

Alberta Electric System Operator 2016 Deferral Account Reconciliation Application

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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 2016 and of changes to deferral account balances for 2015, 2014, 2013, 2012, 2011 and 2010.
- 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 (“base rate”) revenue, tariff revenue offsets¹ 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*, or Rate FTS, *Fort Nelson Demand Transmission Service*, of the Independent System Operator (“ISO”) tariff during 2016, 2015, 2014, 2013, 2012, 2011 and 2010.
- 3 The balances included in this application result in a \$26.2 million net deferral account surplus after applying charges and refunds resulting from Rider C, *Deferral Account Adjustment Rider*, as well as any prior deferral account reconciliation settlements. The \$26.2 million net surplus comprises:
 - a shortfall of \$180.9 million from a first reconciliation of the deferral accounts for 2016;
 - a shortfall of \$63.5 million from a second reconciliation of the deferral accounts for 2015;
 - a surplus of \$86.3 million from a third reconciliation of the deferral accounts for 2014;
 - a surplus of \$92.5 million from a third reconciliation of the deferral accounts for 2013;
 - a surplus of \$61.0 million from a fourth reconciliation of the deferral accounts for 2012;
 - a surplus of \$30.0 million from a fifth reconciliation of the deferral accounts for 2011; and
 - a surplus of \$0.7 million from a fifth reconciliation of the deferral accounts for 2010.
- 4 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

- 5 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.
- 6 The ISO tariffs in place for 2016, 2015, 2014, 2013, 2012, 2011 and 2010 were approved in various decisions and orders of the Commission as follows:
 - Decision 21302-D01-2016 issued March 31, 2016 (ISO tariff effective April 1, 2016);
 - Decision 3473-D01-2015 issued June 17, 2015 (ISO tariff effective July 1, 2015);
 - Decision 2013-325 issued August 28, 2013 and Decision 2014-242 issued August 21, 2014 (ISO tariff effective October 1, 2013);
 - Decision 2011-275 issued June 24, 2011 (ISO tariff effective July 1, 2011); and
 - Decision 2009-141 issued September 18, 2009 (ISO tariff effective October 1, 2009).

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.

- 7 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.
- 8 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*, “to recover unexpected increases in the AESO's working capital deficiency or to refund unexpected surpluses of working capital” and “restore the AESO's working capital deficiency to the AESO's annual average forecast” (which was removed from the ISO tariff effective July 1, 2011); and
 - Rider C, to “recover or refund ... accumulated deferral account balances” and “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.”
- 9 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, including approval of such reconciliation by the Commission. Under the deferral account methodology most recently approved by the Commission,² 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.
- 10 The reconciliation of deferral account balances and the associated allocation of those balances to market participants for certain years included in this application have previously been addressed by the Commission in:
- Decision 21735-D02-2017 issued March 14, 2017 for the AESO's 2015 deferral account reconciliation application;
 - Decision 20866-D01-2016 issued January 14, 2016 for the AESO's 2013-2014 deferral account reconciliation application;
 - Decision 2014-034 issued February 13, 2014 for the AESO's 2012 deferral account reconciliation application; and
 - Decision 2013-034 issued February 7, 2013 for the AESO's 2010-2011 deferral account reconciliation application.
- 11 This application provides a first reconciliation of 2016 deferral account balances; a second reconciliation of 2015 deferral account balances; third reconciliations of 2014 and 2013 deferral account balances; a fourth reconciliation of 2012 deferral account balances; and fifth reconciliations of 2011 and 2010 deferral account balances. The deferral account reconciliations have been prepared on a retrospective, monthly, and production month basis, consistent with the method used in all previous reconciliations starting in 2004 as reviewed and approved by the Commission. More detailed discussion of the deferral account balances is provided in Sections 3 (for 2016), 4 (for 2015), and 5 (for 2014, 2013, 2012, 2011 and 2010) of this application.
- 12 No transactions occurred from on or after January 1, 2016 and up to December 31, 2017 that related, either in whole or in part, to any year prior to 2010. Accordingly, no deferral account reconciliations or adjustments are included in this application for years prior to 2010.

² Decision 21735-D02-2017 issued March 14, 2017

13 The AESO is not proposing any changes to 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.³

14 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.⁴

15 In the 2018 comprehensive ISO tariff application filed by the AESO on September 14, 2017,⁵ 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, 2018.⁶ In Decision 22942-D01-2017 issued on November 28, 2017, the Commission approved the AESO's interim approval request.

16 The approved changes to the AESO's deferral account reconciliation methodology, Rider C and Rate PSC are not applicable to this 2016 application. However, the AESO's next deferral account reconciliation application would rely on the interim approval granted by the Commission in Decision 22942-D01-2017 to apply the revised deferral account reconciliation methodology for the 2017 and future production years. On account of the time required to implement the revised methodology and to test the changes, the AESO currently anticipates filing a combined 2017-2018 deferral account reconciliation application in Q2 2019. The AESO intends to commence preparation of the combined 2017-2018 deferral account reconciliation after January 31, 2019.

1.2 Interim Settlement with Market Participants

17 The AESO is requesting that the Commission approve this application on both a final and interim refundable 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 approved⁷ 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 \$26.2 million net surplus balance reconciled in this application represents probable and material amounts for a number of market participants, and this is one reason it is appropriate to request interim approval.

³ Decision 2014-242 at para 704

⁴ Decision 21735-D02-2017 at para 108.

⁵ Proceeding 22942, Exhibit X0002.01 at para 143, and Exhibit 22942-X0008.

⁶ Proceeding 22942, Exhibit X0002.01 at Section 6.1 and Exhibit 22942-X0008.

⁷ 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.

- 19 The allocation of deferral account balances to market participants has been prepared in this application using the same methodology, 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 2016 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, and this is another reason interim approval is appropriate.
- 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 7.1 of this application.

1.3 Organization of this Application

21 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 2016 Financial Results and Deferral Account Balance** — Discusses cost and revenue variances for 2016 and provides the deferral account balances for 2016.
- 4 2015 Financial Results and Deferral Account Balance** — Discusses adjustments to cost and revenue that occurred after the first 2015 deferral account reconciliation and provides the outstanding deferral account balances for 2015.
- 5 2014, 2013, 2012, 2011 and 2010 Financial Results and Deferral Account Balances** — Discusses adjustments to cost and revenue that occurred after the second 2014 and 2013 deferral account reconciliations, after the third 2012 deferral account reconciliation and the fourth 2011 and 2010 deferral account reconciliations and provides the outstanding deferral account balances for 2014, 2013, 2012, 2011 and 2010.
- 6 Allocation to Market Participants** — Discusses the process by which deferral account balances are allocated to market participants.
- 7 Proposed Method of Refunding and Collecting** — Discusses the proposed method of refunding and collecting deferral account amounts.
- 8 Conclusion.**

Appendices A through K 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 2016, 2015, 2014, 2013, 2012, 2011 and 2010 as presented in Sections 3 to 5 of this application;
- (b) the methodology of allocating deferral account balances to market participants as presented in Section 6 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 7 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 7 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 2015, 2014, 2013, 2012, 2011 and 2010, 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 2016 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, 2017.
- 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 (which method is further described in Section 3.1.1 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 As discussed in Section 2.1.3 below, effective January 1, 2006, transmission system losses are no longer subject to retrospective deferral account reconciliation as was the case for 2005 and prior years. Similarly, and as also discussed in Section 2.1.3 below, costs paid by the AESO for provision of a wind forecasting service for wind-powered generating units are not subject to retrospective deferral account reconciliation. Those costs are therefore excluded from deferral account balances settled in this application.
- 27 The ancillary services and the AESO’s own administrative costs⁸ included in the AESO’s revenue requirement are 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.
- 28 As part of the annual AESO Budget Review Process, AESO management consults with stakeholders in a planning process. In the third quarter of each year, the AESO accordingly 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.

⁸ See Section 1(1)(g) of the *Transmission Regulation*.

29 Specifically, the following data is included for the different components of this application.

- (a) **2016 First Reconciliation** — This application reconciles all costs paid⁹ and revenue collected by the AESO with respect to 2016, from January 1 to December 31, 2017. The reconciliation therefore includes all 2016-related costs and revenue settled on or after January 1, 2016 and up to December 31, 2017, which result in a 2016 deferral account balance shortfall of \$180.9 million.
- (b) **2015 Second Reconciliation** — This application reconciles all costs paid¹¹ and revenue collected by the AESO with respect to 2015, from January 1, 2015 to December 31, 2017. The AESO notes that its previous 2015 deferral account reconciliation application included all 2015-related costs and revenue settled from January 1, 2015 to December 31, 2015. This current application incorporates all later adjustments for 2015 which occurred on or after January 1, 2016 and up to December 31, 2017, which result in a 2015 deferral account balance shortfall of \$63.5 million.
- (c) **2014 Third Reconciliation** — This application reconciles all costs paid¹¹ and revenue collected by the AESO with respect to 2014, from January 1, 2014 to December 31, 2017. The AESO notes that its previous 2015 deferral account reconciliation application included all 2014-related costs and revenue settled from January 1, 2014 to December 31, 2015. This current application incorporates all later adjustments for 2014 which occurred on or after January 1, 2016 and up to December 31, 2017, which result in a 2014 deferral account balance surplus of \$86.3 million.
- (d) **2013 Third Reconciliation** — This application reconciles all costs paid¹¹ and revenue collected by the AESO with respect to 2013, from January 1, 2013 to December 31, 2017. The AESO notes that its previous 2015 deferral account reconciliation application included all 2013-related costs and revenue settled from January 1, 2013 to December 31, 2015. This current application incorporates all later adjustments for 2013 which occurred on or after January 1, 2016 and up to December 31, 2017, which result in a 2013 deferral account balance surplus of \$92.5 million.
- (e) **2012 Fourth Reconciliation** — This application reconciles all costs paid¹¹ and revenue collected by the AESO with respect to 2012, from January 1, 2012 to December 31, 2017. The AESO notes that its previous 2015 deferral account reconciliation application included all 2012-related costs and revenue settled from January 1, 2012 to December 31, 2015. This current application incorporates all later adjustments for 2012 which occurred on or after January 1, 2016 and up to December 31, 2017, which result in a 2012 deferral account balance surplus of \$61.0 million.
- (f) **2011 Fifth Reconciliation** — This application reconciles all costs paid¹¹ and revenue collected by the AESO with respect to 2011, from January 1, 2011 to December 31, 2017. The AESO notes that its previous 2015 deferral account reconciliation application included all 2011-related costs and revenue settled from January 1, 2011 to December 31, 2015. This current application incorporates all later adjustments for 2011 which occurred on or after January 1, 2016 and up to December 31, 2017, which result in a 2011 deferral account balance surplus of \$30.0 million.
- (g) **2010 Fifth Reconciliation** — This application reconciles all costs paid¹¹ and revenue collected by the AESO with respect to 2010, from January 1, 2010 to December 31, 2017. The AESO notes that its previous 2015 deferral account reconciliation application included all 2010-related costs and revenue settled from January 1, 2010 to December 31, 2015. This current application incorporates all later adjustments for 2010 which occurred on or after January 1, 2016 and up to December 31, 2017, which result in a 2010 deferral account balance surplus of \$0.7 million.

