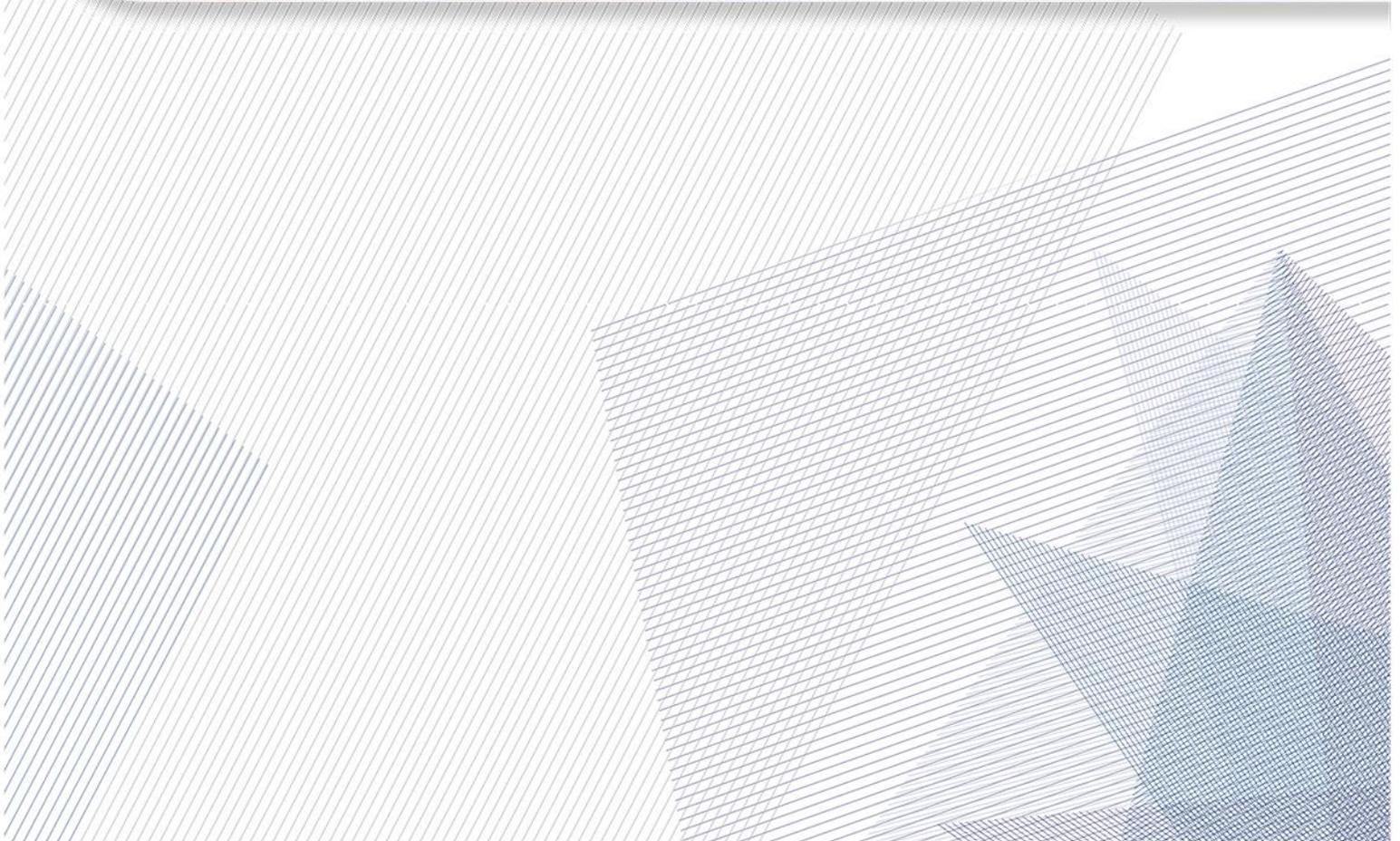


# MD&A

## Management's Discussion and Analysis of Financial Condition and Results of Operations



## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This management's discussion and analysis of financial condition and results of operations (MD&A) as of February 12, 2015, should be read in conjunction with the Alberta Electric System Operator's (AESO) audited financial statements for the years ended December 31, 2014 and 2013 and accompanying notes. The MD&A and financial statements are reviewed and approved by the AESO Board. The AESO's financial statements have been prepared in accordance with Canadian generally accepted accounting principles (GAAP) and are expressed in Canadian dollars.

The AESO is responsible for the operation of Alberta's fair, efficient and openly competitive energy-only market for electricity; determining the order of dispatch of electric energy and ancillary services; providing system access service on the transmission system; directing the safe, reliable and economic operation of the interconnected electric system; planning the capability of the transmission system to meet future needs; and administering load settlement.

The AESO recovers its costs through three separate revenue sources from market participants; there is no government funding provided for the operations of the AESO.

### Summary Annual Highlights

The AESO, a not-for-profit statutory corporation, recovers its operating, intangible and capital asset costs through three separate revenue sources, each of which is designed to recover the costs directly related to the provision of a specific service, as well as a portion of the shared corporate services costs.

(\$ Millions) Years ended December 31,

	2014	2013	Change	% Change
Collections	1,823.1	1,868.4	(45.3)	(2)
Revenue (Deferred revenue)	54.8	(22.0)	76.8	349
Other revenue	2.3	1.6	0.7	44
<b>Total revenue</b>	<b>1,880.2</b>	<b>1,847.9</b>	<b>32.3</b>	<b>2</b>
Transmission operating costs	1,732.3	1,702.6	29.7	2
Other industry costs	23.0	24.9	(1.9)	(8)
General and administrative costs	97.9	97.1	0.8	1
Interest costs	0.1	0.7	(0.6)	(86)
Amortization	26.9	22.6	4.3	19
<b>Total costs</b>	<b>1,880.2</b>	<b>1,847.9</b>	<b>32.3</b>	<b>2</b>

Numbers may not add due to rounding

## Total Costs

### Transmission Operating Costs

Transmission operating costs represent wires costs, operating reserves, transmission line losses, transmission must-run and other ancillary services costs. In 2014, transmission operating costs are \$1,732.3 million, which is \$29.7 million or two per cent higher than the 2013 costs of \$1,702.6 million. This increase is mainly associated with higher wires costs in 2014 resulting from Alberta Utilities Commission (AUC) decisions on regulated rates charged by the transmission facility owners (TFOs) offset by lower operating reserves costs.

(\$ Millions) Years ended December 31,

	2014	2013	Change	% Change
Wires costs	1,399.9	1,126.4	273.5	24
Operating reserves	180.8	362.3	(181.5)	(50)
Transmission line losses	118.0	178.0	(60.0)	(34)
Transmission must-run	5.4	11.2	(5.8)	(52)
Other ancillary services costs	28.2	24.7	3.5	14
<b>Transmission operating costs</b>	<b>1,732.3</b>	<b>1,702.6</b>	<b>29.7</b>	<b>2</b>

Numbers may not add due to rounding

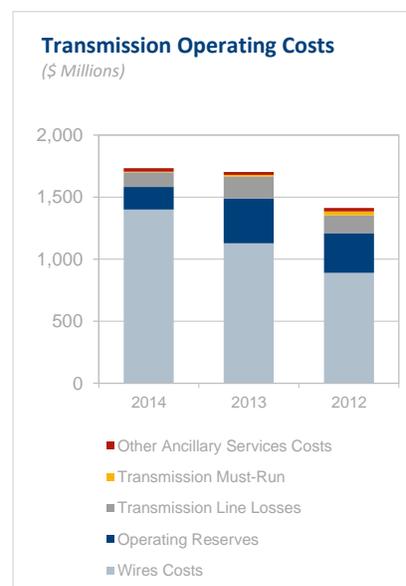
### Wires Costs

Wires costs represent the amounts paid primarily to TFOs in accordance with their AUC-approved tariffs and are not controllable costs of the AESO. Wires costs in 2014 are \$1,399.9 million, which is \$273.5 million or 24 per cent higher than the 2013 costs of \$1,126.4 million due to higher regulated rates charged by the TFOs. The AESO understands that the higher TFO tariffs reflect capital and operating costs associated with projects providing additional transmission system capacity, as well as higher costs to operate and maintain existing transmission facilities.

### Operating Reserves

Operating reserves are 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. There are three types of operating reserves with the minimum volumes of operating reserves required based on Alberta Reliability Standards:

- **Regulating reserves** – The generation capacity, energy and maneuverability responsive to the AESO's automatic generation control (AGC) system that is required to balance supply and demand on a minute-to-minute basis in real time.
- **Spinning reserves** – Unloaded generation that is synchronized to the transmission system, automatically responsive to frequency deviation and ready to provide 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.



- **Supplemental reserves** – While similar to spinning reserves, supplemental reserves are not required to respond to frequency deviations. They include unloaded generation, off-line generation or system load that is ready to serve additional energy (generator) or reduce energy (load) within 10 minutes of receiving a system controller directive.

Operating reserves are procured through an online exchange where offer prices are indexed to the pool price. While the prices of operating reserves procured through the online exchange are indexed to the pool price, changes to the average pool price do not result in proportional changes to the operating reserve costs. The pool price for each hour has a significant impact on the operating reserve costs for that hour. Additionally, during periods of high hourly pool prices, the less expensive operating reserve suppliers may not be available, which results in higher operating reserve costs.

Operating reserve costs in 2014 are \$180.8 million, which is \$181.5 million or 50 per cent lower than the 2013 costs of \$362.3 million primarily due to the impact of the lower hourly pool prices in 2014. The average hourly pool price is \$49 per megawatt hour (MWh) in 2014 compared to \$80 per MWh in 2013, representing a decrease of 38 per cent in 2014. Operating reserve volumes are 8,115 gigawatt hours (GWh) in 2014 compared to 8,142 GWh in 2013, representing less than a one per cent decrease.

