costs that are subject to retrospective deferral account reconciliation in this application are those related to wires, ancillary services, and the AESO's own administrative costs (which include other industry costs, general and administrative costs, and capital costs). The AESO's 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006 revenue that is subject to retrospective deferral account reconciliation in this application is that related to Rate DTS and Rate FTS.

251 The costs and revenue discussed in this section reflect the fourth deferral account reconciliation for 2013, the fifth reconciliation for 2012, and the sixth reconciliations for 2011 and 2010, the fifth reconciliation for 2009, the sixth reconciliation for 2008, the seventh reconciliation for 2007, and the sixth reconciliation for 2006. The adjustments to previous deferral account balances for these years are accordingly smaller and fewer in number, and are summarized in this section for efficiency of presentation. The deferral account reconciliation for each year is provided in detail in Appendices E, G and H of this application.

252 In this 2017-2018 deferral account reconciliation application, all cost and revenue transactions that occurred up to December 31, 2018 and that relate to 2013, 2012, 2011, 2010, 2009, 2008, 2007 or 2006 are included. These transactions establish the production month data for each of those years for deferral account reconciliation purposes in this application.

253 The impact of the inclusion of these additional transactions is summarized in Table 8-1 of Appendix P.

254 The AESO's 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006 revenue requirements were approved either by the Commission (for TFOs) or by the AESO Board (for ancillary services and the AESO's own administrative costs). Variances of recorded costs from approved forecast were explained in prior reconciliations of these years' accounts.

255 No further discussion of those variances is provided in this application. Only cost adjustments which arise from transactions that occurred after the most recent prior reconciliation are discussed in this application.

256 Specifically, the 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006 cost and revenue adjustments which occurred after the prior deferral account reconciliations and which are included in this reconciliation are those transactions that:

- relate to 2013, 2012, 2011, 2010, 2009, 2008, 2007 or 2006;
- occurred after the cut-off dates included in the previous reconciliations; and
- occurred up to December 31, 2018.

257 Three significant cost adjustments occurred during this period:

- $4.3 million decrease attributed to 2013 wires costs;
- $3.1 million increase attributed to 2012 wires costs; and
- $1.7 million decrease attributed to 2006 to 2013 tariff revenue offsets.

8.1 Costs Adjustments after Previous Reconciliation

258 Variances of recorded cost adjustments from approved forecast were explained in the first reconciliations of the 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006 deferral accounts (for those transactions included the first reconciliation). Only cost adjustments which arise from transactions that occurred after the previous reconciliations are discussed in this application and summarized in Table 8-1 in Appendix P.

259 Two significant cost adjustments occurred during this period:

- $4.3 million decrease attributed to ATCO Electric wires costs in 2013; and
- $3.1 million increase attributed to ATCO Electric wires costs in 2012.

8.1.1 Wires Costs – Significant Variances

260 The 2017-2018 deferral account reconciliation recorded costs were based on billings by the TFOs and accruals. Wires forecast cots by TFO discussed below are detailed in Appendix D-5 to this application.

Row 14, Table 8-1 of Appendix P, ATCO Electric

261 The 2013 fourth reconciliation recorded cost for ATCO Electric wires was $462.9 million, which is $4.3 million (or 0.9)% lower than the third reconciliation recorded cost of $467.2 million.

262 The fourth reconciliation recorded costs result Commission Decision 23114-D01-2018 issued on May 16, 2018 regarding ATCO Electric's 2013-2014 deferral account compliance tariff filing.

Row 15, Table 8-1 of Appendix P, ATCO Electric

263 The 2012 fifth reconciliation recorded cost for ATCO Electric wires was $394.7 million, which is $3.1 million (or 0.8%) higher than the fourth reconciliation recorded cost of $391.6 million.

264 The fifth reconciliation recorded costs result from ATCO Electric's Hanna Regional Transmission Development deferral account filing on October 31, 2018.

265 The 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006 recorded costs for ancillary services and for the AESO's own administrative costs did not vary significantly from the previous reconciliation recorded costs for those items.

8.2 Revenue Adjustments after Previous Reconciliation

266 The 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006 revenue amounts did not vary from the previous reconciliation revenue amounts. For years 2009, 2008, 2007 and 2006 the connection revenue appears to vary from the previous reconciliation as this 2017-2018 deferral account reconciliation application is the first application removing the tariff revenue offsets from recorded revenue. The revenue variance for these years is only due to this change in presentation.

8.3 Deferral Account Balance

267 Costs and base rate revenue variances attributed to a year give rise to deferral account balances. The deferral account balances for 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006 are summarized in Table 8-1 of Appendix P.