⁹ Includes the AESO-forecasted TFO wires related costs (see section 3.1.1 of this application) not yet paid

30 This application does not reconcile any amounts with respect to 2009 or any prior year, as there were no costs paid or revenue collected by the AESO with respect to 2009 and prior years on or after January 1, 2016 and up to December 31, 2017.

2.1.1 Significant Prior-Period Adjustments

31 This application includes certain significant amounts that were accounted for on or after January 1, 2016 and up to December 31, 2017 and attributed to periods prior to 2016 under the production month presentation used in this application. These significant prior-period adjustments include (but are not limited to) the following:

- (a) \$251.2 million decrease attributed to wires costs for years 2014, 2013, 2012 and 2011 resulting from final approval of AltaLink Management Ltd's ("AltaLink's") 2015-2016 general tariff application in Decision 22930-D01-2017 on December 22, 2017, final approval of AltaLink's 2012-2013 transmission deferral account application in Decision 21914-D01-2016 on December 22, 2016, and AltaLink's 2014-2015 transmission deferral account reconciliation application¹⁰ on December 8, 2017;
- (b) \$83.2 million increase attributed to wires costs for 2015 resulting from final approval of AltaLink's 2015-2016 general tariff application in Decision 22930-D01-2017 on December 22, 2017 and AltaLink's 2014-2015 transmission deferral account reconciliation application on December 8, 2017;
- (c) \$46.3 million decrease attributed to wires costs for 2015, 2014, 2013, 2012, 2011 and 2010, resulting from final approval of ATCO Electric Ltd's ("ATCO Electric's") 2015-2017 transmission general tariff compliance application in Decision 22860-D01-2017 on November 21, 2017 and ATCO Electric's 2013-2014 transmission deferral account compliance application¹¹ on November 20, 2017; and
- (d) 8.3 million increase attributed to ancillary services for 2015 resulting from certain conscription events which occurred in 2015 that were financially settled in 2016 which resulted in higher recorded costs for 2015.

2.1.2 Forfeited Refunds of Generating Unit Owner's Contributions

32 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*, 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*.

33 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.

¹⁰ Proceeding 22542

¹¹ Proceeding 23114

34 Table 2-1 summarizes the generating unit owner's contributions collected, refunded, and forfeited from 2016 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 2016, \$5.9 million of generating unit owner's contributions were refunded and \$0.6 million forfeited. Since 2009, 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)								Totals	
		2016	2015	2014	2013	2012	2011	2010	2009 to 2006	2016 to 2006	
1	Contributions, Opening Balance	\$66.8	\$70.8	\$62.7	\$42.5	\$31.0	\$26.4	\$25.1	-	-	
2	Additional Contributions During Year	0.2	0.4	11.5	22.8	13.2	5.3	1.7	25.2	80.3	
3	Contribution Refunds During Year										
4	Refunds to Generating Unit Owners	(5.9)	(4.3)	(3.2)	(2.6)	(1.6)	(0.7)	(0.4)	(0.1)	(18.8)	
5	Forfeited Refunds	(0.6)	(0.1)	(0.2)	(0.0)	(0.0)	(0.0)	(0.1)	-	(0.9)	
6	Total Contribution Refunds During Year	(6.4)	(4.4)	(3.4)	(2.7)	(1.6)	(0.7)	(0.4)	(0.1)	(19.7)	
7	Contributions, Closing Balance	\$60.6	\$66.8	\$70.8	\$62.7	\$42.5	\$31.0	\$26.4	\$25.1	\$60.6	

Note: Numbers may not add due to rounding

2.1.3 Adjustments Not Included

35 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.

36 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.¹² 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.

37 Any adjustments relating to 2016 or prior years which occurred after December 31, 2017 are not included in this application, and will be addressed in a future deferral account reconciliation application.

2.2 Production Month Presentation

38 All costs and revenue included in this application are presented on a production month basis. For those years included in this 2016 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.

¹² Application 1605961, Proceeding 530, Exhibit 0070.00.ISO-530, Application (Revised) at pars 316-322.

- 39 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.
- 40 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.
- 41 The method of allocating the deferral account balances for each of these years to market participants is discussed in detail in Section 6 of this application.

2.3 Deferral Account Balances

- 42 Table 2-2 summarizes the deferral account balances and adjustments addressed in this application for deferral account years 2016, 2015, 2014, 2013, 2012, 2011 and 2010.
- 43 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, were:
- a shortfall of \$110.7 million or 5.8% of costs for 2016;
 - a shortfall of \$300.9 million or 16.2% of costs for 2015;
 - a shortfall of \$128.6 million or 8.0% of costs for 2014;
 - a shortfall of \$125.2 million or 8.3% of costs for 2013;
 - a shortfall of \$86.9 million or 6.5% of costs for 2012;
 - a shortfall of \$136.5 million or 11.3% of costs for 2011; and
 - a shortfall of \$107.3 million or 12.2% of costs for 2010.

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 2016 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:

- a shortfall of \$180.9 million or 9.4% of costs for 2016,
- a shortfall of \$63.5 million or 3.4% of costs for 2015,
- a surplus of \$86.3 million or 5.4% of costs for 2014,
- a surplus of \$92.5 million or 6.1% of costs for 2013,
- a surplus of \$61.0 million or 4.6% of costs for 2012,
- a surplus of \$30.0 million or 2.5% of costs for 2011, and
- a surplus of \$0.7 million or 0.1% of costs for 2010.

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

Component	Deferral Account Reconciliations							Totals 2016 to 2010
	2016	2015	2014	2013	2012	2011	2010	
Base Rate Revenue								
Connection	\$1,722.3	\$1,412.2	\$1,301.6	\$1,005.7	\$886.9	\$736.1	\$580.7	
Operating Reserve	84.1	144.1	180.0	361.5	320.1	286.7	136.3	
Transmission Constraint Rebalancing	0.0	-						
Voltage Control	3.4	0.9	1.8	21.9	28.5	32.0	35.0	
Other System Support Services	5.6	2.9	2.7	5.6	6.5	6.8	6.8	
Total Base Rate Revenue	\$1,815.5	\$1,560.0	\$1,486.1	\$1,394.6	\$1,241.9	\$1,061.7	\$758.8	\$9,318.6
Tariff Revenue Offsets	(\$8.1)	(\$9.3)	(\$10.1)	(\$2.8)	\$1.4	\$7.6	\$13.3	(\$8.1)
Costs Paid								
Wires	(\$1,724.4)	(\$1,581.9)	(\$1,289.6)	(\$1,019.0)	(\$855.0)	(\$746.0)	(\$629.4)	
Ancillary Services	(93.2)	(171.2)	(213.9)	(398.3)	(375.1)	(367.4)	(174.2)	
Other Industry	(14.9)	(14.8)	(15.3)	(17.0)	(18.6)	(15.5)	(15.1)	
General & Administrative	(85.5)	(83.7)	(85.7)	(82.7)	(81.5)	(76.8)	(60.7)	
Total Costs Paid	(\$1,918.0)	(\$1,851.6)	(\$1,604.6)	(\$1,517.0)	(\$1,330.2)	(\$1,205.8)	(\$879.5)	(\$10,306.6)
Deferral Account								
(Shortfall) Surplus	(\$110.7)	(\$300.9)	(\$128.6)	(\$125.2)	(\$86.9)	(\$136.5)	(\$107.3)	(\$996.1)
Rider C (Refund) Collection	(70.1)	220.2	185.5	247.9	158.5	185.8	104.6	1,032.4
Prior DAR ¹ Collection (Refund)	-	17.2	29.4	(30.2)	(10.6)	(19.3)	3.4	(10.1)
Net (Shortfall) Surplus	(\$180.9)	(\$63.5)	\$86.3	\$92.5	\$61.0	\$30.0	\$0.7	\$26.2

Note: Numbers may not add due to rounding

¹ DAR means Deferral Account Reconciliation

- 45 Adjustments to costs and revenue also occur several or many months 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.
- 46 The net impact of the 2016 to 2010 deferral account reconciliation and re-reconciliations provided in this application is a net surplus of \$26.2 million, as provided in Table 2-2.
- 47 For comparison with Table 2-2, Table 2-3 provides a summary of comparable amounts as included in the 2015 deferral account reconciliation application. In addition, Table 2-4 summarizes the differences between Tables 2-2 and 2-3, 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.
- 48 The variances between costs and base rate revenue included in Table 2-2 affect the deferral account balances to be collected from or refunded to market participants. Adjustments to base rate revenue received from individual market participants also affect 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 full reconciliation as for all years in this application.
- 49 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.