#### **Transmission Line Losses**

Transmission line losses represent the amount of energy that is “lost” as a result of electrical resistance on the transmission lines. Volumes associated with line losses are determined through the energy market settlement as the difference between generation and import volumes less consumption and export volumes. The hourly volumes of line losses vary based on load and export levels, the distance between generation and load, and changes in the transmission topology. Transmission and generation outage schedules, unplanned transmission and generation outages, and market dispatches also affect the volume of losses. The value of line losses is calculated based on the hourly pool price.

The costs of transmission line losses in 2014 are \$118.0 million, which is \$60 million or 34 per cent lower than the 2013 costs of \$178.0 million due primarily to the impact of a 38 per cent lower average pool price in 2014. Line loss volumes financially settled in 2014 are 2,467 GWh compared to 2,276 GWh in 2013, representing an eight per cent increase associated with higher generation in the Wabamun area, higher volume of power flows from the Wabamun Lake area to the south and higher system demand.

#### **Transmission Must-run**

Transmission must-run (TMR) is generation required to be online and operating to ensure reliability in specific areas of the AIES with insufficient transmission capacity. This service is typically procured through commercial contracts involving fixed and variable payment components.

A market participant may be directed to provide unforeseeable TMR service when the provider does not have an existing contract for the service. In these circumstances, the Independent System Operator (ISO) transmission tariff specifies how to calculate the amount to be paid to suppliers. Unforeseeable TMR reinforces transmission in areas where the transmission deficiency is not foreseen with sufficient time to negotiate a contract competitively. These conditions arise for a number of reasons including unplanned transmission line outages, system conditions in real time or unexpected loss of generation.

TMR costs in 2014 are \$5.4 million, which is \$5.8 million or 52 per cent lower than the 2013 costs of \$11.2 million. The volumes of contracted TMR in 2014 decreased in addition to lower unforeseeable TMR costs.

### Other Ancillary Services Costs

Other ancillary services that the AESO procures for the secure and reliable operation of the AIES include load shed service for imports (LSSi), black start and services provided by the Poplar Hill generator. These services are procured through bilateral contracts with suppliers using competitive procurement processes whenever possible.

In 2014, other ancillary services costs are \$28.2 million, which is \$3.5 million or 14 per cent higher than the 2013 costs of \$24.7 million. This increase is attributable to higher LSSi costs. 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 capability (ATC). The 2014 costs for LSSi are \$24.4 million, which is \$3.2 million higher than the 2013 costs of \$21.2 million.

### Other Industry Costs

Other industry costs represent fees or costs paid based on regulatory requirements or membership fees for industry organizations; the amounts or requirement for the costs are not under the direct control of the AESO. These costs relate to regulatory processes, the annual administration fee for the AUC, and the AESO's share of Western Electricity Coordinating Council and Northwest Power Pool (NWPP) membership fees.

For regulatory process costs, there are three categories: (i) objections and complaints to ISO Rules or any regulatory application; (ii) the AESO's regulatory proceedings; and (iii) intervener cost recovery for AESO applications.

Other industry costs in 2014 are \$23.0 million, which is \$1.9 million or eight per cent lower than the 2013 costs of \$24.9 million. The decrease is attributable to lower annual WECC membership fees and regulatory process costs.

(\$ Millions) Years ended December 31,

	2014	2013	Change	% Change
AUC Fees – Transmission	13.4	13.2	0.2	2
AUC Fees – Energy Market	7.0	6.9	0.1	1
Regulatory process costs	1.5	2.0	(0.5)	(25)
WECC/NWPP costs	1.1	2.8	(1.7)	(61)
<b>Other industry costs</b>	<b>23.0</b>	<b>24.9</b>	<b>(1.9)</b>	<b>(8)</b>

Numbers may not add due to rounding

Under the provisions of the *Alberta Utilities Commission Act*, AUC operating and capital costs are recovered from natural gas and electricity market participants under its jurisdiction or any person to whom the AUC provides services. Accordingly, the AUC apportions its costs related to its electricity transmission and wholesale electric market activities to the AESO as an AUC administration fee. The AUC levies two separate administration fees to the AESO; a transmission fee that is recovered through the transmission tariff and an energy market fee that is recovered from market participants through the AESO's energy market trading charge on a per-MWh-traded basis.

Regulatory process costs in 2014 are \$1.5 million, which is \$0.5 million or 25 per cent lower than the 2013 costs of \$2.0 million. The 2014 costs are mainly associated with regulatory proceedings of \$0.6 million (most notably the 2014 ISO tariff application proceeding) and ISO Rule objections and complaints of \$0.7 million (most notably transmission loss factors and transmission constraint management (TCM)). AUC cost awards to interveners for AESO applications were \$0.2 million in 2014.

The AESO's share of the WECC membership fees in 2014 is \$0.9 million, payable in US dollars, which is \$1.7 million or 61 per cent lower than the 2013 fees of \$2.8 million. The reduction in WECC membership fees relates to the AESO assuming all responsibilities for the function of a Reliability Coordinator<sup>1</sup> for the province of Alberta starting on January 1, 2014.



<sup>1</sup> The Reliability Coordinator function as it is defined in the North American Electric Reliability Corporation (NERC) Functional Model is to “maintain the real-time operating reliability of its Reliability Coordinator Area and in coordination with its neighboring Reliability Coordinator’s wide-area view”. An entity performing this function monitors transmission services; coordinating, and in some instances, issuing directives to participants to ensure secure operation of the transmission system.

## General and Administrative Costs

(\$ Millions) Years ended December 31,

	2014	2013	Change	% Change
Staff costs	63.2	60.5	2.7	4
Contract services and consultants	13.5	14.2	(0.7)	(5)
Administration	5.0	5.0	(0.0)	(0)
Facilities	6.2	6.9	(0.7)	(10)
Computer services and maintenance	8.5	8.9	(0.4)	(4)
Telecommunications	1.4	1.6	(0.2)	(13)
<b>General and administrative costs</b>	<b>97.9</b>	<b>97.1</b>	<b>0.8</b>	<b>1</b>

Numbers may not add due to rounding

General and administrative costs in 2014 are \$97.9 million, which is \$0.8 million or less than one per cent higher than the 2013 costs of \$97.1 million. This increase is mainly associated with increases in staff costs offset by decreases in other cost areas.

### Staff Costs

Staff resources continue to be the foundation for the AESO's operations, requiring ongoing management to ensure that the right people with the right skill sets work to achieve the corporate objectives. The organization focuses on attracting and retaining qualified staff and offering a competitive compensation package and a rewarding work environment.

In 2014, staff costs are \$63.2 million, which is \$2.7 million or four per cent higher than the 2013 costs of \$60.5 million. The increase is mainly attributable to annual staff salary adjustments.

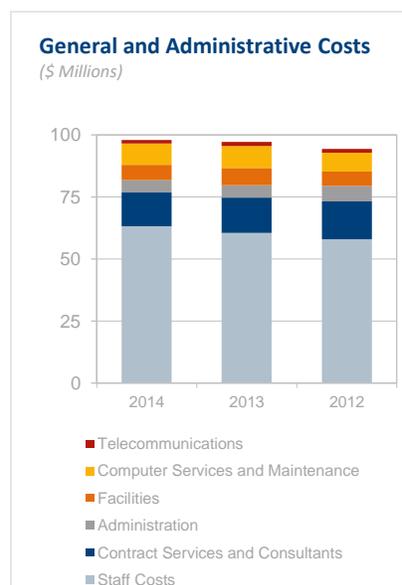
### Contract Services and Consultants

In 2014, contract services and consultant costs are \$13.5 million, which is \$0.7 million or five per cent lower than the 2013 costs of \$14.2 million.

The change is primarily a result of various non-recurring costs associated with:

- the completion of the transition of authoritative documents project and the Transmission Cost Study;
- fewer transmission studies for the bulk transmission system, customer connections or issue-specific initiatives undertaken for Needs Identification Documents and the update of the *2013 Long-term Transmission Plan*;
- reduced requirement for contractors to provide temporary support for vacant permanent positions; and
- conversion of contractors to permanent staff to benefit from lower cost resources and improved human resource management.

These non-recurring costs are offset by an increase in 2014 for additional resources associated with Phase II (Sourcing/Request for Proposal) of the Market Systems Replacement and Reengineering (MSR)



Project to define the detailed business and design requirements and establish the approach, timing, and cost estimates for the subsequent implementation phase.

#### **Administration**

Administration costs include corporate communications, recruiting, travel and training, AESO Board fees and office costs. In 2014, administration costs are \$5.0 million, which is consistent with the 2013 costs of \$5.0 million.

#### **Facilities**

In 2014, facilities costs are \$6.2 million, which is \$0.7 million or 10 per cent lower than the 2013 costs of \$6.9 million. The decrease is associated with lower costs for the new Backup Coordination Centre leased from another electric industry organization that was occupied in mid-2013 and the conclusion of a sublease arrangement in 2013 for office space adjacent to the AESO's downtown office space.

#### **Computer Services and Maintenance**

The AESO's investment in information technology infrastructure to support the organization's business operations requires ongoing costs to purchase annual software operating licenses and maintenance agreements.

In 2014, computer services and maintenance costs are \$8.5 million, which is \$0.4 million or four per cent lower than the 2013 costs of \$8.9 million. The decrease in costs is mainly due to the reduction of, and in some cases elimination of, support agreements where appropriate.

#### **Telecommunications**

The AESO incurs costs for network systems and telecommunications to support general business operations and, to a much larger extent, to support real-time operations. The strategy for developing and maintaining the telecommunication infrastructure is based on the requirement for high service availability, which necessitates redundancies of services and equipment.

In 2014, telecommunication costs are \$1.4 million, which is \$0.2 million or 13 per cent lower than the 2013 costs of \$1.6 million. The decrease is associated with one-time costs incurred in 2013 for the relocation of the Backup Coordination Centre and for a duplication of services required during the relocation process.