8.3.1 Connection Component – Significant Variances

268 For years 2013 and 2012 the connection charge varied significantly from the previous reconciliations due to the significant variances of wires costs explained above.

8.3.2 Tariff Revenue Offsets – Significant Variances

Row 44, Table 8-1 of Appendix P, Rate PSC Billing Error Fix

269 As a result of a billing error correction for all years 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006, there is a total reduction of $1.7 million in tariff revenue offsets relating to a market participant eligible for Rate PSC but not credited with Rate PSC.

270 The overall impact to the net deferral account balance resulting from the adjustments to 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006 which occurred in 2018 is a $0.4 million shortfall and detailed in Appendix P – Table 8-1, row 52.

9 Allocation to Market Participants

271 The allocation of deferral account balances and adjustments is implemented through the continued use of a software program developed by the AESO to calculate deferral account reconciliation amounts.

9.1 Provision of Market Participant Allocation Information

272 The results of the deferral account allocation for each market participant who received system access service under Rate DTS or Rate FTS are included in Appendices E, G, and H of this application, in annual market participant detail summaries and market participant allocation detail. As discussed in Section 2.7 of this application, market participant confidentiality is protected by assigning a number to each AESO direct-connect market participant as has been done in prior deferral account reconciliation applications. The numbers assigned to a specific market participant are not necessarily the same for each deferral account year in this application, and are not necessarily the same as those used in prior applications.

273 After filing this application, the AESO will distribute to each market participant the applicable market participant numbers for the deferral account reconciliation years included. As well, the AESO will provide on request to market participants with multiple settlement points deferral account allocation data for each of the market participant's settlement points. Such information is too extensive and detailed to be included with this application, and it is impractical to protect market participant confidentiality through numerical coding when dealing with hundreds of settlement points. Instead, the AESO will advise market participants of the availability of settlement point data at the time it provides market participant numbers. The settlement point data will include information comparable to that provided in Appendices E, G and H, in Microsoft Excel format.

274 The AESO notes that a market participant may assign its system access service agreement to another market participant (the "assignee") in accordance with the ISO tariff.[43] Where such an assignment has occurred, the deferral account allocation will be applied to the account of the assignee, and the applicable market participant numbers will be provided only to the assignee.

275 The AESO has determined assignees and prepared the appendices of this deferral account reconciliation application as of July 10, 2019 for charges and refunds included in the application. No assignment agreements have been executed since then.

9.2 Uncollectible Amounts

276 As summarized above, deferral account balances are allocated retrospectively to individual market participants who received system access service under Rate DTS or Rate FTS based on each market participant's percentage of base rate revenue collected based on the rates in place during the period, by month and by rate component. The amounts allocated to each market participant will be collected from or refunded to the market participant as discussed in Section 10 below. Where a market participant has assigned its system access service agreement to another market participant, the deferral account allocation will be collected from or refunded to the market participant to whom the service has been assigned. Up to and including the AESO's 2008 deferral account reconciliation, the AESO has collected or refunded all deferral account amounts allocated to market participants.

[43] Subsection 2 of section 15, *Miscellaneous*, of the 2014 ISO Tariff.

277 For allocations resulting from the 2013-2014, 2012, 2010-2011 and 2009 deferral account reconciliations, the AESO has been unable to collect amounts allocated to market participants no longer operating in Alberta. For allocations resulting from this 2017 -2018 deferral account reconciliation application, the AESO expects that, in specific and infrequent circumstances, it may also be unable to collect or refund a deferral account allocation from or to a market participant. The anticipated circumstances are those where a market participant has:

(a) terminated system access service with the AESO;

(b) discontinued its business operations, either through bankruptcy, dissolution, or other formal proceeding; and

(c) has not assigned its system access service agreement to another market participant.

278 In those specific circumstances, an allocation of deferral account balances to the market participant who has discontinued operations may be uncollectible from that market participant. ("Uncollectible" is used in a general sense, and the AESO acknowledges that, technically, only a charge would be uncollectible while a refund would be "unrefundable".) Although the specific circumstances are expected to be infrequent, allocations to the same market participant may result in uncollectible amounts in several deferral account reconciliation applications if those applications include re-reconciliations for years in which the market participant received system access service before discontinuing operations.

279 The AESO also notes that in those cases where a market participant has discontinued operations without assigning its system access service to another market participant, the facilities used to provide system access service are expected to remain in service. Those facilities typically provide service to other existing or new market participants, including any market participant who takes over the original participant's assets without assignment of the system access service agreement. As well, charges billed prior to a market participant discontinuing its operations would be settled with that market participant through normal processes. Only later amounts resulting from retrospective deferral account reconciliation and allocation would potentially become uncollectible.