Table 2-3 Summary of 2015 Deferral Account Reconciliation Application, \$ 000 000

Component	2016	2015	Deferral Account Reconciliations					Totals 2015 to 2010
			2014	2013	2012	2011	2010	
Revenue								
Connection		\$1,412.8	\$1,301.7	\$1,005.7	\$886.9	\$736.1	\$580.7	
Operating Reserve		144.1	180.0	361.5	320.1	286.7	136.3	
Transmission Constraint Rebalancing		-						
Voltage Control		0.9	1.8	21.9	28.5	32.0	35.0	
Other System Support Services		2.9	2.7	5.6	6.5	6.8	6.8	
Total Revenue		\$1,560.7	\$1,486.2	\$1,394.6	\$1,241.9	\$1,061.7	\$758.8	\$7,503.9
Tariff Revenue Offsets		(\$9.3)	(\$10.1)	(\$2.8)	\$1.4	\$7.6	\$13.3	\$0.0
Costs Paid								
Wires		(\$1,527.4)	(\$1,376.2)	(\$1,111.5)	(\$916.0)	(\$776.0)	(\$630.2)	
Ancillary Services		(162.9)	(213.8)	(398.3)	(375.1)	(367.4)	(174.2)	
Other Industry		(14.8)	(15.3)	(17.0)	(18.6)	(15.5)	(15.1)	
General & Administrative		(83.7)	(85.7)	(82.7)	(81.5)	(76.8)	(60.7)	
Total Costs Paid		(\$1,788.8)	(\$1,691.0)	(\$1,609.5)	(\$1,391.2)	(\$1,235.7)	(\$880.2)	(\$8,596.4)
Deferral Account								
(Shortfall) Surplus		(\$237.4)	(\$214.9)	(\$217.7)	(\$147.9)	(\$166.5)	(\$108.1)	(\$1,092.4)
Rider C Collection (Refund)		220.2	185.5	247.9	158.5	185.8	104.6	1,102.5
Prior DAR ¹ Collection (Refund)		-	40.2	(18.0)	(6.1)	(24.0)	4.5	(3.4)
Net (Shortfall) Surplus		(\$17.2)	\$10.8	\$12.2	\$4.5	(\$4.7)	\$1.0	\$6.7

Note: Numbers may not add due to rounding

¹ DAR means Deferral Account Reconciliation

Table 2-4 Summary of 2016 Net Deferral Account Transactions Since 2015 Deferral Account Reconciliation, \$ 000 000

Component	Deferral Account Reconciliation							Totals 2016to 2010
	2016	2015	2014	2013	2012	2011	2010	
Base Rate Revenue								
Connection	\$1,722.3	(\$0.6)	(\$0.1)	-	-	-	-	
Operating Reserve	84.1	(0.1)	-	-	-	-	-	
Transmission Constraint Rebalancing	0.0	-						
Voltage Control	3.4	-	-	-	-	-	-	
Other System Support Services	5.6	(0.0)	-	-	-	-	-	
Total Base Rate Revenue	\$1,815.5	(\$0.7)	(\$0.1)	-	-	-	-	\$1,814.7
Tariff Revenue Offsets	(\$8.1)	\$0.0	-	-	-	-	-	(\$8.1)
Costs Paid								
Wires	(\$1,724.4)	(\$54.5)	\$86.5	\$92.5	\$61.0	\$30.0	\$0.7	
Ancillary Services	(93.2)	(8.3)	(0.1)	-	-	-	-	
Other Industry	(14.9)	-	-	-	-	-	-	
General & Administrative	(85.5)	-	-	-	-	-	-	
Total Costs Paid	(\$1,918.0)	(\$62.8)	\$86.4	\$92.5	\$61.0	\$30.0	\$0.7	(\$1,710.2)
Deferral Account								
(Shortfall) Surplus	(\$110.7)	(\$63.5)	\$86.3	\$92.5	\$61.0	\$30.0	\$0.7	\$96.3
Rider C Refund (Collection)	(70.1)	-	-	-	-	-	-	(70.1)
Prior DAR ¹ Collection (Refund)	-	-	-	-	-	-	-	-
Net (Shortfall) Surplus	(\$180.9)	(\$63.5)	\$86.3	\$92.5	\$61.0	\$30.0	\$0.7	\$26.2

Note: Numbers may not add due to rounding

¹ DAR means Deferral Account Reconciliation

2.4 Cost Prudency Considerations

50 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 3.1.1 of this application, the wires costs included in this application reflect the approach approved by the Commission in Decision 2011-275.

51 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.

52 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.¹³

53 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.

54 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.

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

¹³ Decision 2014-242 at para 36.

- 56 Where significant adjustments to 2015 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 2015 and prior years which were already included in the 2015 deferral account reconciliation application was considered in the 2015 deferral account reconciliation application and prior proceedings, and should not be reviewed again.
- 57 The presentation of a second reconciliation of the 2015 deferral accounts, of third reconciliations of the AESO's 2014 and 2013 deferral accounts, of a fourth reconciliation of the AESO's 2012 deferral accounts and of fifth reconciliations of the AESO's 2011 and 2010 deferral accounts in this application does not imply that all costs relating to those years are again subject to review. Rather, the second, third, fourth, and fifth reconciliations are provided to appropriately allocate all costs related to those years to market participants, not to re-examine the prudence of costs which have already been approved.
- 58 The AESO has accordingly provided schedules and explanations of significant variances by line item for 2016 and of significant adjustments to costs for 2015 and prior years where such adjustments have not previously been included in a deferral account reconciliation application, in Sections 3, 4 and 5 of this application.

2.5 Reconciliation to Financial Statements

- 59 The AESO's audited financial statements present costs and revenue on a financial or accounting year basis rather than on a production month 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 months after the financial statements are audited, with those adjustments attributed back on a production month basis to the applicable year.
- 60 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.
- 61 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

- 62 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.
- 63 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.
- 64 The AESO modifies and validates the software program used to prepare deferral account reconciliations and allocations for each successive annual reconciliation.

65 In summary, the AESO has prepared and filed this 2016 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

66 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.

67 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.

68 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.

69 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 6.2 of this application.

2.8 Future Deferral Account Reconciliations

70 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 except for the 2017-2018 deferral account reconciliation. As the AESO has proposed revisions to Rate PSC and Rider C in the 2018 comprehensive ISO tariff application and received interim approval for deferral account reconciliation methodology changes, that apply to the 2017 production year, and the AESO’s ability to implement methodology changes into the deferral reconciliation system (“DRS”) may delay the start date of the 2017-2018 deferral account reconciliation to Q3 2018.

71 The deferral account reconciliation in this application is based on final settlement volumes for 2016, and a December 31, 2017 data cut-off date.

72 During the 2014 ISO tariff application proceeding, the AESO summarized its consultation on and consideration of potential changes to Rider C and to deferral account reconciliation processes. In Decision 2014-242, the Commission stated that, except as set out in Section 7.3 of the decision, it was not making any “specific directions to the AESO in respect of deferral account processes.”¹⁴ In Section 7.3 of the decision, the Commission directed the AESO as follows:

Therefore, the Commission directs the AESO to discuss the related matters of annual tariff updates, deferral account reconciliation processes and Rider C design with stakeholders prior to filing its next comprehensive GTA, and to provide a report on the outcome of any such discussions, including any recommended changes (if any) within its next comprehensive GTA¹⁵ [general tariff application].

73 The AESO accordingly includes no proposals for changes to Rider C or the deferral account reconciliation process in this application. As detailed above in Section 1.1, the AESO has consulted with stakeholders and has proposed revisions to Rate PSC and Rider C as part of its 2018 comprehensive ISO tariff application.

¹⁴ Decision 2014-242 at para 691.

¹⁵ *Ibid*, at para 704.

3 2016 Financial Results and Deferral Account Balance

- 74 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.
- 75 In determining the financial results and deferral account balance for 2016, all cost and revenue transactions that occurred from January 1, 2016, to December 31, 2017 and that relate to 2016 have been included in the reconciliation. These transactions establish the 2016 production month data for deferral account reconciliation purposes in this application. The result of these transactions is \$1,918.0 million in costs and \$1,737.2 million in market participant revenue (including net Rider C collections and refunds) being attributed to 2016. The difference between costs and revenue is a shortfall of \$180.9 million, which is the net deferral account balance for 2016.
- 76 The AESO notes that cost and revenue transactions that occurred from January 1, 2016, to December 31, 2017 may also relate, in whole or in part, to years prior to 2016. In such instances, the transaction (or part of the transaction) which relates to a prior year has been assigned to the prior year, in accordance with the production month presentation described in Section 2.2 of this application. Detail on the assignment between 2016 and prior years for transactions which occurred after December 31, 2015 is provided in Appendix D-1 to this application.

3.1 2016 Cost Variances

- 77 The AESO's 2016 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).
- 78 The TFO wires costs included in the AESO's 2016 revenue requirement were based on the TFO tariff approved by the Commission for, or applied for by, each TFO at the time the AESO prepared the 2016 ISO tariff update¹⁶ in early 2016, as filed on February 2, 2016. The AESO received approval in Decision 21302-D01-2016 issued on March 31, 2016, for rates to be effective April 1, 2016. The TFO wires costs reflected the status of each TFO's application for its 2016 tariff in accordance with the approach described in the 2010 ISO tariff application and approved in Decision 2011-275, as discussed in more detail in Section 3.1.1 below.
- 79 Following consultation with stakeholders, AESO management submitted the *AESO 2016 Business Plan and Budget Proposal* to the AESO Board on October 29, 2015. 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 2016. The *AESO 2016 Business Plan and Budget Proposal* was also provided to stakeholders and posted on the AESO website and is included as Appendix I in this application.

¹⁶ Proceeding 21302, Exhibit X0005 – Appendix C, 'C-1 Rev Req'

80 The AESO Board Decision 2016-BRP-001, AESO 2016 Business Plan and Budget Proposal, dated December 16, 2015 approved the 2016 forecast costs included in the AESO 2016 Business Plan and Budget Proposal for ancillary services, losses, and the AESO's own administrative costs and is included as Appendix J in this application. On February 18, 2016, the AESO Board amended 2016 own administrative costs in AESO Board Decision 2016-BRP-002, Amended 2016 General and Administrative Budget, to reflect an additional \$1.5 million as the transmission portion for potential climate change initiatives.

81 Additional information on the AESO's business priorities and own administrative costs budget for 2016 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: 2016.

82 Table 3-1 of Appendix K presents the AESO's 2016 revenue requirement, 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) as discussed above. Table 3-1 of Appendix K also includes recorded costs as incurred or accrued for 2016, and variances between approved and recorded costs in both dollar amounts and as a percentage of approved costs.

83 Total 2016 recorded costs are \$48.9 million (or 2.5%) lower than the total 2016 approved forecast. This variance consists of 2016 recorded costs being:

- \$39.9 million (or 2.4%) higher than the 2016 approved costs for wires,
- \$89.4 million (or 48.9%) lower than the 2016 approved costs for ancillary services,
- \$0.6 million (or 4.0%) lower than the 2016 approved costs for other industry costs, and
- \$1.2 million (or 1.5%) higher than the 2016 approved costs for general and administrative costs.

84 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. The AESO considers a line item variance to be significant when it exceeds $\pm\$8.0$ million, which represents approximately 10% of the \$85.5 million general and administrative costs component of the AESO's 2016 revenue requirement. A line item variance smaller than $\pm\$8.0$ million is also considered significant when it is both at least $\pm\$0.8$ million and at least $\pm 10\%$ of the approved line item amount. The $\pm\$0.8$ million threshold represents approximately 1% of the \$85.5 million general and administrative costs component of the AESO's revenue requirement, while the AESO considers $\pm 10\%$ to be a reasonable threshold below which specific variance explanations are not required.