## Interest and Amortization

(\$ Millions) Years ended December 31,

	2014	2013	Change	% Change
Interest costs	0.1	0.7	(0.6)	(86)
Amortization of intangible and capital assets	26.9	22.6	4.3	19

### Interest

Interest costs are incurred as a result of bank debt held throughout the year and the associated borrowing rate. Bank debt is issued to fund intangible and capital asset purchases and working capital deficiencies due to timing differences in the collection of revenues and payment of costs. Intangible and capital assets are financed through the AESO's credit facilities and recovered as amortization over the useful lives of the assets.

In 2014, interest costs are \$0.1 million, which is \$0.6 million or 86 per cent lower than the 2013 costs of \$0.7 million. The average borrowing requirements in 2014 are significantly lower than 2013 due to available working capital leading to the overall decrease in interest costs.

### Amortization of Intangible and Capital Assets

Intangible and capital assets are amortized over their estimated useful lives in accordance with GAAP. Intangible assets include the AESO's computer software purchases and development costs.

In 2014, amortization of intangible and capital assets is \$26.9 million, which is \$4.3 million or 19 per cent higher than the 2013 amortization of \$22.6 million. This increase is due to a full year of amortization on 2013 intangible and capital asset additions combined with the asset additions in the current year.

### Intangible and Capital Assets

Intangible and capital asset expenditures totaled \$17.2 million in 2014 compared to \$22.0 million in 2013. The AESO's development and acquisition of intangible and capital assets, most significantly the investment in information technology infrastructure and business systems, is a key component of the business operations. As with all information technology-intensive organizations, the AESO's challenge is to find the appropriate balance between implementing technology advancements, determining the level of information technology development that can be supported by business operations, and validating the overall financial requirement. To address these challenges, a vetting and prioritization process has been implemented and continues to be enhanced, such that intangible and capital asset expenditures achieve the most beneficial and cost-effective results, while continuing to meet operating requirements.

In 2014, intangible and capital asset expenditures of \$17.2 million related primarily to base system hardware and software application replacements, additions, and continued development and upgrades to operational systems. The AESO also continued to focus on the integration of the upcoming high-voltage direct current (HVDC) transmission lines into the AESO's critical software applications and advancement of the AESO's document management systems. In addition, the AESO initiated a multi-year project to upgrade its Energy Management System (EMS) which is a foundational system and is critical in ensuring the power system is operated reliably. The EMS project is expected to be completed by 2017.

In 2013, the investment in intangible and capital assets of \$22.0 million continued to support software development and upgrades to critical operational systems, in addition to base system application infrastructure. Ongoing development occurred on the information technology tools to advance intertie initiatives, while there was also investment in system enhancements for the integration of the upcoming

high-voltage direct current (HVDC) transmission lines into the AESO's critical software applications. The AESO successfully accomplished the relocation of its backup coordination centre to a new facility and completed various upgrade projects to the AESO's servers, networks and data storage systems.

The AESO's net book value for intangible and capital assets totals \$78.8 million in 2014 compared to \$88.4 million in 2013. As of December 31, 2014, approximately 79 per cent (2013 – 79 per cent) of the net book value relates to computer infrastructure and business systems with the remaining value associated with the AESO's system coordination facility, furniture and office equipment.

## Service Area Cost Detail

### Allocation of Costs for Revenue Requirements

The AESO recovers its operating, intangible and capital asset costs through three separate revenue sources. Each revenue source is designed to recover the costs directly related to a specific service as well as a portion of the shared corporate services costs. The majority of revenues the AESO collects relate to the recovery of transmission operating costs (wires, line losses and ancillary services costs). The remaining costs (other industry, general and administrative, interest and amortization costs) are recovered through a methodology intended to relate the costs to the specific services that they support (transmission, energy market or load settlement).

The allocation of costs to one of the AESO's three services is based on the direct or indirect relationship the costs have to one of the services. If an operating cost is directly associated with a service, the cost will be assigned directly to that service (e.g., a consultant cost in the transmission group would be assigned 100 per cent to transmission and recovered through the transmission tariff). Alternatively, if an operating cost is not directly associated with any one service (typical for corporate service areas), the cost will be allocated to the services based on the value of the directly assigned costs. This methodology assumes that the service with the higher direct costs would contribute to a higher demand for general costs (such as corporate services) and therefore be assigned a higher percentage allocation.

Exceptions to this general methodology arise for information technology, office rent, other industry costs and intangible and capital asset costs. Information technology costs are allocated based on an activity-based analysis to reflect the nature of the underlying costs. Office rent costs are allocated based on the staff associated with the three services. Other industry costs are allocated based on the nature of the specific regulatory proceeding or the administration or membership fee. Intangible and capital asset purchases made to support one service are recovered from that service or alternatively from multiple services based on management judgment, taking into consideration the business or operating activities that will be supported by the systems (hardware and software).

### Allocation and Cost Classifications

General Classification	Cost Categories	AESO Services (%)		
		Transmission	Energy Market	Load Settlement
Operating	• Wires	100	-	-
	• Operating reserves	100	-	-
	• Transmission line losses	100	-	-
	• Transmission must-run	100	-	-
	• Other ancillary services	100	-	-
Non-operating	• Other industry	Costs allocated based on established methodology		
	• General and administrative			
	• Interest			
	• Amortization of intangible and capital assets			

### Allocation of Non-Operating Costs

Based on the allocation methodology, the AESO recovers the non-operating costs from the three revenue sources.

(\$ Millions) Years ended December 31,

		Trans- mission	Energy Market	Load Settlement	Total
<b>Other industry</b>	<b>2014</b>	<b>15.3</b>	<b>7.6</b>	<b>0.0</b>	<b>23.0</b>
	2013	17.0	7.9	0.0	24.9
<b>General and administrative</b>	<b>2014</b>	<b>70.7</b>	<b>26.0</b>	<b>1.2</b>	<b>97.9</b>
	2013	69.9	25.7	1.4	97.1
<b>Interest</b>	<b>2014</b>	<b>(0.7)</b>	<b>0.8</b>	<b>0.0</b>	<b>0.1</b>
	2013	(0.5)	1.2	0.0	0.7
<b>Amortization</b>	<b>2014</b>	<b>15.8</b>	<b>10.9</b>	<b>0.2</b>	<b>26.9</b>
	2013	13.4	9.0	0.2	22.6
<b>Total</b>	<b>2014</b>	<b>101.1</b>	<b>45.3</b>	<b>1.4</b>	<b>147.9</b>
	2013	99.8	43.9	1.7	145.3

Numbers may not add due to rounding

### **Other Industry**

The percentage allocation of other industry costs to the three services is consistent in 2014 and 2013.

### **General and Administrative**

The percentage allocation of general and administrative costs to the three services is consistent in 2014 and 2013.

### **Interest**

The allocation of interest costs is impacted by excess funds and the net book value of the intangible and capital assets relating to the three services. The amount of excess funds that are available to offset the amount of required debt financing for the net book value of the assets is primarily related to deferral account balances, as well as generating unit owner's contribution deposits, which are associated with the transmission tariff requirements.

The excess funds relating to the transmission service in 2014 exceed the net book value of its assets, resulting in imputed interest income allocated to the transmission service; this is consistent with 2013.

### **Amortization**

The percentage allocation of amortization to the three services is consistent in 2014 and 2013.

## Total Revenues

The *Electric Utilities Act* (EUA) requires that the AESO operates so that no profit or loss results on an annual basis from its operations. To achieve this, revenue is recognized to the extent of annual operating costs, including the amortization of intangible and capital assets. When the annual sum of collections differs from the annual operating costs, the difference is recorded as revenue or deferred revenue with an offsetting deferred asset or liability. The AESO's three revenue sources are from transmission, energy market or load settlement market participants; there is no government funding provided for AESO operations.

### Total Revenue

(\$ Millions) Years ended December 31,

	2014	2013	Change	% Change
<b>Revenue collections</b>				
Transmission	1,776.1	1,827.8	(51.7)	(3)
Energy market	49.6	39.4	10.2	26
Load settlement	(0.2)	2.8	(3.0)	(107)
<b>Total revenue collections</b>	<b>1,825.4</b>	<b>1,870.0</b>	<b>(44.6)</b>	<b>(2)</b>
<b>(Deferred revenue) / revenue</b>				
Transmission	57.4	(25.4)	82.8	326
Energy market	(4.2)	4.5	(8.7)	(193)
Load settlement	1.6	(1.1)	2.7	245
<b>Total (deferred revenue)</b>	<b>54.8</b>	<b>(22.0)</b>	<b>76.8</b>	<b>349</b>
<b>Total revenue</b>	<b>1,880.2</b>	<b>1,847.9</b>	<b>32.3</b>	<b>2</b>

Numbers may not add due to rounding

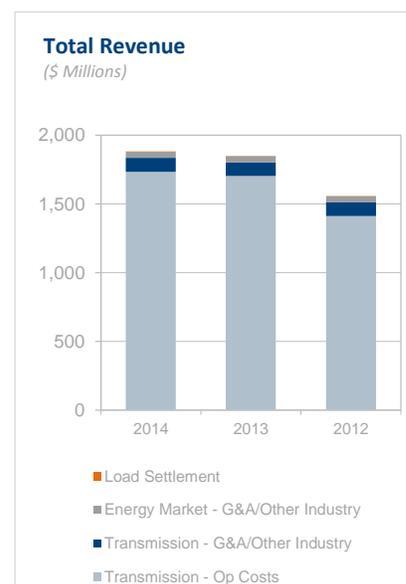
## Transmission

The AESO is responsible for paying all of the costs incurred in managing the provincial transmission system and recovering the costs through a tariff approved by the AUC. The transmission tariff is designed to allocate the costs to all users of the transmission system based on level of usage.

On a monthly basis, the AESO invoices market participants for transmission system access services based on approved tariff rates. The AESO also pays for costs associated with providing system access services. The monthly differences in the revenues collected and the costs incurred are accumulated in the AESO's transmission deferral account and can be attributed to several factors:

- Timing of revenues and costs (monthly fluctuations).
- Forecast variances (pool price volatility, meter volumes and regulatory decisions).
- Any misalignment of approved rates and the current year revenue requirement (delays in having the current year rates approved).