280 To date, the uncollectible amounts resulting from market participants who terminate service and discontinue operations without assigning their system access service agreements include:

- a $46 charge resulting from the 2013-2014 deferral account reconciliation allocated to one of those market participants as discussed below from the 2010-2011 deferral account reconciliation;
- a $9 refund resulting from the 2012 deferral account reconciliation allocated to one of those market participants as discussed below from the 2010-2011 deferral account reconciliation;
- a total $758 refund resulting from the 2010-2011 deferral account reconciliation allocated to two market participants, one of whom was the same market participant that was allocated an uncollectible amount in 2009; and
- a $566 charge resulting from the 2009 deferral account reconciliation allocated to a market participant no longer operating in Alberta.

281 The $46 charge resulting from the 2013-2014 deferral account reconciliation was included as an adjustment in the 2015 deferral account reconciliation application. The $9 refund and $758 refund related to the 2012 and 2010-2011 deferral account reconciliation applications respectively were included as adjustments in 2013 in the 2013-2014 deferral account reconciliation application The $566 charge amount resulting from the 2009 deferral account reconciliation was included as an adjustment in 2012 in the 2012 deferral account reconciliation application. The treatment of uncollectible amounts is summarized in Table 9-1.

282 The AESO will continue its practice to collect or refund such amounts until such time as it determines that all reasonable attempts have been made and the amounts will remain uncollectible. The AESO will monitor and report uncollectible amounts in future deferral account reconciliation applications, and will review its approach to uncollectible amounts if such amounts become significant in magnitude.

Table 9-1 Continuity of Uncollectible Amounts, $

Line No.	***Description***	***Deferral Account Reconciliation Application 2017-2018***	***2016***	***2015 - 2009***	***Totals 2018 to 2009***
1	Uncollectible Amounts, Opening Balance	-	-	*$46*	-
2	Uncollectible Charges (Refunds)	-	-	*(155)*	(155)
3	Number of Market Participants	-	-	*2*	2
4	Adjustments – Refunds (Charges)	-	-	*(155)*	155
5	**Uncollectible Amounts, Closing Balance**	**-**	**-**	**-**	**-**

Note: Numbers may not add due to rounding.

10 Proposed Method of Refunding and Collecting

283 Consistent with the approach approved for the AESO’s prior deferral account reconciliations, the AESO proposes to settle the outstanding deferral account balances through a one-time payment and collection option. Under this option, the AESO proposes to refund or collect the amounts for each market participant within 60 days from the date of the Commission decision regarding this application.

284 Although the AESO favours the one-time payment and collection option to expedite the final resolution and financial settlement related to the deferral account balances, it appreciates that it is not in a position to determine if this option presents a financial burden to market participants. If this option does present a financial burden to a market participant, the AESO considers it reasonable to offer a 3-month payment option, including carrying charges, similar to that offered to market participants in previous deferral account reconciliations.

10.1 Immediate Interim Settlement

285 As discussed in Section 1.2 of this application, the AESO proposes that the refunds and charges to and from market participants as a result of this application be settled as soon as possible on an interim refundable basis. The AESO understands that prior to approving immediate interim settlement, the Commission would need to be satisfied that the amounts are accurate and that such an order is in the public interest.

286 In the AESO’s view, the reasons set out in Section 1.2 provide a sufficient basis for the Commission to approve the settlement of the deferral account balances in the amounts allocated in this application on an interim refundable basis. The AESO should be able to financially settle deferral account balance amounts with market participants in the month following that in which approval is granted. The AESO will therefore plan interim settlement on invoices to be issued in December 2019, subject to approval by the Commission. To enable settlement on invoices issued in December 2019, the Commission would need to provide interim approval by December 3, 2019. Interim approval after that date (but before January 2, 2020) would result in settlement on invoices issued in January 2020.

287 Appendix E includes the total Rate DTS and Rate FTS amounts that will be settled with individual market participants on an interim refundable basis as a result of this application, pending approval of the Commission. Table 10-1 summarizes the distribution of charges and refunds among individual Rate DTS and Rate FTS market participants. The AESO notes that in both the appendices of this application and in Table 10-1 and 10-2, Rate FTS amounts have been included with Rate DTS amounts as only one market participant (BC Hydro) receives service under Rate FTS.

288 Table 10-1 indicates that no Rate DTS and Rate FTS market participants will receive refunds as a result of this 2017-2018 deferral account reconciliation application, while 64 Rate DTS and Rate FTS market participants will receive charges totaling $154.1 million.

289 The total charges to market participants are $154.1 million compared to no refunds to market participants. The net deferral balance is a charge of $154.1 million. The AESO submits that settlement of the amounts in this application would therefore improve the accuracy of the allocation of deferral account balances to market participants, which further supports the approval of interim settlement of the deferral account amounts in this application.