85 Variances exceeding these thresholds are shaded in Table 3-1 of Appendix K, with explanations provided by row number in the following discussion. Where variances were either lower than $\pm\$0.8$ million or less than $\pm 10\%$ (except where such variance is $\pm\$8.0$ million or higher) explanations are not provided, as such variances are small enough that specific variance explanations are not required.

3.1.1 Wires Costs

86 The AESO's 2016 wires costs forecast is based on the 2016 ISO tariff update application¹⁷. Total wires costs (shown in row 29 of Table 3-1 of Appendix K) include costs related to invitation to bid on credit ("IBOC") and location based credit standing offer ("LBC SO") programs, which were initiated to provide a non-wires solution to transmission wires issues in Alberta and for which the AESO forecast costs in conjunction with ancillary services costs approved by the AESO Board.

¹⁷ Proceeding 21302, Exhibit 0005, Appendix C— 2016 Rates Calculations, Tab C-1 2016 Updated Forecast Costs

- 87 The forecast of TFOs' wires costs (shown in rows 13-22 of column (a) of Table 3-1 of Appendix K) has been calculated in accordance with the following approach, which was described in the 2010 ISO tariff application, approved in Decision 2011-275¹⁸ and used in the calculations of wires costs in the 2016 ISO tariff update
- (a) If a TFO has received final Commission approval for its 2016 tariff, the AESO includes the approved cost for that 2016 TFO tariff.
 - (b) If a TFO has applied for its 2016 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 2016 TFO tariff costs included in the refiling.
 - (c) If a TFO has applied for its 2016 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 2016 tariff application above or below the prior approved costs.
 - (d) If a TFO has not yet applied for its 2016 tariff, the AESO includes the TFO tariff costs most recently approved by the Commission on either a final or interim basis.
- 88 The specific determinations of the forecast wires cost for each TFO, shown in rows 13-22 of column (a) of Table 3-1 of Appendix K are detailed in Appendix D-1, *Wires Forecast Detail (2010 to 2016)*, to this application.
- 89 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*. The isolated generation cost offset was estimated at \$2.9 million in 2016 based on 2015 recorded volumes for isolated communities and the 2016 forecast pool price.
- 90 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".
- 91 The recorded 2016 wires costs were based on billings by the TFOs to the AESO based on 2016 TFO tariffs, approved on an interim or final basis, and on accruals estimated by the AESO using the approach described above. Final approvals were not issued before the end of 2016 for the 2016 TFO tariffs of AltaLink, ATCO Electric, ENMAX, and TransAlta.
- 92 Where final costs approved differ from the costs included in this deferral account reconciliation the differences will be included in the next deferral account reconciliation application filed after the final costs are approved.
- 93 The recorded wires costs for 2016 totaled \$1,724.4 million, which is \$39.9 million (or 2.4%) higher than the 2016 forecast of \$1,684.5 million on which 2016 ISO tariff rates were based. The variance results from Commission Decision 22930-D01-2017 on December 22, 2017 on AltaLink's 2015-2016 TFO compliance tariff filing on a final basis.

¹⁸ Decision 2011-275 at para 98.

¹⁹ Process described in paragraph 88.

Row 13 AltaLink

94 The 2016 recorded cost for AltaLink wires is \$834.1 million, which is \$142.5 million (or 20.6%) higher than the 2016 forecast of \$691.6 million.

95 The first reconciliation recorded costs reflect Decision 22930-D01-2017 on December 22, 2017 regarding the final approval of AltaLink's 2015-2016 general tariff compliance filing.

Row 14 ATCO Electric

96 The 2016 recorded cost for ATCO Electric wires is \$690.7 million, which is \$106.2 million (or 13.3%) lower than the 2016 forecast of \$796.9 million.

97 The first reconciliation recorded costs reflect Decision 22860-D01-2017 on November 21, 2017 regarding the final approval of ATCO Electric's 2015-2017 general tariff compliance filing.

Row 15 ATCO Electric – Isolated Generation

98 The 2016 recorded payments to the AESO for ATCO Electric isolated generation is \$1.3 million, which is \$1.6 million (or 54.2%) lower than the 2016 forecast of \$2.9 million. The lower than expected payments result from the 2016 recorded pool price of \$18.28/MWh, which is \$22.71/MWh (or 55.4%) lower than the 2016 approved forecast pool price of \$40.99/MWh.

Row 27 Location Based Credit Standing Offer

99 The 2016 recorded cost for the LBC SO program was \$3.2 million, which is \$0.8 million (or 19.3%) lower than the 2016 approved forecast of \$4.0 million. The LBC SO program was initiated in 2001 as an incentive for generation to locate closer to major load centers and provide a non-wires solution to transmission wires issues in Alberta. Annual costs are a combination of payments for availability and activation. In 2016, the units were dispatched less than forecast.

100 The 2016 recorded costs for the remaining TFOs and for the IBOC program did not vary significantly from the 2016 forecast.

3.1.2 Ancillary Services

101 The recorded ancillary service costs for 2016 totaled \$93.2 million, which is \$89.4 million (or 48.9%) lower than the 2016 approved forecast of \$182.6 million. The variance includes:

- lower than forecast active operating reserve costs of \$73.0 million (or 58.1%);
- lower than forecast standby operating reserve of \$8.7 million (or 38.1%);
- lower than forecast actual credit for trading fees and other related charges of \$1.0 million (or 78.3%);
- lower than forecast transmission must-run ("TMR") costs of \$3.3 million (or 81.3%); and
- lower than forecast transmission constraint rebalancing ("TCR") costs of \$4.0 million (or 99.8%).

Rows 34 to 45 Operating Reserve

102 Operating reserve is generating capacity or load that is held in reserve and made available to the system controller to manage the transmission system supply-demand balance in real time. Operating reserve comprises regulating reserve and contingency reserve (including spinning and supplemental reserve) with the minimum volumes of operating reserve required based on Alberta Reliability Standards.

103 Regulating reserve refers to the generation capacity, energy and maneuverability responsive to the AESO's automatic generation control ("AGC") system that is required to automatically balance supply and demand on a minute-to-minute basis in real time.. Regulating reserve tracks variations in demand that cannot be met with energy dispatches. Because variations in supply and demand can be either positive or negative, regulating reserve has a range with an upper and lower limit. The volumes of regulating reserve are specified as a range in megawatts over which a level of control is required by the AGC system.

- 104 Spinning reserve is unloaded generation that is synchronized to the system, automatically responsive to deviations in frequency, and ready to serve additional energy in response to an AESO system controller directive. Spinning reserve suppliers must be able to ramp up their generator within 10 minutes of receiving a system controller directive.
- 105 Supplemental reserve is unloaded generation, off-line generation or load that is ready to serve additional energy or reduce energy within 10 minutes of receiving an AESO system controller directive. Supplemental reserves are not required to respond to frequency deviations.
- 106 Spinning and supplemental reserve is required in order to restore frequency following the loss of generation in Alberta or in the Western Electricity Coordinating Council (“WECC”) region. Alberta reliability standards²⁰ set out requirements for maintaining specific volumes of spinning and supplemental reserve in order to maintain reliability.²¹

Rows 34 to 37 Active Operating Reserve

- 107 Active operating reserve is required to automatically balance small changes in supply and demand and to maintain system reliability during unplanned events such as the loss of a generator, loss of a transmission line, or a sudden increase in demand. Alberta reliability standards define the minimum levels that must be procured.
- 108 2016 recorded cost was \$52.6 million, which is \$73.0 million (or 58.1%) lower than the 2016 approved forecast of \$125.7 million, and comprise the following amounts:
- For active regulating reserve, the 2016 recorded cost was \$29.4 million, which is \$2.1 million (or 7.8%) higher than the 2016 approved forecast of \$27.2 million.
 - For active spinning reserve, the 2016 recorded cost was \$16.1 million, which is \$41.6 million (or 72.1%) lower than the 2016 approved forecast of \$57.7 million.
 - For active supplemental reserve, the 2016 recorded cost was \$7.2 million, which is \$33.6 million (or 82.4%) lower than the 2016 approved forecast of \$40.7 million.
- 109 The recorded cost of all active operating reserve is the product of volumes procured multiplied by operating reserve price, which is indexed to the hourly pool price and represents approximately 80 per cent of total operating reserve costs. The costs are impacted by pool price fluctuations, supply of offered reserves and market participant offer behavior. The 2016 recorded average pool price was \$18.28/MWh, which is \$22.71/MWh (or 55.4%) lower than the 2016 approved forecast average pool price of \$40.99/MWh. The 2016 recorded active operating reserve volumes were 5,262 GWh, which is 648 GWh (or 11.0%) lower than the 2016 approved forecast of 5,910 GWh. Lower costs are also associated with changes to offer behavior.

²⁰ BAL-002-WECC-AB1-2

²¹ Refer to [Consolidated Authoritative Document Glossary](#) on the AESO website at www.aeso.ca by following the path AESO ► Rules, Standards and Tariff ► Consolidated Authoritative Document Glossary.

Rows 29 to 42 Standby Operating Reserve

- 110 Standby reserve is additional reserve when the active operating reserves are insufficient to ensure system reliability. Pricing of standby operating reserve includes two components: (i) an option premium, paid for the capability to activate the standby reserves, and (ii) an activation price, paid only if the standby reserves are activated. Costs for operating reserve represent approximately 20 per cent of total operating reserve costs.
- For standby regulating reserve, the 2016 recorded cost was \$8.1 million, which is \$1.2 million (or 17.4%) higher than the 2016 approved forecast of \$6.9 million.
 - For standby spinning reserve, the 2016 recorded cost was \$4.8 million, which is \$7.5 million (or 61.0%) lower than the 2016 approved forecast of \$12.4 million.
 - For standby supplemental reserve, the 2016 recorded cost was \$1.2 million, which is \$2.3 million (or 66.2%) lower than the 2016 approved forecast of \$3.5 million.
- 111 In total, 2016 recorded standby operating reserve volumes were lower than the 2016 approved forecast. Standby premium volumes were 2,049 GWh which is 61 GWh (or 2.9%) lower than the 2016 approved forecast of 2,109 GWh. Standby activation volumes were 85 GWh which is 18 GWh (or 27.0%) higher than the 2016 approved forecast of 67 GWh.