In circumstances where collections are in excess of the transmission costs, the excess amount is recorded as deferred revenue, recognized as a deferred liability and refunded to market participants in future periods. Where collections are less than the transmission costs, the shortfall is recorded as revenue, recognized as a deferred asset and collected from market participants in future periods.



## TRANSMISSION DEFERRAL SUMMARY

(\$ Millions) Years ended December 31,

	2014	2013
Collections	1,776.1	1,827.8
Costs	1,833.5	1,802.4
<b>Transmission revenue (deferred revenue)</b>	<b>57.4</b>	<b>(25.4)</b>
Deferral account payable, beginning of year	(49.7)	(30.2)
Disbursement (collection) of the deferral account reconciliation applications:		
2012	-	7.5
2010-2011	-	(1.6)
<b>Deferral account receivable (payable), end of year</b>	<b>7.7</b>	<b>(49.7)</b>

Numbers may not add due to rounding

As part of the transmission tariff, Deferral Account Adjustment Rider C is intended to bring the transmission deferral account balance for rate categories other than transmission line losses to zero during the following calendar quarter. It is a dollar-per-MWh collection or payment by rate class and rate component. Losses Calibration Factor Rider E is intended to bring the transmission line losses deferral account balance to zero during the remainder of the calendar year. Rate Rider E is a percentage adjustment to all location-specific loss factors.

For rate categories other than transmission line losses, the AESO files a retrospective deferral account reconciliation application with the AUC for approval of the final settlement amounts. The final reconciliation process associates all revenue and cost adjustments by rate category to the appropriate production month and allocates the corresponding charges and refunds to market participants. For transmission line losses, Rate Rider E is a prospective adjustment for the reconciliation of deferral account balances.

The transmission deferral account balance changed from a payable to market participants of \$49.7 million at December 31, 2013 to a receivable of \$7.7 million at December 31, 2014. The change of \$57.4 million during 2014 is the result of transmission costs exceeding collections. The pre-2014 excess collections resulted when several of the TFOs in Alberta did not receive final approval of 2013 costs by the end of 2013. During 2014, several of these TFO applications received approval and the excess collections were used to pay for the approved amounts.

### **Energy Market**

The AESO recovers the costs of operating the real-time energy market through an energy market trading charge on all MWh traded. The AESO's component of the energy market trading charge recovers regulatory process costs, general and administrative costs, interest, and amortization of intangible and capital assets. The energy market trading charge also recovers the AUC administrative fee and the operating costs for the Market Surveillance Administrator (MSA), which are organizations that are independent of the AESO's operations.

For 2014, the AESO's component of the energy market trading charge is 32.3 cents per MWh compared to 25.9 cents per MWh in 2013.

Energy market collections are dependent on the energy market trading charge and the volume of energy traded through the power pool.

In circumstances where collections are in excess of energy market costs, the excess amount is recorded as deferred revenue, recognized as a deferred liability and incorporated into a reduction in the following year's energy market trading charge. Where collections are less than the energy market costs, the shortfall is recorded as revenue, recognized as a deferred asset and collected in the following year.

The energy market deferral account is the accumulated difference between revenues collected and costs paid that is receivable from, or payable to, energy market participants.

## ENERGY MARKET DEFERRAL SUMMARY

(\$ Millions) Years ended December 31,

	2014	2013
Collections	49.6	39.4
Costs	45.3	43.9
<b>Energy market (deferred revenue) revenue</b>	<b>(4.2)</b>	4.5
Deferral account receivable, beginning of year	7.8	3.3
<b>Deferral account receivable, end of year</b>	<b>3.6</b>	7.8

Numbers may not add due to rounding

The energy market deferral account at December 31, 2014 is a \$3.6 million receivable compared to a \$7.8 million receivable at the end of 2013. The change of \$4.2 million is the result of energy market collections exceeding costs to recover the shortfall in collections from prior years.

### Load Settlement

Under the ISO Rules, costs that are incurred to provide services related to administering provincial load settlement are charged to the owners of electric distribution systems and wires service providers conducting load settlement. The costs associated with load settlement include general and administrative costs, interest, and amortization of intangible and capital assets.

In circumstances where collections are in excess of the load settlement costs, the excess amount is recorded as deferred revenue, recognized as a deferred liability and refunded to the owners of electric distribution systems and wires service providers in the following year. Where collections are less than the load settlement costs, the shortfall is recorded as revenue, recognized as a deferred asset and collected from the owners of electric distribution systems and wires service providers in the following year.

## LOAD SETTLEMENT DEFERRAL SUMMARY

(\$ Millions) Years ended December 31,

	2014	2013
Collections	(0.2)	2.8
Costs	1.5	1.7
<b>Load settlement revenue (deferred revenue)</b>	<b>1.6</b>	(1.1)
Deferral account payable, beginning of year	(1.8)	(0.7)
<b>Deferral account payable, end of year</b>	<b>(0.2)</b>	(1.8)

Numbers may not add due to rounding

The load settlement deferral account at December 31, 2014 is a \$0.2 million payable compared to a \$1.8 million payable at the end of 2013. The change of \$1.6 million is the result of load settlement costs exceeding collections. The excess collections in 2013 were applied to the amounts owing in 2014 for current year costs.

## Market Surveillance Administrator Charge

A portion of the energy market charge collected by the AESO is remitted to the MSA for its revenue requirement in accordance with the EUA. The AESO facilitates the cash collection process for the funding of the MSA through a per-MWh addition to the AESO's energy market trading charge. In 2014, the MSA's portion of the total energy market trading charge is 3.3 cents per MWh compared to 2.2 cents per MWh in 2013.

The MSA's revenue and costs are separate and independent of the AESO's financial records. The AESO records the difference between the payments made to the MSA and the collection on behalf of the MSA in a separate deferral account. At the end of 2014, the MSA payments exceeded the MSA collections, resulting in a deferral account receivable of \$2.7 million.

## Financial Position and Liquidity

(\$ Millions) Years ended December 31,

	2014	2013
<b>Cash, beginning of year</b>	<b>17.3</b>	85.8
Operating activities	<b>79.6</b>	(65.2)
Investing activities	<b>(17.2)</b>	(22.0)
Financing activities	<b>(49.9)</b>	18.7
<b>Cash, end of year</b>	<b>29.8</b>	17.3

The cash balance as at December 31, 2014 is \$29.8 million compared to \$17.3 million at December 31, 2013. The increase is primarily the result of the following:

- **Operating activities** provided cash of \$79.6 million in 2014 (2013 – used cash of \$65.2 million).

The increase is mainly attributable to cash provided for non-cash working capital of \$52.7 million (2013 – cash used of \$87.8 million).

- Accounts receivable at December 31, 2014 is \$148.5 million compared to \$151.1 million at December 31, 2013, a decrease of \$2.6 million.
- Accounts payable at December 31, 2014 is \$210.7 million compared to \$157.9 million at December 31, 2013, an increase of \$52.8 million. This increase is associated with the accrual for AUC-approved wire costs billed by TFOs that are paid in January 2015 as part of the December production month settlement process.
- Market participants' security deposits balance at December 31, 2014 is \$2.2 million compared to \$4.6 million at December 31, 2013, a decrease of \$2.4 million. The balance of security deposits held by the AESO is dependent on how market participants meet the AESO's security requirements.

The recovery of intangible and capital asset costs through amortization of these assets provided cash of \$26.9 million (2013 – provided cash of \$22.6 million).

- **Investing activities** used cash of \$17.2 million in 2014 (2013 – used cash of \$22.0 million) for the purchase of intangible and capital assets.

- **Financing activities** used cash of \$49.9 million in 2014 (2013 – provided cash of \$18.7 million). The primary financing activities are a decrease in the deferral accounts payable balances of \$54.8 million offset by an increase in long-term payables of \$6.8 million.

As at December 31, 2014, the AESO had the following credit facilities available to fund general operating and intangible and capital asset purchasing activities:

(\$ Millions) Year ended December 31, 2014,

	Total	Available	Used
Demand revolving facility	160.0	150.0	<b>10.0</b>
Demand treasury risk management facility	9.0	9.0	-

The demand facility includes a \$10.0 million letter of credit at December 31, 2014 and 2013, which is issued as financial security for the AESO's procurement of operating reserves.

Throughout 2014, the AESO's credit rating has been AA-/Stable from Standard and Poor's (S&P's) Ratings Services. S&P is a leading global provider of independent credit risk research and benchmarks.

## Future Outlook

Cost recovery for the AESO's operations is approved on an annual basis by the AESO Board, and for transmission-related wires costs through TFO tariffs approved by the AUC under Section 37 of the EUA.

For transmission-related activities in 2015, the AESO has established a revenue requirement of \$1,743.0 million through the 2015 Budget Review Process for costs related to wires, ancillary services, transmission line losses, other industry, general and administrative, amortization and interest. The total transmission revenue requirement in 2015 is \$90.5 million or five per cent lower than the 2014 actual costs of \$1,833.5. The lower 2015 forecast is associated with lower ancillary services and transmission line losses costs mainly due to a lower pool price forecast for 2015.

For energy market-related activities, the annual costs are forecast to decrease to \$42.9 million in 2015 from the 2014 actual costs of \$45.3 million, a \$2.4 million or five per cent decrease. This forecast decrease is associated with lower general and administration costs and amortization. The AESO's portion of the 2015 energy market trading charge will decrease to 30.3 cents per MWh in 2015 compared to 32.3 cents per MWh in 2014, a decrease of 2.0 cents per MWh. In 2015, the total energy market trading charge, which also includes components for funding the AUC and MSA, will be 40.7 cents per MWh compared to 41.2 cents per MWh in 2014.

The AESO continues to enhance the transmission system in Alberta by advancing the electric system development plans referenced in the *2013 Long-term Transmission Plan (Plan)*. The 2013 Plan describes the transmission facilities required to connect generation facilities to consumers of electricity, ensure continued reliability, facilitate the fair, efficient and openly competitive operation of the market, and support long-term economic development in Alberta. Advancements include the construction or commissioning of several major projects across Alberta, including the Foothills Area transmission system reinforcement and other developments which continue into 2015. In addition, the construction of the high-voltage direct current (HVDC) transmission project between Edmonton and Calgary is ongoing with the planned commissioning of the Western Alberta Transmission Line in mid-2015 followed by the Eastern Alberta Transmission Line later in the year.