Table 10-1 Distribution of Charges and Refunds Among Market Participants

Range of Refunds and Charges	Number of Participants DTS and FTS DFO [1]	Number of Participants DTS and FTS Non-DFO	Total Amount, $ 000 000 DTS and FTS DFO [1]	Total Amount, $ 000 000 DTS and FTS Non-DFO	Total
Refund Greater Than $0	-	-	-	-	-
Subtotal Refunds	**-**	**-**	**-**	**-**	**-**
Charge Greater Than $0 to $50,000	-	30	-	($0.4)	($0.4)
Charge Greater Than $50,000 to $1,000,000	-	25	-	(7.0)	(7.0)
Charge Greater Than $1,000,000 to $10,000,000	2	3	(4.2)	(6.5)	(10.7)
Charge Greater Than $10,000,000 to $30,000,000	2	-	(43.2)	-	(43.2)
Charge Greater Than $30,000,000 to $70,000,000	2	-	(92.7)	-	(92.7)
Subtotal Charges	**6**	**58**	**($140.2)**	**($13.9)**	**($154.1)**
Total Refunds and (Charges)	**6**	**58**	**($140.2)**	**($13.9)**	**($154.1)**

Notes: Numbers may not add due to rounding.
[1] DFO means Distribution Facility Owner.

290 Table 10-2 below provides distribution of charges and refunds information by removing the aggregation of settlement points by distribution system owners and direct-connect market participants with multiple system access services. Table 10-2 indicates that 3 settlement points will receive refunds totaling $0.01 million as a result of this 2017-2018 deferral account reconciliation application, while 604 settlement points will receive charges totaling $154.2 million.

Table 10-2 Distribution of Charges and Refunds Among Settlement Points

Range of Refunds and Charges	Number of Settlement Points DTS and FTS DFO [1]	Number of Settlement Points DTS and FTS Non-DFO	Total Amount, $ 000 000 DTS and FTS DFO [1]	Total Amount, $ 000 000 DTS and FTS Non-DFO	Total
Refund Greater Than $10,000 to $100,000	-	1	-	$0.01	$0.01
Refund Greater Than $0 to $10,000	2	-	$0.00	-	0.0
Subtotal Refunds	**2**	**1**	**$0.00**	**$0.01**	**$0.01**
Charge Greater Than $0 to $10,000	45	42	($0.1)	($0.1)	($0.2)
Charge Greater Than $10,000 to $100,000	105	21	(5.7)	(1.1)	(6.7)
Charge Greater Than $100,000 to $1,000,000	343	30	(113.7)	(9.8)	(123.5)
Charge Greater Than $1,000,000 to $3,000,000	16	2	(20.7)	(3.0)	(23.7)
Subtotal Charges	**509**	**95**	**($140.2)**	**($14.0)**	**($154.2)**
Total Refunds and (Charges)	**511**	**96**	**($140.2)**	**($13.9)**	**($154.1)**

Notes: Numbers may not add due to rounding.
[1] DFO means Distribution Facility Owner.

291 As already noted, the amounts settled on invoices issued after an interim decision would be interim and refundable, and subject to adjustment in the final decision on the 2017-2018 deferral account reconciliation application following a full regulatory review. In the event such adjustment is required, the AESO proposes that the impact of the adjustment be assessed to determine whether a separate settlement process is required or whether the adjustment can be included in the 2019 deferral account reconciliation application expected to be filed in the second quarter of 2020.

11 Conclusion

292 Based on all of the foregoing, the AESO respectfully requests that the Commission approve this 2017-2018 deferral account reconciliation application as applied for, including:

(a) the deferral account balance reconciliations for the calendar years 2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006 as presented in Sections 3 to 8 of this application;

(b) the methodology of allocating deferral account balances to market participants as presented in Section 2 and Appendices E through H of this application, for purposes of recovering and refunding outstanding variance amounts from and to market participants receiving system access service under Rate DTS or Rate FTS of the ISO tariff;

(c) the collection and refund by the AESO of amounts through the use of a one-time collection and refund option similar to that used for previous years' deferral account balances, as more particularly described in Section 10 of this application;

(d) the collection and refund by the AESO of the market participant amounts included in this application as soon as practical on an interim refundable basis with such amounts subject to adjustment in final approvals following a full regulatory review, as described in Section 10 of this application; and

(e) such further and other relief as the Commission may provide.

293 All of which is respectfully submitted this 27th day of September, 2019.

Alberta Electric System Operator

Per: *"Miranda Keating Erickson"*
Miranda Keating Erickson
Vice-President, Markets