Row 44 Trading Fees and Other Related Charges

- 112 The 2016 recorded cost for trading fees paid to the operating reserve market operator, Alberta Watt Exchange and other related charges was \$0.3 million, which is \$1.0 million (or 78.3%) lower than the 2016 approved forecast of \$1.3 million. The forecast included recoveries related to non-compliance and liquated damages of \$2.0 million compared to recorded recoveries of \$0.9 million. The recorded trading costs were \$0.7 million which are comparable to the forecast.

Rows 48 to 56 Other Ancillary Services

- 113 The AESO procures other ancillary services for the secure and reliable operation of the AIES. These services are procured through a competitive procurement process where possible, or in such instances where procurements may not be feasible, through bilateral negotiations. These services include black start, TMR, LSSi, reliability services, transmission constraint rebalancing ("TCR"), and Poplar Hills. The AESO notes that there were no contracts for interruptible load remedial action scheme ("ILRAS") and generator remedial action scheme ("RAS") services in 2016 and therefore no forecast or recorded costs.
- 114 The 2016 recorded cost of other ancillary services was \$26.8 million, which is \$8.7 million (or 24.5%) lower than the 2016 approved forecast of \$35.5 million.
- 115 Black start service is provided by generators that are able to restart their generation facility with no outside source of power. In the event of a system-wide black-out, black start services are used to re-energize the transmission system and provide start-up power to generators who cannot self-start. Black start providers are required in specific areas of the AIES to ensure the entire system has adequate start-up power. The 2016 recorded cost did not vary significantly from the 2016 approved forecast.

116 TMR occurs when generation is 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. In circumstances when this service is required for an unforeseeable event and there is no contracted TMR, non-contracted generators may be dispatched to provide this service (referred to as conscripted TMR). In the event of foreseeable TMR, the AESO may enter into a contract with a generator to provide TMR services. The 2016 recorded cost for TMR was \$0.7 million, which is \$3.3 million (or 81.3%) lower than the 2016 approved forecast of \$4.0 million. Certain conscription events which occurred in 2016 will be financially settled in 2018. Following the settlements in 2018, recorded costs will remain lower than forecast. There were no contracts for TMR services in 2016. The number of conscription events and event-related costs are difficult to forecast.

117 LSSi is interruptible load that can be armed to trip, either automatically or manually, on the loss of the Alberta-British Columbia intertie to allow for increased import available transfer capacity ("ATC"). The 2016 recorded cost did not vary significantly from the 2016 approved forecast.

118 Reliability service is provided through an agreement with Powerex Corp. for grid restoration balancing support in the event of an Alberta blackout and emergency energy in the event of supply shortfall. The 2016 recorded cost did not vary from the 2016 approved forecast.

119 TCR service is provided when the transmission system is unable to deliver electricity from a generator to a given electricity consuming area without contravening reliability requirements. When this occurs, a market participant downstream of a constraint may be dispatched for purposes of TCR under the ISO rules and would receive a TCR payment for energy provided for that purpose. The 2016 recorded cost for TCR was \$0.01 million, which is \$3.99 million (or 99.8%) lower than the 2016 approved forecast of \$4.0 million. The number of events and event-related costs for TCR are difficult to forecast.

120 The 2016 recorded cost for Poplar Hill did not vary significantly from the 2016 approved forecast.

3.1.3 Other Industry Costs

121 The 2016 recorded other industry cost was \$14.9 million, which is \$0.6 million (or 4.0%) lower than the 2016 approved forecast of \$15.5 million.

122 Regulatory process costs are associated with the AESO's involvement in a Commission proceeding to hear objections and complaints to ISO Rules or a regulatory application and costs incurred to respond to specific agency-related directions or recommendations that are beyond the routine operations of the AESO. This does not include application preparation costs.

Row 63 Regulatory Process Costs

123 The AESO's involvement in regulatory proceedings is not discretionary and the number and complexity of proceedings is difficult to forecast. The 2016 recorded cost of regulatory process costs was \$0.4 million, which is \$1.0 million (or 70.4%) lower than the 2016 approved forecast of \$1.4 million, primarily due to the proceeding for an ISO rule objection and complaint²² forecasted as a transmission cost now determined to be an energy market cost.

124 The 2016 recorded costs for WECC and the AESO's share of Commission costs did not vary significantly from the 2016 approved forecast.

²² Proceeding 790, Milner Power Inc. and ATOC Power Ltd. Complains Regarding ISO Transmission Loss Factor Rule and Loss Factor Methodology.

3.1.4 General and Administrative Costs

The 2016 recorded general and administrative cost was \$85.5 million, which is \$1.2 million (or 1.5%) higher than the 2016 approved forecast of \$84.3 million. This variance was primarily due to higher costs for staff and benefits, and computer and telecomm services and maintenance, and interest, offset by lower costs for contract services and consultants, administration, facilities and amortization.

The 2016 recorded costs for the general and administrative components did not vary significantly from the 2016 approved forecast.

3.1.5 Capital

Capital investment is required by the AESO for the development of information technology systems necessary to support the transmission function, for its System Coordination Centre ("SCC") facility and infrastructure, and for leasehold improvements, furniture, and equipment. In particular, the development and acquisition of intangible and capital assets, including significant investment in information technology systems, is a key component of the AESO's business operations. Capital costs recorded in 2016 were \$25.6 million for the AESO's transmission function.

Total capital cost recorded in 2016 was \$31.4 million, which is \$6.6 million (or 17.3%) lower than the 2016 approved forecast of \$38.0 million as provided in Table 3-2 of Appendix K.

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.

The 2016 recorded cost for key capital initiatives was \$3.2 million, which is \$2.1 million (or 39.8%) lower than the 2016 approved forecast primarily due to the re-prioritization and deferral of components of the program, in particular market evolution and information technology/cyber security advancements. Short-term actions were taken to mitigate any risks related to project postponements.

The 2016 recorded cost for other capital initiatives was \$2.6 million, which is \$2.7 million (or 51.3%) lower than the 2016 approved forecast primarily due to the re-prioritization and deferral of components of the program.

The 2016 recorded cost for the EMS 3.0 upgrade implementation phase was \$15.4 million, which is \$1.7 million (or 9.7%) lower than the 2016 approved forecast due to the timing of a number of planned expenditures for this multi-year program.

At the end of 2016, capital projects were allocated among AESO business functions on a project-by-project basis, resulting in 82% of the total recorded capital being allocated to transmission.

3.2 2016 Revenue Variances

Table 3-3 of Appendix K presents AESO revenue forecast to be collected from Rate DTS and Rate FTS base rates in effect during 2016. The table also includes recorded revenue as collected through 2016 base rates, as well as variances between forecast and recorded base rate revenue in both dollar amounts and as a percentage of forecast revenue.

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.

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.

- 137 The base rates which were in effect during the period January 1, 2016 to March 31, 2016 were approved at the conclusion of the proceeding on the 2015 ISO tariff update on an interim basis in Decision 20753-D01-2015 issued on November 16, 2015 and on a final basis in Decision 20753-D02-2015 issued on December 21, 2015. Those rates were based on the AESO's 2015 revenue requirement and 2015 forecast billing determinants for January 1 to December 31, 2015.
- 138 The base rates which were in effect during the period April 1, 2016 to December 31, 2016 were approved at the conclusion of the proceeding on the 2016 ISO tariff update on a final basis in Decision 21302-D01-2016 issued on March 31, 2016. Those rates were based on the AESO's 2016 revenue requirement and 2016 forecast billing determinants for January 1 to December 31, 2016.
- 139 To calculate the 2016 forecast base rate revenue presented in Table 3-3 of Appendix K, the AESO applied the rates in effect during 2016 to its corresponding forecast of billing determinants for 2016. Those billing determinants were based on the 2016 demand forecast in the AESO's *2014 Long-term Outlook* ("2014 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 2016 billing determinants for the 2016 ISO tariff update were adjusted by a reduction of 1.5% to reflect expected changes in electricity consumption in 2016 due to a decline in economic growth rate compared to that included in the 2014 LTO.
- 140 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. The 2016 recorded base rate revenue in column (b) of Table 3-3 of Appendix K totaled \$1,815.5 million, which is \$125.3 million (or 6.5%) lower than the 2016 forecast base rate revenue of \$1,940.7 million. The base rate revenue variances for individual Rate DTS components varied from 99.8% lower than forecast to 9% higher than forecast, as discussed below.
- 141 The 2016 recorded base rate revenue for connection was \$1,722.3 million, which is \$36.4 million (or 2.1%) lower than the 2016 forecast base rate revenue of \$1,758.8 million. The decrease results from recorded volumes, on average, lower than forecast for 2016. Coincident metered demand volumes were lower than forecast by 3.7% and metered energy volumes were lower than forecast by 5.6%.
- 142 The 2016 recorded base rate revenue for operating reserve was \$85.1 million, which is \$85.1 million (or 50.3%) lower than the 2016 forecast base rate revenue of \$169.2 million. Operating reserve costs are allocated hourly to market participants under Rate DTS and Rate FTS and discussed in Section 3.1.2 above.
- 143 The 2016 recorded base rate revenue for TCR was \$0.01 million, which is \$3.99 million (or 99.8%) lower than the 2016 forecast base rate revenue of \$4.0 million. TCR costs are allocated hourly to market participants under Rate DTS and Rate FTS and discussed in Section 3.1.2 above.
- 144 The base rate revenue variances for voltage control and other system support services were insignificant.

3.3 2016 Deferral Account Balance

- 145 Costs and base rate revenue variances through the year give rise to deferral account balances. The deferral account balances for 2016 are summarized in Table 3-4 of Appendix K, and reflect the 2016 recorded costs and revenue provided in Tables 3-1 and 3-3 of Appendix K respectively. Table 3-4 of Appendix K also includes tariff revenue offsets, which increase the amount of revenue that would otherwise need to be collected through Rate DTS and Rate FTS.