Since 2011, the AESO has focused on the development of a Competitive Process as a method to contract for the development, design, construction, financing, ownership, operation and maintenance of

certain transmission infrastructure in the province. The first transmission system project to which the Competitive Process was applied is the transmission infrastructure from the Edmonton region to the Fort McMurray region; the Fort McMurray West 500kV Transmission Project. In December 2014, the AESO executed the first of two contracts that combined, will span a period of approximately 38 years, with the selected owner and operator. The planned in-service date for this new transmission facility is 2019. The second Competitive Process is planned for the Fort McMurray East 500 kV Transmission Project.

On January 1, 2014, the AESO assumed all responsibilities related to the functions of a Reliability Coordinator for the province of Alberta; previously, limited Reliability Coordinator services were provided by WECC. With this change, the AESO now maintains the authority to ensure the efficient, safe and reliable operation of the AIES, in coordination with its neighboring Reliability Coordinators. In 2015, the AESO will continue to develop and implement Reliability Coordinator-related technical standards and Alberta Reliability Standards to further advance this function.

In 2014, several initiatives were advanced to streamline the connection process. These initiatives related to the Abbreviated Need Approval Process (ANAP), Market Participant Choice (MPC) and general opportunities identified through targeted industry consultation. Implementation and advancements on these initiatives will continue in 2015.

The AIES supply margins have increased in 2014 as generation development has exceeded load growth in the province. New generation in 2014 from wind and co-generation facilities together with the addition of an 873 MW natural gas-fired generation facility, being commissioned in first quarter of 2015, have further expanded the supply margins for the province and resulted in downward pressure on pool prices. The AESO strives to ensure that the Alberta market design is stable and predictable while advancing for new market enhancements. In 2015, the AESO will continue to advance initiatives to integrate energy storage technologies, advance demand-side participation in the energy market and restore the interties.

Two projects are underway to upgrade the information technology applications that support the core operations of the AESO. Once delivered, these projects will ensure the AESO is able to continue to meet the needs of market participants with reliable and flexible information technology systems. The first project is the Market Systems Replacement and Reengineering Project (MSR) which began in 2013 to identify the project scope and optimal delivery plan. In 2015, the implementation phase will begin to replace and reengineer certain market systems. The AESO estimates the costs for the MSR project will range from \$20 to \$40 million. The second project is an upgrade to the Energy Management System (EMS) which is the application that enables the real-time operations of the transmission system. This project will deliver necessary security requirements and technology and functionality advancements to meet current and future needs. The AESO estimates the costs for the EMS project will range from \$20 to \$25 million. Both projects are multi-year in nature with development scheduled to begin in 2015.

## International Financial Reporting Standards

Canadian GAAP for publicly accountable entities has been replaced with International Financial Reporting Standards (IFRS) effective January 1, 2011. In April 2014, the Canadian Accounting Standards Board (AcSB) determined that first-time adoption of IFRS by rate-regulated entities is effective for annual periods beginning on or after January 1, 2015. At that time, AcSB incorporated interim standard IFRS 14, *Regulatory Deferral Accounts* into Part I of the CPA Canada Handbook – Accounting which permits first-time adopters to continue to recognize amounts related to rate regulation in accordance with their previous GAAP requirements when they adopt IFRS.

The AESO will adopt IFRS for the annual periods beginning on or after January 1, 2015. The adoption of these standards will have an impact on the presentation of the AESO's results of operations, financial position, cash flows and accompanying notes.

## Risk Management

The AESO is exposed to various risks in the normal course of business. Many of these are similar to risks faced by other companies including independent electric system operators and wholesale market operators.

The risk management processes that the AESO has developed are designed to identify the risks confronting the AESO, to assess the impact and likelihood of those risks occurring and to determine mitigation strategies to be taken. AESO Management is responsible for the ongoing operations of the organization including its risk management programs.

Many of the risks identified are not directly within the control of the AESO. However, it has adopted several strategies to reduce and mitigate the effects of those risks that are within its control. Risk management is a key element of organizational governance and is characterized by a philosophy of continuous improvement. The key features of the AESO's governance and internal control environment, which facilitate the AESO's risk management processes, are as follows:

- The AESO is established by the *Electric Utilities Act*. The AESO's business and affairs are governed by Members of the AESO (Members). Members are individuals who are independent from any person having a material interest in the Alberta electricity industry and are appointed by the Alberta Minister of Energy. The Members function as a board of directors (AESO Board) and act in the public interest. The *Alberta Public Agencies Governance Act* is legislation applicable to the AESO that addresses certain duties of the AESO as a "public agency" under that Act.
- AESO policies are developed and approved by the AESO Board or the President and Chief Executive Officer as delegated by the AESO Board. AESO policies are communicated to employees and, as appropriate, to contractors. AESO policies are reviewed on a regular basis and are accessible by employees at all times.
- The AESO is committed to maintaining a high level of ethics and integrity. The AESO Board and AESO Management foster these values throughout the organization and maintain an effective whistleblower policy. The AESO maintains codes of conduct applicable to its Members, officers, employees and contractors, which serve as frameworks for these individuals when they are faced with difficult situations where laws and regulations may not provide sufficient direction and assistance. The AESO's *Code of Conduct – Officers, Employees and Contractors* is a policy that all employees must agree to when hired, review at least annually to confirm compliance/non-compliance, and affirm their agreement to abide by the policy. Contractors of the AESO have similar requirements, as appropriate, given the

nature of their work for the AESO. Each Member of the AESO Board is bound by the AESO Members' Code of Conduct and similarly provides an annual confirmation of their compliance/non-compliance.

- AESO Management is responsible for establishing and maintaining adequate internal controls over financial reporting. These controls are designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. Internal controls over financial reporting, no matter how well designed, have inherent limitations and provide only reasonable assurance with respect to financial statement preparation. Accordingly, they may not prevent or detect all misstatements.
- The AESO conducts an annual assessment of the design and effectiveness of its internal controls over financial reporting based on an accepted industry framework. The framework adopted by the AESO for this assessment is the *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, AESO Management has concluded that, as of December 31, 2014, the AESO maintained effective internal controls over financial reporting.
- The Audit Committee reviews and monitors the system of internal controls, the systems for managing risk, the external audit process and the AESO's process for monitoring compliance with laws and regulations, with a view to adopt best practices, as appropriate.
- The AESO's Controls and Audit Services function provides the AESO with an objective and independent assessment of internal controls, coordinating and reporting on risk management activities and identifying opportunities for operational improvements. Controls and Audit Services reports directly to the Audit Committee and if required, discusses matters with the Audit Committee independent of AESO Management.
- Risk assessment is a continuous process. The AESO is committed to proactively identifying and addressing potential risks as well as implementing appropriate mitigation strategies.
- AESO Management identifies and reports any significant risks to the AESO Board and the Audit Committee on a regular basis and provides updates on the implementation of mitigation strategies that are undertaken to address these.
- The AESO, its Members, officers, employees and contractors are extended a degree of statutory liability protection consistent with the AESO's public interest mandate.
- The AESO carries insurance coverage that is reviewed and approved as appropriate by the AESO Board, through the Audit Committee. The insurance coverage may not be adequate to cover all possible risks and the proceeds of any insurance claim may not be adequate to cover all potential losses.