- 146 As noted in Section 1.1 of this application, the AESO's tariff includes the use of deferral accounts, which were incorporated in the ISO tariff through Rider C. The AESO determined Rider C charges and refunds in accordance with the rider's approved purpose to "restore the deferral account balances to zero (0) over the following calendar quarter". The AESO sets Rider C rates each quarter based on estimates of deferral account balances at the end of the quarter and forecast billing volumes for the quarter. Rider C charges and refunds attributed to 2016 are provided in column (e) of Table 3-4 of Appendix K.
- 147 The recorded revenue collected with respect to 2016 is therefore the sum of base rate revenue as discussed in Section 3.2 above, plus recorded tariff revenue offsets and revenue collected or refunded through Rider C during 2016.
- 148 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 2016 reconciliation after final settlement of 2016 volumes. Any deferral account year-end amounts remaining to be refunded or collected after December 31, 2017 are retained by the AESO for reconciliation in this 2016 deferral account reconciliation application and will not be refunded or collected through Rider C during 2018.
- 149 Rider C collections and refunds for 2016 maintained the annual deferral account balance at a reasonable level of less than $\pm 2\%$ of costs for the operating reserve, TCR, and other system support services rate components.
- 150 An under-collection of \$191.6 million (or 10.5%) existed for the connection component mainly due to the anticipation of a wires cost credit from AltaLink's 2015-2016 TFO tariff compliance application,²³ requesting rate relief for the production years 2011-2016 (refunding CWIP collected from rate payers). The AESO used the Rider C mechanism, in 2016, to ensure that the large forecast of refund of wires costs of over \$300 million could be transferred to rate payers before the final approval of this 2016 deferral account reconciliation application and minimize rate impact of the amounts.
- 151 An over collection of \$10.7 million (or 1437.0%) existed for the voltage control rate component due to lower than anticipated financial settlement of unforeseeable TMR services that were provided in 2016 but will be paid in 2018. Financial settlement was anticipated for 2016 and therefore included in the 2016 Rider C collections, resulting in the net over-collection during the year.

²³ Proceeding 21827

4 2015 Financial Results and Deferral Account Balance

152 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.

153 Variances of recorded costs and revenue from the approved forecasts of costs and revenue were explained in the first reconciliation of the 2015 deferral account (for those transactions included in that first reconciliation). Those variances were approved in Decision 21735-D02-2017 on the 2015 deferral account reconciliation issued on March 14, 2017. No further discussion of those variances is provided in this application. Only 2015 cost and revenue adjustments which arise from transactions that occurred after the first reconciliation are discussed in this application. These transactions establish the 2015 production month data for second reconciliation purposes in this application.

154 Specifically, the 2015 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 2015;
- occurred after the cut-off date of December 31, 2015 for data included in the 2015 first reconciliation; and
- occurred up to December 31, 2017.

4.1 2015 Deferral Account Second Reconciliation

155 The AESO filed a first reconciliation of its 2015 deferral accounts as part of its 2015 deferral account reconciliation application submitted to the Commission on June 17, 2016. That first reconciliation included all relevant costs and revenue that occurred from January 1, 2015, to December 31, 2015 and that related to 2015. The first reconciliation deferral account balance for 2015 was a shortfall of \$17.2 million as provided in Table 2-3 of Appendix K in this application. The first reconciliation balance was settled with market participants in October 2016 in accordance with the interim approval of the 2015 deferral account reconciliation in Decision 21735-D01-2016, issued on September 29, 2016 and considered final in Decision 21735-D02-2017, issued on March 14, 2017.

156 The first reconciliation resulted in \$1,788.8 million in costs and \$1,788.8 million in market participant revenue (including tariff revenue offsets and net Rider C collections and refunds, as well as first reconciliation collections and refunds) being attributed to 2015.

157 The inclusion of additional transactions increases the 2015 recorded costs to \$1,851.6 million and the 2015 recorded total revenue, plus revenue collected or refunded through Rider C and previous deferral account reconciliation amounts, remained at \$1,788.8 million.

4.2 2015 Cost Adjustments after First Reconciliation

158 The AESO's 2015 forecast revenue requirement was approved either by the Commission (for TFOs) or by the AESO Board (for ancillary services and the AESO's own administrative costs), and is provided as column (a) in Table 4-1 of Appendix K.

159 Four significant cost adjustments occurred during this period:

- \$83.2 million increase attributed to AltaLink wires costs;
- \$29.2 million decrease attributed to ATCO Electric Ltd. wires costs;
- \$0.6 million increase attributed to City of Lethbridge wires costs; and
- \$8.3 million increase attributed to TMR costs.

160 The 2015 second reconciliation costs were \$1,851.6 million, which is \$62.8 million (or 3.5%) higher than the first reconciliation costs of \$1,788.8 million.

161 Table 4-1 of Appendix K includes the following information for 2015:

- column (a) contains the 2015 forecast costs included in the first reconciliation in the 2015 deferral account application;
- column (b) contains the 2015 recorded costs included in the first reconciliation in the 2015 deferral account application;
- column (c) contains the 2015 recorded costs included in this application;
- column (d) provides the additional amounts attributed to 2015 which occurred after the cut-off date for transactions included in the first reconciliation — that is, the cost adjustments between the first and second reconciliations; and
- column (e) provides the 2015 additional amounts from column (d) as a percentage of the recorded costs from the first reconciliation in column (b).

162 In the first reconciliation for 2015, in the 2015 deferral account reconciliation application, the AESO considered a line item variance to be significant when it exceeded $\pm\$8.0$ million, or, if it was smaller than $\pm\$8.0$ million, when it was both at least $\pm\$0.8$ million and at least $\pm 10\%$ of the approved line item amount.

163 In this second reconciliation for 2015, adjustments are transactions that occurred after the first reconciliation. It seems inappropriate to use the same threshold levels for the adjustment explanations as those used for variance explanations in the first reconciliation. The AESO considers it reasonable to reduce the adjustment explanation thresholds to half of that of the variance explanation established in the first reconciliation, recognizing that costs may have varied from forecast in the first reconciliation and may also vary again due to further adjustments in this second reconciliation.

164 Therefore, in Table 4-1 of Appendix K, the AESO considered a line item adjustment to be significant when it exceeded $\pm\$4.0$ million, or, if it was smaller than $\pm\$4.0$ million, when it was both at least $\pm\$0.4$ million and at least $\pm 5\%$ of the first reconciliation recorded costs item amount. Adjustments exceeding these thresholds are shaded in Table 4-1 of Appendix K, with explanations provided by row number in the following discussion. Where adjustments were either lower than $\pm\$0.4$ million or less than $\pm 5\%$ (except where such adjustments are $\pm\$4.0$ million or higher) explanations are not provided, as such adjustments are considered small enough that specific adjustment explanations are not required.

4.2.1 Wires Costs

The second reconciliation recorded costs were based on billings by the TFOs and accruals for 2015 up to December 31, 2017, which is the data cut-off date for this application. Wires forecast costs by TFO discussed below are detailed in Appendix D-5 to this application.

Row 14 AltaLink

The 2015 second reconciliation recorded cost for AltaLink wires was \$744.0 million, which is \$83.2 million (or 12.6%) higher than the first reconciliation recorded cost of \$660.8 million.

The first reconciliation recorded costs reflected AltaLink's 2015-2016 TFO tariff application in Proceeding 3524. The second reconciliation recorded costs reflect Decision 22930-D01-2017 regarding the Commission's final approval of AltaLink's 2015-2016 TFO compliance tariff filing and included an increase of \$69.0 million. As well, the second reconciliation recorded costs reflect AltaLink's 2014-2015 deferral account reconciliation filing on December 8, 2017 and an increase of \$14.2 million.

Row 15 ATCO Electric

The 2015 second reconciliation recorded cost for ATCO Electric wires was \$648.2 million, which is \$29.2 million (or 4.3%) lower than the first reconciliation recorded cost of \$677.3 million.

The first reconciliation recorded costs reflected the ATCO Electric's 2015-2017 TFO tariff application. The second reconciliation recorded costs reflect Decision 22860-D01-2017 regarding the Commission's final approval of ATCO Electric's 2015-2017 TFO compliance tariff application and a reduction of \$28.7 million.

Row 20 City of Lethbridge

The 2015 second reconciliation recorded cost for City of Lethbridge was \$6.3 million, which is \$0.6 million (or 10.4%) higher than the first reconciliation recorded cost of \$5.7 million.

The first reconciliation recorded costs reflected Decision 2014-309 regarding the interim approval of City of Lethbridge's 2015 TFO tariff. The second reconciliation recorded costs reflect Decision 21863-D01-2016 regarding the Commission's final approval of City of Lethbridge's 2015 TFO tariff and included an increase of \$0.6 million.

4.2.2 Ancillary Services

The second reconciliation recorded costs were based on billings by the TFOs and accruals for 2015 up to December 31, 2017, which is the data cut-off date for this application.

Row 50 Transmission Must Run ("TMR")

The 2015 second reconciliation recorded cost for TMR services was \$9.6 million, which is \$8.3 million (or 634%) higher than the first reconciliation recorded cost of \$1.3 million. Certain conscription events which occurred in 2015 were financially settled in 2016 which resulted in higher recorded costs. The number of conscription events and event-related costs are difficult to forecast.

4.3 2015 Revenue Adjustments after First Reconciliation

The AESO's 2015 forecast base rate revenue was discussed in the 2015 deferral account reconciliation application. Base rates exclude tariff revenue offsets and amounts charged or refunded through Rider C. 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 base rate revenue. Base rate revenue also excludes any amounts collected or refunded through deferral account reconciliation applications.

- 175 Variances of recorded total revenue from the 2015 forecast base rate revenue were explained in the first reconciliation of the 2015 deferral account (for those transactions included in that first reconciliation). Those variances were approved on a final basis in Decision 21735-D02-2017 on the 2015 deferral account reconciliation issued on March 14, 2017. No further discussion of those revenue variances is provided in this application. Only revenue adjustments which arise from transactions that occurred after the first reconciliation are discussed in this application.
- 176 The 2015 revenue adjustments were insignificant and net to a base rate revenue decrease of \$0.7 million.
- 177 Table 4-2 of Appendix K accordingly includes the following information for 2015:
- column (a) contains the 2015 forecast base rate revenue included in the first reconciliation in the 2015 deferral account application;
 - column (b) contains the 2015 recorded base rate revenue included in the first reconciliation in the 2015 deferral account application;
 - column (c) contains the 2015 recorded base rate revenue included in this application;
 - column (d) provides the additional base rate revenue amounts attributed to 2015 which occurred after the cut-off date for transactions included in the first reconciliation — that is, the revenue adjustments between the first and second reconciliations; and
 - column (e) provides the 2015 additional revenue amounts from column (d) as a percentage of the recorded revenue from the first reconciliation in column (b).
- 178 The 2015 second reconciliation recorded base rate revenue is \$1,560.0 million, which is \$0.7 million (or 0.04%) lower than the first reconciliation recorded base rate revenue of \$1,560.7 million.

4.4 2015 Second Reconciliation Deferral Account Balance

- 179 Costs and base rate revenue variances attributed to a year give rise to deferral account balances. The deferral account balances for the 2015 second reconciliation are summarized in Table 4-3 of Appendix K, and reflect the 2015 second reconciliation of costs and revenue provided in Tables 4-1 and 4-2 of Appendix K respectively. Table 4-3 of Appendix K also includes tariff revenue offsets, which increase the amount of revenue that would otherwise need to be collected through Rate DTS and Rate FTS.
- 180 As noted in Section 1.1 of this application, the AESO's tariff includes the use of deferral accounts, which were incorporated in the ISO tariff that was in effect during 2015 through Rider C. The AESO determined Rider C charges and refunds in accordance with the rider's approved purpose to "restore the deferral account balances to zero (0) over the following calendar quarter". The AESO sets Rider C rates each quarter based on estimates of deferral account balances at the end of that quarter and forecast billing volumes for that quarter. Rider C charges and refunds attributed to 2015 are provided in column (e) of Table 4-3 of Appendix K.
- 181 The first reconciliation of the 2015 deferral account in the AESO's 2015 deferral account reconciliation application resulted in a \$17.2 million shortfall attributed to 2015, as illustrated in Table 2-3 in Section 2.3 of this application. The first reconciliation shortfall was collected from market participants in the settlement in October 2016 in accordance with the interim approval of the 2015 deferral account reconciliation in Decision 21735-D01-2016, issued on September 29, 2016 and considered final in Decision 21735-D02-2017, issued on March 14, 2017. First reconciliation settlement amounts attributed to 2015 are provided in column (f) of Table 4-3 of Appendix K, and restored all 2015 deferral account balances to zero based on the transactions included in the 2015 first reconciliation.
- 182 However, this second reconciliation includes adjustments to costs and revenue that occurred after the first reconciliation of the 2015 deferral account, as discussed in Sections 4.2 and 4.3 where explanations were provided when the resulting line item adjustments were significant.

- 183 The deferral account balance for connection has decreased to an under collection of \$63.5 million (or 3.4% of recorded costs), primarily due to adjustments for TFO wires costs in 2015 as discussed above in Section 4.2.1.
- 184 Deferral account balances for operating reserve, voltage control and other system support services charges have not changed significantly from the first reconciliation.
- 185 The impact of all 2015 cost and revenue adjustments is a deferral account net balance decrease to an under collection of \$63.5 million (or 3.4% of recorded costs), compared to the zero balance that existed after settlement of amounts included in the first reconciliation.

5 2014, 2013, 2012, 2011 and 2010 Financial Results and Deferral Account Balances

- 186 The AESO's 2014, 2013, 2012, 2011 and 2010 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, 2013, 2012, 2011 and 2010 revenue that is subject to retrospective deferral account reconciliation in this application is that related to Rate DTS and Rate FTS.
- 187 The costs and revenue discussed in this section reflect the third deferral account reconciliation for 2014 and 2013, the fourth reconciliations for 2012, and the fifth reconciliations for 2011 and 2010. 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.
- 188 The most recent deferral account reconciliation for 2014, 2013, 2012, 2011 and 2010 were presented in the 2015 deferral account reconciliation application, and included the second reconciliations for 2014 and 2013, the third reconciliation for 2012, and the fourth reconciliations for 2011 and 2010. The reconciliations included all cost and revenue transactions that occurred to December 31, 2015 and that related to 2014, 2013, 2012, 2011, or 2010. The reconciliations resulted in a surplus balance of \$10.8 million for 2014, a surplus balance of \$12.2 million for 2013, a surplus balance of \$4.5 million for 2012, a shortfall balance of \$4.7 million for 2011 and a shortfall balance of \$1.0 million for 2010 as provided in Table 2-3 in this application, which were settled with the market participants in October 2016 in accordance with the interim approval of the 2015 deferral account reconciliation in Decision 21735-D01-2016, issued on September 29, 2016 and considered final in Decision 21735-D02-2017, issued on March 14, 2017..
- 189 In this 2016 deferral account reconciliation application, the third reconciliations for 2014 and 2013, the fourth reconciliation for 2012, and the fifth reconciliations for 2011 and 2010 include all cost and revenue transactions that occurred up to December 31, 2016 and that relate to 2014, 2013, 2012, 2011, or 2010. These transactions establish the production month data for each of those years for deferral account reconciliation purposes in this application.
- 190 The impact of the inclusion of these additional transactions is summarized in Table 6-1 below.
- 191 The AESO's 2014, 2013, 2012, 2011, and 2010 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 the 2014, 2013, 2012, 2011, and 2010 deferral accounts. Variances explained in prior reconciliations were approved in:
- Decision 21735-D02-2017 on the 2015 deferral account reconciliation issued on March 14, 2017;
 - Decision 20866-D01-2016 on the 2013-2014 deferral account reconciliation issued on January 14, 2016;
 - Decision 2014-034 on the 2012 deferral account reconciliation issued on February 13, 2014; and
 - Decision 2013-034 on the 2010-2011 deferral account reconciliation issued on February 7, 2013.
- 192 No further discussion of those variances is provided in this application. Only 2012, 2011, and 2010 cost adjustments which arise from transactions that occurred after the most recent prior reconciliation are discussed in this application.

- 193 Specifically, the 2014, 2013, 2012, 2011 and 2010 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 2014, 2013, 2012, 2011 or 2010;
 - occurred after the cut-off date of December 31, 2015 for data included in the previous reconciliation; and
 - occurred up to December 31, 2017.
- 194 The 2014, 2013, 2012, 2011 and 2010 cost adjustments included in this deferral account reconciliation are summarized in Table 5-1 of Appendix K. These adjustments result in a surplus balance of \$86.3 million for 2014, a surplus balance of \$92.5 million for 2013, a surplus balance of \$61.0 million for 2012, a surplus balance of \$30.0 million for 2011 and a surplus balance of \$0.7 million for 2010 as provided in Table 2-4 in this application. The overall balance resulting from the 2014, 2013, 2012, 2011 and 2010 cost adjustments is a surplus of \$270.5 million.
- 195 Five significant cost adjustments occurred during this period:
- \$86.5 million decrease attributed to 2014 wires costs;
 - \$92.5 million decrease attributed to 2013 wires costs;
 - \$61.0 million decrease attributed to 2012 wires costs;
 - \$30.0 million decrease attributed to 2011 wires costs; and
 - \$0.7 million decrease attributed to 2010 wires costs.
- 196 2014, 2013, 2012 and 2011 wires costs adjustments resulted from AltaLink's 2015-2016 transmission compliance tariff filing, 2014 wires costs adjustments resulted from AltaLink's 2014-2015 deferral account reconciliation filing, and 2014, 2013 and 2012 wires costs adjustments from Decision 21914-D01-2016 on AltaLink's 2012-2013 transmission deferral account application on a final basis.
- 197 Some 2014, 2013, 2012, 2011 and 2010 wires costs adjustments resulted from on ATCO Electric's 2013-2014 transmission deferral account application compliance filing.
- 198 There have been no adjustments to capital expenditures for 2014, 2013, 2012, 2011 and 2010 since the previous reconciliations of these years.
- 199 Table 5-1 of Appendix K also includes revenue for 2014, 2013, 2012, 2011 and 2010 included in this deferral account reconciliation. There have been no significant adjustments to revenue since those included in the previous reconciliations of these years.
- 200 During the multi-year reconciliation process, it seems inappropriate to use the same threshold levels for explanations for adjustments as subsequent reconciliations occur and the AESO considers it reasonable to reduce the adjustment explanation thresholds in these circumstances. For the third reconciliations for 2014 and 2013, the adjustment explanation threshold is \pm \$2.6 million and \pm 3. For the fourth reconciliation for 2012, the adjustment explanation threshold is \pm \$2.0 million and \pm 2%. For the fifth reconciliations for 2011 and 2010, the adjustment explanation threshold is \pm \$1.4 million and \pm 2%.

Appendix K - Table 5-1, rows 13 - 19 2010-2014 Deferral Accounts Summary - Total Wires Costs

- 201 The recorded wires costs in the 2016 deferral account reconciliation reflect billings by the TFOs and accruals estimated by the AESO for 2014, 2013, 2012, 2011 and 2010 up to December 31, 2017, which is the data cut-off date for this application. The calculations of wires forecast costs for all TFOs are detailed in Appendix D-5 to this application.
- 202 The 2014 third reconciliation recorded cost for wires was \$1,289.6 million, which is \$86.5 million (or 6.3%) lower than the second reconciliation recorded cost of \$1,376.2 million. The third reconciliation cost reflects significant amounts resulting from Decision 22930-D01-2017 on AltaLink's 2015-2016 transmission compliance tariff filing on a final basis, significant amounts from Decision 21914-D01-2016 on AltaLink's 2012-2013 transmission deferral account application on a final basis and significant amounts resulting from AltaLink's 2014-2015 deferral account reconciliation filing in December 2017. As well, the third reconciliation cost reflects significant amounts resulting from ATCO Electric's 2013-2014 deferral accounts compliance filing in November 2017.
- 203 The 2013 third reconciliation recorded cost for wires was \$1,019.0 million, which is \$92.5 million (or 8.3%) lower than the third reconciliation recorded cost of \$1,106.1 million. The third reconciliation cost reflects significant amounts resulting from Decision 22930-D01-2017 on AltaLink's 2015-2016 transmission compliance tariff filing on a final basis and significant amounts from Decision 21914-D01-2016 on AltaLink's 2012-2013 transmission deferral account application on a final basis. As well, the third reconciliation cost reflects significant amounts resulting from ATCO Electric's 2013-2014 deferral accounts compliance filing in November 2017.
- 204 The 2012 fourth reconciliation recorded cost for wires was \$855.0 million, which is \$61.0 million (or 6.7%) lower than the third reconciliation recorded cost of \$916.0 million. The fourth reconciliation cost reflects significant amounts resulting from Decision 22930-D01-2017 on AltaLink's 2015-2016 transmission compliance tariff filing on a final basis and significant amounts from Decision 21914-D01-2016 on AltaLink's 2012-2013 transmission deferral account application on a final basis. As well, the fourth reconciliation cost reflects significant amounts resulting from ATCO Electric's 2013-2014 deferral accounts compliance filing in November 2017.
- 205 The 2011 fifth reconciliation recorded cost for wires was \$746.0 million, which is \$30.0 million (or 3.9%) lower than the fourth reconciliation recorded cost of \$776.0 million. The fifth reconciliation cost reflects significant amounts resulting from Decision 22930-D01-2017 on AltaLink's 2015-2016 transmission compliance tariff filing on a final basis. As well, the fifth reconciliation cost reflects significant amounts resulting from ATCO Electric's 2013-2014 deferral accounts compliance filing in November 2017.
- 206 The 2010 fifth reconciliation recorded cost for wires was \$629.4 million, which is \$0.7 million (or 0.1%) lower than the fourth reconciliation recorded cost of \$630.2 million.
- 207 The 2014 and 2013 third reconciliation, 2012 fourth reconciliation and 2011 and 2010 fifth reconciliation 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.
- 208 The 2014 and 2013 third reconciliation, 2012 fourth reconciliation and 2011 and 2010 fifth reconciliation revenue amounts did not vary from the previous reconciliation revenue amounts.
- 209 There were no significant changes to 2014, 2013, 2012, 2011 and 2010 deferral account balances for individual rate component charges for operating reserve, voltage control and other system support services compared to previous reconciliations.