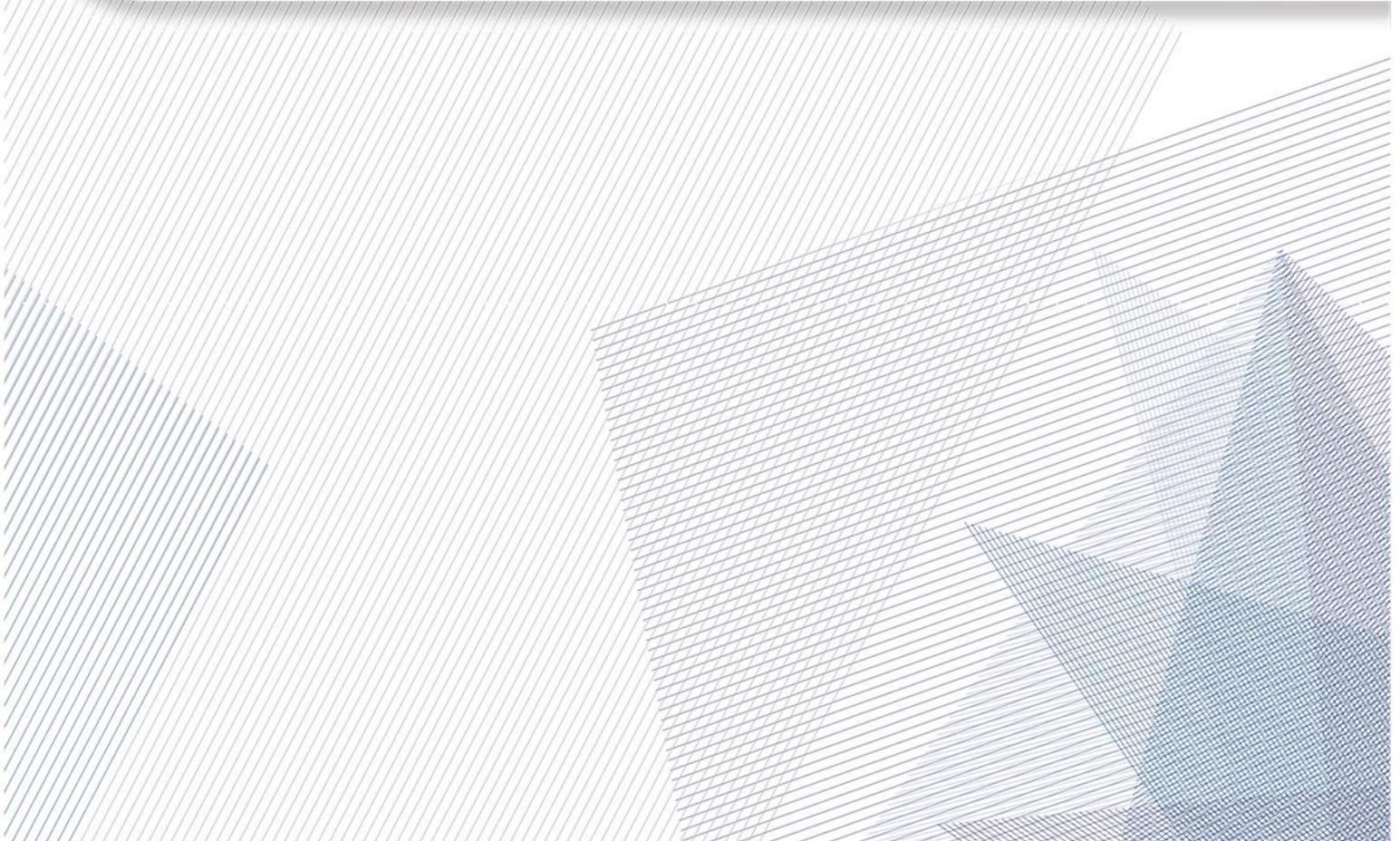
## Forward-looking Statements

This MD&A contains forward-looking statements that are subject to certain assumptions and risks that create uncertainties. These assumptions and risks could cause actual results to differ materially from results anticipated by the forward-looking statements.

## Additional Information

Additional information relating to the AESO can be found on the corporate website at [www.aeso.ca](http://www.aeso.ca)

# Financial Statements and Notes



## Management's Responsibility for Financial Reporting

The financial statements of the Alberta Electric System Operator (AESO) are the responsibility of management and have been approved by the AESO Board. These financial statements have been prepared by management in accordance with Canadian generally accepted accounting principles as set out in Part V of the *Chartered Professional Accountants (CPA) Canada Handbook*, and include the use of estimates and assumptions that have been made using management's best judgment. Financial information contained elsewhere in this annual report is consistent with that in the financial statements.

To discharge its responsibility for financial reporting, management maintains a system of internal controls designed to provide reasonable assurance that the AESO's assets are safeguarded, that transactions are properly authorized and that financial information is relevant, accurate and available on a timely basis. Internal controls are reinforced through the AESO's Codes of Conduct, which set forth the AESO's commitment to conduct business with integrity and to comply with the law.

The AESO Board, through the Audit Committee, is responsible for ensuring management fulfils its responsibility for financial reporting and internal controls. The Audit Committee meets regularly with management, internal auditors and external auditors to discuss any significant accounting, internal control and auditing matters to determine that management is carrying out its responsibilities and to review and recommend the approval of the financial statements by the AESO Board.

The financial statements have been examined by Ernst & Young LLP, the AESO's external independent auditors who are engaged by the AESO Board. The responsibility of these external auditors is to examine the financial statements and express their opinion on the fairness of the financial statements in accordance with Canadian generally accepted accounting principles. The external auditors' report outlines the scope of their examination and states their opinion. Internal and external auditors have access to the Audit Committee, with and without the presence of management.



**David Erickson, CA**  
President and Chief Executive Officer



**Todd D. Fior, CA**  
Vice-President, Finance

## Independent Auditors' Report

### To the Members of the Independent System Operator, operating as Alberta Electric System Operator Board

We have audited the accompanying financial statements of the Alberta Electric System Operator which comprise the balance sheets as at December 31, 2014 and 2013 and the statements of operations and comprehensive income and cash flows for the years then ended, and a summary of significant accounting policies and other explanatory information.

#### ***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian generally accepted accounting principles, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

#### ***Auditors' Responsibility***

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

#### ***Opinion***

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Alberta Electric System Operator as at December 31, 2014 and 2013 and the results of its operations and its cash flows for the years then ended in accordance with Canadian generally accepted accounting principles.



Chartered Accountants  
Calgary, Canada

February 12, 2015

## Balance Sheets

As at December 31 (in millions of Canadian dollars)

	2014	2013
<b>Assets</b>		
Current assets		
Cash	\$ 29.8	\$ 17.3
Accounts receivable (note 4)	148.5	151.1
Prepays and deposits	3.7	3.6
MSA deferral account receivable	2.7	0.4
AESO deferral account receivable (notes 3 and 8)	11.1	-
	<b>195.8</b>	<b>172.4</b>
Long-term prepaids	4.4	5.1
Intangible assets, net (note 5)	49.3	55.7
Capital assets, net (note 6)	29.5	32.7
	<b>\$ 279.0</b>	<b>\$ 265.9</b>
<b>Liabilities</b>		
Current liabilities		
Accounts payable and accrued liabilities (note 7 and 9)	\$ 210.7	\$ 157.9
Security deposits (note 15)	2.2	4.6
Bank debt (note 10)	-	-
AESO deferral accounts payable (notes 3 and 8)	-	43.7
	<b>212.9</b>	<b>206.2</b>
Long-term payables (note 9)	66.1	59.4
Deferred rent	-	0.3
<b>Equity (note 1)</b>	<b>-</b>	<b>-</b>
	<b>\$ 279.0</b>	<b>\$ 265.9</b>

Asset retirement obligation (note 12)

Contingencies and commitments (note 13)

See accompanying notes.

## Statements of Operations and Comprehensive Income

For the year ended December 31 (in millions of Canadian dollars)

	2014	2013
<b>Revenue</b>		
Transmission tariff	\$ 1,831.4	\$ 1,801.0
Energy market charge	44.9	43.6
Load settlement charge	1.5	1.6
Interest and other	2.4	1.7
	<b>1,880.2</b>	<b>1,847.9</b>
<b>Operating costs and expenses</b>		
Wires costs	1,399.9	1,126.4
Ancillary services costs	214.4	398.2
Transmission line losses	118.0	178.0
General and administrative	97.9	97.1
Other industry costs	23.0	24.9
Amortization (notes 5 and 6)	26.9	22.6
Interest expense (note 9)	0.1	0.7
	<b>1,880.2</b>	<b>1,847.9</b>
<b>Net income and comprehensive income</b>	<b>\$ -</b>	<b>\$ -</b>

See accompanying notes.

## Statements of Cash Flows

For the year ended December 31 (in millions of Canadian dollars)

	2014	2013
<b>Operating activities</b>		
Net income	\$ -	\$ -
Amortization	26.9	22.6
Net change in non-cash working capital items related to operating activities*	52.7	(87.8)
Net cash provided by (used in) operating activities	79.6	(65.2)
<b>Investing activities</b>		
Intangible asset additions	(12.5)	(14.4)
Capital asset additions	(4.7)	(7.6)
Net cash used in investing activities	(17.2)	(22.0)
<b>Financing activities</b>		
Increase in MSA deferral account	(2.3)	(0.1)
Decrease (increase) in long-term prepaids	0.7	(3.2)
(Decrease) increase in AESO deferral accounts	(54.8)	16.1
Increase in long-term payables	6.8	19.4
Decrease in deferred rent	(0.3)	(0.3)
Decrease in bank debt	-	(13.2)
Net cash (used in) provided by financing activities	(49.9)	18.7
<b>Increase (decrease) in cash</b>	<b>12.5</b>	<b>(68.5)</b>
<b>Cash, beginning of year</b>	<b>17.3</b>	<b>85.8</b>
<b>Cash, end of year</b>	<b>\$ 29.8</b>	<b>\$ 17.3</b>
Cash interest paid	\$ 0.1	\$ 0.9

\* Consists of changes in accounts receivable, short-term prepaids and deposits, accounts payable and accrued liabilities, and security deposits.

See accompanying notes.

## Notes to the Financial Statements

December 31, 2014 and 2013

(All amounts are in millions of Canadian dollars unless otherwise indicated)

### 1. Nature of Operations

The Independent System Operator (ISO), operating as the Alberta Electric System Operator (AESO), is a statutory corporation established on June 1, 2003 under the *Electric Utilities Act* (EUA) of the Province of Alberta.

The AESO is responsible for operating Alberta's fair, efficient and openly competitive energy-only market for electricity; determining the order of dispatch of electric energy and ancillary services; providing system access service on the electric transmission grid; directing the safe, reliable and economic operation of the interconnected electric system; planning the capability of the transmission system to meet future needs; and administering load settlement.

The AESO's business is governed by Members of the AESO (Members). Members are individuals who are independent from any person or entity having a material interest in the Alberta electricity industry and are appointed by the Alberta Minister of Energy. The Members function as a board of directors (AESO Board) and act in the public interest. As of December 31, 2014, the AESO Board had four committees: Audit Committee; Human Resources Committee; Governance and Nominations Committee; and Power System Committee.

The EUA requires that charges to industry, including the transmission tariff, energy market charge and load settlement charge, be set to recover the costs required to operate the AESO, and that the AESO be operated so no profit or loss results on an annual basis from its operations. The AESO has no equity.

The AESO's transmission-related financial activities are regulated by the Alberta Utilities Commission (AUC or Regulator) and approved based on the AESO's tariff applications.

### 2. Summary of Significant Accounting Policies

These financial statements have been prepared by management in accordance with Canadian generally accepted accounting principles (GAAP) as set out in Part V of the *Chartered Professional Accountants (CPA) Canada Handbook*.

**USE OF ESTIMATES** ► Preparation of these financial statements requires estimates and assumptions that affect the amounts reported and disclosed in the financial statements and related notes. These estimates and assumptions include information, regulatory decisions and other matters that are periodically influenced by third parties that may impact the timing of revenue and/or expense recognition. Actual results may differ from those estimates and assumptions due to factors such as the useful lives and impairment of intangible assets, capital assets, accrued liabilities, settlement of an asset retirement obligation and regulatory decisions. Any changes from current estimates or assumptions are accounted for in the period that they are determined.