- 210 For all years 2014, 2013, 2012, 2011 and 2010 the connection charge varied significantly from the previous reconciliations due to the significant variances of wires costs explained above.
- 211 The overall impact to the net deferral account balance resulting from the adjustments to 2014, 2013, 2012, 2011 and 2010 which occurred in 2016 are:
- a 2014 deferral account balance increase to an over-collection of \$86.3 million (or 5.4% of recorded costs);
 - a 2013 deferral account balance increase to an over-collection of \$92.5 million (or 6.1% of recorded costs);
 - a 2012 deferral account balance increase to an over-collection of \$61.0 million (or 4.6% of recorded costs);
 - a 2011 deferral account balance increase to an over-collection of \$30.0 million (or 2.5% of recorded costs); and
 - a 2010 deferral account balance decrease to an over-collection of \$0.7 million (or 0.1% of recorded costs).

6 Allocation to Market Participants

212 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.

6.1 Allocation of Deferral Account Balances

213 As with previous deferral account reconciliation applications, deferral account balances are calculated on a production month basis as the costs paid by rate and rate component for each year. Consistent with treatment in prior years, these deferral account balances have been allocated to individual market participants based on each market participant's percentage of base rate revenue collected, with one exception discussed below. Base rate revenue results from Rate DTS and Rate FTS that were in place during the deferral account period, by month and by rate component.

214 The exception mentioned above arises because the voltage control charge of both Rate DTS and Rate FTS was \$0.00/MWh from July 1 to December 31, 2015, as approved in Decision 3473-D01-2015 issued on June 17, 2015 in respect of the *2014 ISO Tariff Compliance Filing Pursuant to Decision 2014-242, Module 1*. The \$0.00/MWh charge resulted from the forecast of zero costs for transmission must-run services included in the 2014 ISO tariff compliance filing. However, unforeseeable transmission must-run services were conscripted during the last half of 2015. Costs related to those transmission must-run services were financially settled during 2016 and are included in this application as prior-period adjustments for 2015. With a charge of \$0.00/MWh from July 1 to December 31, 2015, there is no base rate revenue for the voltage control rate component (which includes only the costs of transmission must-run services) on which to allocate the deferral account balance for those production months.

215 To address this issue, the AESO has used metered energy as the allocator for the voltage control deferral account balance for July through December 2015. In both Rate DTS and Rate FTS, the voltage control charge is the product of metered energy and a single, constant \$/MWh amount. Therefore, voltage control revenue would be exactly proportional to metered energy for each market participant. Using metered energy as the allocator for the voltage control deferral account balance by production month results in the same allocation to market participants as would using revenue with a non-zero voltage control charge. Details regarding the allocation by market participant using metered energy can be found in Appendix H-2, *2015 Supplemental*, to this application.

216 The AESO notes that no other ISO tariff period has a voltage control charge of \$0.00/MWh and the AESO does not anticipate this issue arising in any other tariff period. However, metered energy may continue to need to be used as the allocator if additional prior-period adjustments for July through December 2015 affect voltage control deferral account balances in a future deferral account reconciliation.

217 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 basis, by rate and rate component.

218 For additional clarity, in this application the second reconciliation for 2015, the third reconciliations for 2014 and 2013, the fourth reconciliation for 2012 and the fifth reconciliations for 2011 and 2010 all include deferral account charges or refunds relating to those years which were financially settled in 2017, 2016 and 2013 as a result of prior reconciliation proceedings. The additional revenue by market participant that is subtracted from or added to the deferral account balances includes the settlement amounts approved in the 2015, 2013-2014, 2012 and 2010-2011 deferral account reconciliation proceedings.

6.2 Provision of Market Participant Allocation Information

- 219 The results of the deferral account allocation for each market participant who received system access service under Rate DTS, *Demand Transmission Service* or Rate FTS, *Fort Nelson Demand Transmission Service* 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.
- 220 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.
- 221 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.²⁴ 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.
- 222 The AESO has determined assignees and prepared the appendices of this deferral account reconciliation application as of June 30, 2018 for charges and refunds included in the application. No assignment agreements have been executed since then.

6.3 Uncollectible Amounts

- 223 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 8 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.

²⁴ Subsection 2 of section 15, *Miscellaneous*, of the 2014 ISO Tariff

224 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 2016 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.

225 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.

226 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.

227 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.

228 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 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 6-1.

229 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 6-1 Continuity of Uncollectible Amounts, \$

Line No.	Description	Deferral Account Reconciliation Application						Totals
		2016	2015	2013-2014	2012	2010-2011	2009	2016 to 2009
1	Uncollectible Amounts, Opening Balance	-	\$46	(\$767)	(\$192)	\$566	-	-
2	Uncollectible Charges (Refunds)	-	-	46	(9)	(758)	566	(155)
3	Number of Market Participants	-	-	1	1	2	1	2
4	Adjustments – Refunds (Charges)	-	(46)	767	(566)	-	-	155
5	Uncollectible Amounts, Closing Balance	-	-	\$46	(\$767)	(\$192)	\$566	-

Note: Numbers may not add due to rounding.

7 Proposed Method of Refunding and Collecting

230 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.

231 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.

7.1 Immediate Interim Settlement

232 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.

233 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 October 2018, subject to approval by the Commission. To enable settlement on invoices issued in October 2018, the Commission would need to provide interim approval by October 3, 2018. Interim approval after that date (but before November 5, 2018) would result in settlement on invoices issued in November 2018.

234 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 7-1 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 7-1 and 7-2, Rate FTS amounts have been included with Rate DTS amounts as only one market participant (BC Hydro) receives service under Rate FTS.

235 Table 7-1 indicates that 41 Rate DTS and Rate FTS market participants will receive refunds totaling \$32.2 million as a result of this 2016 deferral account reconciliation application, while 22 Rate DTS and Rate FTS market participants will receive charges totaling \$6.1 million.

236 The total charges to market participants are \$6.1 million compared to refunds to other market participants of \$32.2 million. The net deferral balance is a refund of \$26.2 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 7-1 Distribution of Charges and Refunds Among Market Participants

Range of Refunds and Charges	Number of Participants		Total Amount, \$ 000		
	DTS and FTS		DTS and FTS		Total
	DFO ¹	Non-DFO	DFO ¹	Non-DFO	
Refund Greater Than \$1,000,000 to \$17,000,000	4	-	\$28.6	-	\$28.6
Refund Greater Than \$100,000 to \$1,000,000	2	8	0.8	\$2.3	3.1
Refund Greater Than \$10,000 to \$100,000	-	13	-	0.4	0.4
Refund Greater Than \$0 to \$10,000	-	14	-	0.0	0.0
Subtotal Refunds	6	35	\$29.4	\$2.8	\$32.2
Charge Greater Than \$0 to \$10,000	-	4	-	(\$0.0)	(\$0.0)
Charge Greater Than \$10,000 to \$100,000	-	9	-	(0.5)	(0.5)
Charge Greater Than \$100,000 to \$1,000,000	-	6	-	(2.1)	(2.1)
Charge Greater Than \$1,000,000 to \$5,000,000	-	3	-	(3.5)	(3.5)
Subtotal Charges	-	22	-	(\$6.1)	(\$6.1)
Total Refunds and (Charges)	6	57	\$29.4	(\$3.3)	\$26.2

Notes: Numbers may not add due to rounding.

¹ DFO means Distribution Facility Owner.

237 Table 7-2 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 7-2 indicates that 470 settlement points will receive refunds totaling \$44.7 million as a result of this 2016 deferral account reconciliation application, while 116 settlement points will receive charges totaling \$18.5 million.

Table 7-2 Distribution of Charges and Refunds Among Settlement Points

Range of Refunds and Charges	Number of Settlement Points		Total Amount, \$ 000 000		Total
	DTS and FTS		DTS and FTS		
	DFO ¹	Non-DFO	DFO ¹	Non-DFO	
Refund Greater Than \$100,000 to \$1,000,000	172	11	\$28.0	\$3.2	\$31.2
Refund Greater Than \$10,000 to \$100,000	210	19	12.5	0.8	13.3
Refund Greater Than \$0 to \$10,000	27	31	0.1	0.1	0.1
Subtotal Refunds	409	61	\$40.6	\$4.1	\$44.7
Charge Greater Than \$0 to \$10,000	14	6	(\$0.1)	(\$0.0)	(\$0.1)
Charge Greater Than \$10,000 to \$100,000	40	10	(1.9)	(0.5)	(2.4)
Charge Greater Than \$100,000 to \$1,000,000	33	11	(9.2)	(3.3)	(12.4)
Charge Greater Than \$1,000,000 to \$3,000,000	-	2	-	(3.6)	(3.6)
Subtotal Charges	87	29	(\$11.1)	(\$7.4)	(\$18.5)
Total Refunds and (Charges)	496	90	\$29.4	(\$3.3)	\$26.2

Notes: Numbers may not add due to rounding.

¹ DFO means Distribution Facility Owner.

238 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 2016 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 2017-2018 deferral account reconciliation application expected to be filed in the second quarter of 2019.

8 Conclusion

239 Based on all of the foregoing, the AESO respectfully requests that the Commission approve this 2016 deferral account reconciliation application as applied for, including:

- (a) the deferral account balance reconciliations for the calendar years 2016, 2015, 2014, 2013, 2012, 2011 and 2010 as presented in Sections 3 to 6 of this application;
- (b) the methodology of allocating deferral account balances to market participants as presented in Section 7 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 8 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 8 of this application; and
- (e) such further and other relief as the Commission may provide.

240 All of which is respectfully submitted this 1st day of August, 2018.

Alberta Electric System Operator

Per: "Miranda Keating Erickson"

Miranda Keating Erickson

Vice-President, Markets