**CHANGE IN ACCOUNTING ESTIMATE** ► During the year ended December 31, 2013, the estimate for the useful life of the computer hardware capital assets was increased. The change in estimate was due to an assessment of the period in which the assets would be available and used in the

AESO's operations from a three-year to a four-year amortization period. The impact of this change on the 2013 amortization was a decrease of \$1.9 million.

**REVENUE RECOGNITION** ► The AESO's revenue is primarily derived through three separate charges: (i) the transmission tariff; (ii) the energy market charge; and (iii) the load settlement charge. Each of these charges is set to recover the costs directly attributable to a specific service as well as a portion of the shared corporate services costs. Consistent with the requirements of the EUA, which requires the AESO to operate with no annual profit or loss, revenue is recognized equivalent to the aggregate of annual operating costs on a service area basis.

The EUA requires the AESO to provide funding for the Market Surveillance Administrator (MSA), a separate statutory corporation, with the amount to be recovered through the energy market charge. The energy market charge included in the AESO's statement of operations and comprehensive income does not include amounts recovered related to the MSA's funding requirements and the AESO's costs do not include amounts related to the operations of the MSA. The difference in the revenue collections and the payments associated with the MSA are recorded in the MSA deferral account.

**DEFERRALS** ► The AESO utilizes deferral accounts to facilitate a matching of revenues and costs. On an individual basis for the transmission, energy market and load settlement operations, in circumstances where annual collections are in excess of the costs, the excess amount is recorded as deferred revenue, recognized as a deferred liability and refunded in future periods. In circumstances where annual collections are less than the costs, the shortfall is recorded as revenue, recognized as a deferred asset and collected in future periods.

A portion of the energy market charge collected by the AESO is remitted to the MSA according to its revenue requirement as provided in the EUA. When the annual revenue collected on behalf of the MSA through the energy market charge collection process is different than the funding payments made to the MSA, the difference is recognized in the deferral account and is incorporated into the estimated per-megawatt-hour energy market charge for the following year.

**INTANGIBLE ASSETS** ► Intangible assets include computer software and are stated at the cost less accumulated amortization. These assets are amortized on a straight-line basis over their estimated useful lives as follows:

Software development	5 or 7 years; or Over the term of the licence agreement for customization of Software as a Service
System coordination computer systems	7 years ending in 2016

Interest costs attributable to and incurred during the development phase of large projects are capitalized. Capitalization ceases when the projects are substantially complete and ready for productive use. Payroll and payroll-related costs associated with staff directly involved in software development are capitalized as intangible assets.

**CAPITAL ASSETS** ► Capital assets are stated at cost less accumulated amortization. These assets are amortized on a straight-line basis over their estimated useful lives as follows:

Furniture and office equipment	3 years
Computer hardware	4 years
System coordination computer systems	7 years ending in 2016
Leasehold improvements	Over the applicable lease terms ending in 2014 and 2024
System coordination facility	Over the land lease term ending in 2025
Backup coordination centre	Over the lease term ending in 2033

Interest costs attributable to and incurred during the development phase of large capital projects are capitalized. Capitalization ceases when the projects are substantially complete and ready for productive use. Payroll and payroll-related costs associated with staff directly involved in hardware set-up and installation are capitalized.

**DEFERRED RENT** ► The AESO recognizes the benefit of rent-free periods by aggregating the total lease payments over the lease term and allocating the total lease payments on a straight-line basis over the term of the lease.

**LONG-TERM PREPAIDS** ► The AESO recognizes advance cash payments associated with operating leases and information technology licenses with terms longer than one year from the balance sheet date as long-term assets.

**LONG-TERM PAYABLES** ► The AESO recognizes refundable amounts for owners' contributions for generating units as long-term liabilities when the refund term is longer than one year from the balance sheet date.

**EMPLOYEE FUTURE BENEFITS** ► The AESO's employee future benefit program consists of a defined contribution plan. The AESO's contributions to the defined contribution plan are expensed as incurred.

**FINANCIAL INSTRUMENTS** ► The AESO has evaluated the five classifications of financial instruments, namely (i) held for trading; (ii) available for sale; (iii) held to maturity; (iv) loans and receivables; and (v) other financial liabilities, and designated its financial instruments as appropriate.

**COMPREHENSIVE INCOME** ► As the AESO does not have any other comprehensive income, net income equals comprehensive income.

**RECENT ACCOUNTING PRONOUNCEMENTS NOT YET ADOPTED** ►

***International Financial Reporting Standards***

Canadian GAAP for publicly accountable entities has been replaced with International Financial Reporting Standards (IFRS) effective January 1, 2011. In April 2014, the Canadian Accounting Standards Board (AcSB) determined that first-time adoption of IFRSs by rate-regulated entities is effective for annual periods beginning on or after January 1, 2015. At that time, AcSB incorporated

interim standard IFRS 14, Regulatory Deferral Accounts into Part I of the *CPA Canada Handbook – Accounting* which permits first-time adopters to continue to recognize amounts related to rate regulation in accordance with their previous GAAP requirements when they adopt IFRS.

The AESO will adopt IFRS for the annual periods beginning on or after January 1, 2015. The adoption of these standards will have an impact on the presentation of the AESO's results of operations, financial position, cash flows and accompanying notes.

**COMPARATIVE FIGURES** ► Certain comparative figures have been reclassified to conform to the current period's presentation.

### 3. Financial Statement Effects of Rate Regulation

Regulatory assets represent certain costs incurred in the current period or in prior periods that are expected to be recovered from market participants in future periods through the rate-setting process. Regulatory liabilities represent future reductions of revenues associated with amounts that are expected to be refunded to market participants as a result of the rate-setting process.

*As of December 31,*

	2014		2013	
<b>Regulatory assets</b>				
Transmission deferral	\$	7.7	\$	-
<b>Regulatory liabilities</b>				
Transmission deferral	\$	-	\$	49.7

At December 31, 2014, the transmission deferral asset was \$7.7 million based on an accumulation of variances between transmission revenue collections and costs incurred in 2014 and prior years. The AESO applies to the Regulator for the approval and settlement of deferral balances. The transmission deferral balance is a regulatory asset or liability, based upon the expectation that amounts accumulated from one year to the next will be approved for collection from, or refund to, market participants in a subsequent year. In the absence of rate regulation, GAAP would require that such balances be included in operating results in the year in which they are incurred. The regulatory asset is included in the AESO's net deferral accounts receivable on the balance sheet at December 31, 2014 (note 8).

All transmission-related financial activities of the AESO are subject to the Regulator's approval, thus the recovery of transmission costs through the transmission tariff is subject to regulatory approval. With the formation of the AESO through the EUA, the AESO must be managed so no profit or loss results on an annual basis from its operations. Management believes that the ultimate recovery is assured due to this statutory requirement.

#### 4. Accounts Receivable

As of December 31,

	2014	2013
Transmission settlement	\$ 140.4	\$ 143.1
Energy market settlement	4.9	4.1
Trade	3.2	3.9
	<b>\$ 148.5</b>	<b>\$ 151.1</b>

#### 5. Intangible Assets

As of December 31,

	Cost	Accumulated Amortization	2014 Net Book Value
Software development	\$ 82.1	\$ 45.4	<b>\$ 36.7</b>
System coordination computer systems	20.5	14.2	<b>6.3</b>
Work in progress	6.3	-	<b>6.3</b>
	<b>\$ 108.9</b>	<b>\$ 59.6</b>	<b>\$ 49.3</b>

As of December 31,

	Cost	Accumulated Amortization	2013 Net Book Value
Software development	\$ 75.9	\$ 34.5	\$ 41.4
System coordination computer systems	19.7	11.0	8.7
Work in progress	5.6	-	5.6
	<b>\$ 101.2</b>	<b>\$ 45.5</b>	<b>\$ 55.7</b>

Work in progress relates to intangible assets associated with various software development projects that were not commissioned or operational by the end of the year.

For the 12 months ended December 31, 2014, \$3.5 million of payroll and payroll-related costs associated with staff directly involved in software development have been capitalized (2013 – \$4.5 million) and less than \$0.1 million in interest costs were capitalized in 2014 (2013 – \$0.1 million).

## 6. Capital Assets

As of December 31,

		Cost	Accumulated Amortization	2014 Net Book Value
System coordination facility	\$	22.8	\$ 9.9	\$ 12.9
Computer hardware		27.3	16.5	10.8
Leasehold improvements		6.2	4.9	1.3
System coordination computer systems		4.1	2.6	1.5
Backup coordination centre		2.0	0.1	1.9
Furniture and office equipment		0.7	0.4	0.3
Work in progress		0.8	-	0.8
	\$	63.9	\$ 34.4	\$ 29.5

As of December 31,

		Cost	Accumulated Amortization	2013 Net Book Value
System coordination facility	\$	22.3	\$ 8.6	\$ 13.7
Computer hardware		23.3	11.6	11.7
Leasehold improvements		6.6	4.2	2.4
System coordination computer systems		4.1	1.9	2.2
Backup coordination centre		2.0	0.0	2.0
Furniture and office equipment		0.7	0.2	0.5
Work in progress		0.2	-	0.2
	\$	59.2	\$ 26.6	\$ 32.7

Work in progress relates to capital assets associated with hardware that were not commissioned or operational by the end of the year.

For the 12 months ended December 31, 2014, \$0.6 million of payroll and payroll-related costs associated with staff directly involved in hardware set-up and installation have been capitalized (2013 – \$0.5 million) and no interest costs were capitalized in 2014 (2013 – less than \$0.1 million).

## 7. Accounts Payable and Accrued Liabilities

As of December 31,

	2014		2013
Transmission settlement	\$ 186.9	\$	135.2
Energy market settlement	-		-
Trade	19.2		12.5
Accrued liabilities	4.6		10.2
	<b>\$ 210.7</b>	<b>\$</b>	<b>157.9</b>

## 8. AESO Deferral Accounts Receivable (Payable)

	Transmission	Energy Market	Load Settlement	Total
Opening balance, January 1, 2013	\$ (30.2)	\$ 3.3	\$ (0.7)	\$ (27.6)
2013 Operations	(25.4)	4.5	(1.1)	(22.0)
Collection of 2010-2011 Deferral Account Reconciliation	(1.6)	-	-	(1.6)
Distribution of 2012 Deferral Account Reconciliation	7.5	-	-	7.5
Closing balance, December 31, 2013	(49.7)	7.8	(1.8)	(43.7)
2014 Operations	57.4	(4.2)	1.6	54.8
<b>Closing balance, December 31, 2014</b>	<b>\$ 7.7</b>	<b>\$ 3.6</b>	<b>\$ (0.2)</b>	<b>\$ 11.1</b>

## 9. Long-term Payables

Under the terms of the transmission tariff, a market participant may be required to pay an owner's contribution for a generating unit. The contribution amount is determined based on variable terms in accordance with the transmission tariff. A market participant is entitled to a refund of the owner's contribution over a period of ten years for a generating unit's satisfactory annual performance.

The amounts eligible for refund within one year of the balance sheet date is \$8.1 million (2013 - \$6.0 million) which is included as short-term trade payables on the balance sheet as December 31, 2014 (Note 7).

## 10. Credit Facilities

The AESO has credit facilities of \$160.0 million in unsecured demand revolving loan facilities. The facilities provide that the borrowings may be made by way of fixed rate offer loans, prime loans or bankers' acceptances, which bear interest at the rates specified in fixed rate offer loans, at the bank's prime rates, or at bankers' acceptance rates plus a stamping fee. There is an option to request letters of credit under the credit facilities.

In addition to the credit facilities, a demand treasury risk management facility of \$9.0 million in deemed risk content is available to provide for interest swaps for up to \$35.0 million in notional debt. This facility was not used in 2014 and 2013.

At December 31, 2014, there were no drawings on the facilities (2013 – nil) and a \$10.0 million letter of credit was issued as security for operating reserve procurement.

The amount of interest paid during 2014 was \$0.1 million (2013 – \$0.9 million) at an average interest rate of 2.2 per cent (2013 – 2.2 per cent).

## 11. Capital Disclosure

In managing capital, the AESO reviews its cash flows from operations, including the transmission tariff, energy market charge and load settlement charge, to determine whether there are sufficient funds to cover its operating costs and pay for intangible and capital asset purchases. To the extent that the cash flows are not sufficient to cover these expenditures, the AESO utilizes debt financing. The AESO has no equity or externally imposed capitalization requirements except as described in note 1.

*As of December 31,*

	2014	2013
Bank debt	\$ -	\$ -

## 12. Asset Retirement Obligation

The system coordination facility is located on leased land. Under the terms of the lease agreement, the AESO is obligated, at the request of the landlord, to complete site restoration upon termination of the lease. The landlord's intentions are not determinable at this time. As the fair value of the obligation cannot be reasonably estimated due to the broad range of settlement dates and cash flows, any potential liability has not been recognized. Amounts will be accounted for in the period they are determined.

## 13. Contingencies and Commitments

- (i) The AESO leases office space, data processing equipment and land under various operating leases. The minimum lease payments associated with these leases are as follows:

<u>Year</u>	<u>Amount</u> <u>(\$ million)</u>
2015	6.2
2016	6.3
2017	6.3
2018	6.4
2019	6.5
Thereafter	36.9

- (ii) To fulfil the duties of the AESO in accordance with the EUA, the AESO manages the procurement of ancillary services through contracts with third-party suppliers. These ancillary services include operating reserves, transmission must-run, load shed and system restoration. The contracts are for generation capacity and load reduction capabilities ranging in contract duration from one day to 20 years. The amount to be paid under each contract is dependent upon fixed and variable terms. The variable terms are based upon commodity prices, dispatch volumes and frequency.
- (iii) Under the direction of the Government of Alberta, the AESO utilized an AUC-approved Competitive Process to select the party to develop, design, build, finance, own, operate and maintain the Fort McMurray West 500 kV Transmission Project. In December 2014, the AESO executed the first of two contracts with the counterparty that combined, will span a period of approximately 38 years. The amount to be paid under the contract is dependent upon fixed and variable terms. Variable terms include indexation for inflation, regulatory approval of route, final debt funding and the occurrence of certain pre-determined relief events. There are no scheduled financial obligations for the AESO under the contract until 2019.
- (iv) As a result of events that have occurred, the AESO may become party to a claim or legal action arising in the normal course of business. While the outcome of these matters is uncertain, the AESO does not currently believe that the outcome related to these matters or any amount that the AESO may be required to pay would have a materially adverse effect on the AESO as a whole.
- (v) The EUA requires the AESO to provide funding for the MSA with the amount to be recovered through the energy market charge. In 2014, \$6.5 million was paid to the MSA (2013 – \$2.8 million).
- (vi) The *Alberta Utilities Commission Act* requires the AESO to provide funding for the AUC with the amounts to be recovered through the transmission tariff and the energy market charge. In 2014, \$20.4 million was paid to the AUC (2013 – \$20.1 million).

## 14. Employee Future Benefits

The contributions to the defined contribution plan are based on a percentage of an employee's salary with the AESO matching employee contributions to a maximum percentage. There is no unfunded obligation related to the plan as contributions are paid to employees when earned. Total expense for the defined contribution plan was \$4.2 million in 2014 (2013 – \$4.1 million).

## 15. Security Deposits

Security requirements for market participant financial obligations in excess of their unsecured credit limits are met with cash deposits and letters of credit. All market participants who have financial obligations to the AESO must adhere to the ISO Rules and transmission tariff terms and conditions regarding security requirements. Unsecured credit is granted by the AESO to organizations (or guarantors) with an acceptable credit rating from an AESO-recognized bond rating agency, to organizations that do not have a credit rating if they qualify for an AESO-determined proxy credit rating, and to organizations that have an exempt status as determined through government legislation or AUC rulings. The unsecured credit granted by the AESO to an organization is limited based on the AESO's assessment of the organization's credit worthiness.

## 16. Financial Instruments

Financial Instrument	Designated Category	Measurement Basis	Associated Risks	Fair Value at December 31, 2014
Cash	Held for trading	Fair value	Liquidity risk	Carrying value approximates fair value due to short-term nature
Accounts receivable AESO deferral accounts receivable MSA deferral account receivable	Loans and receivables	Initially at fair value and subsequently at amortized cost	Credit risk	Carrying value approximates fair value due to short-term nature
Accounts payable and accrued liabilities	Other financial liabilities	Initially at fair value and subsequently at amortized cost	Liquidity risk Market risk	Carrying value approximates fair value due to short-term nature
Security deposits	Other financial liabilities	Initially at fair value and subsequently at amortized cost	Liquidity risk	Carrying value approximates fair value due to short-term nature
Bank debt	Other financial liabilities	Initially at fair value and subsequently at amortized cost	Liquidity risk Market risk	Carrying value approximates fair value due to short-term nature and variable interest rates

## Nature and Extent of Risks Arising From Financial Instruments

The AESO is exposed to the following types of risks in relation to its financial instruments:

- (a) **CREDIT RISK** ► The risk that a counterparty may default on its financial obligations to the AESO. Due to the EUA requirement that the AESO be operated with no profit or loss from its operations, credit risk is ultimately borne by market participants, though managed by the AESO.

Counterparties are granted certain levels of unsecured credit with the AESO based on their long-term unsecured debt rating provided by a major reputable corporate rating service satisfactory to the AESO or, in the absence of the availability of such ratings, the AESO has satisfactorily reviewed the counterparty for creditworthiness as appropriate. Letters of credit, cash on deposit and legally enforceable right to set-off are used to mitigate risk where appropriate. As at December 31, 2014 and 2013, the amount of financial assets that were past due was not material and there were no material uncollectible receivable balances.

- (b) **MARKET RISK** ► The risk of a potential negative impact on the balance sheet and/or statement of operations and comprehensive income resulting from adverse changes in the value of financial instruments as a result of changes in certain market variables. This includes interest rate price and foreign exchange risks.

The AESO's bank debt is comprised of short-term bankers' acceptances that bear interest at market rates. Accordingly, the exposure to interest rate price risk in relation to the bank debt at the balance sheet date is not material.

The AESO conducts less than one per cent of its business in U.S. dollars and accordingly is subject to currency risk associated with changes in foreign exchange rates in relation to payables. The AESO monitors its exposure to currency risk and reviews whether the use of derivative financial instruments is appropriate to manage potential fluctuations in foreign exchange rates. The AESO has not entered into any derivative instruments with respect to currency risk.

- (c) **LIQUIDITY RISK** ► The risk that the AESO will not be able to meet its obligations associated with financial liabilities. The AESO does not consider this to be a significant risk as the available credit facilities provide financial flexibility to allow the AESO to meet its obligations as they come due. The AESO does not consider there to be a present risk in relation to funds availability to the AESO under the existing credit facilities.

### Summarized Quantitative Data Associated with the Above Risks

- (a) **CREDIT RISK** ► At December 31, 2014, the AESO's maximum exposure to receivable credit risk was \$148.5 million (2013 – \$151.1 million), which is the aggregate of accounts receivable.

The AESO's receivables are due from counterparties that have provided security to the AESO or have been granted unsecured credit based on satisfactory credit ratings. As at December 31, 2014, the amount of financial assets that were past due was not material (2013 – not material).

- (b) **MARKET RISK** ► The AESO is exposed to currency risk on \$0.6 million (2013 – \$0.8 million) of U.S. dollar denominated financial liabilities at December 31, 2014.

If the Canadian dollar increases (decreases) against the U.S. dollar by five per cent prior to the payment by the AESO, operating costs would decrease (increase) by less than \$0.1 million (2013 – less than \$0.1 million) and intangible asset costs would decrease (increase) by less than \$0.1 million (2013 – less than \$0.1 million).

- (c) **LIQUIDITY RISK** ► The AESO's bank debt and accounts payable and accrued liabilities generally have contractual maturities of six months or less.