AESO 2022 YEAR IN REVIEW

Management's Discussion and Analysis

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 March 9, 2023, should be read in conjunction with the Alberta Electric System Operator's (AESO) audited financial statements for the years ended December 31, 2022 and 2021 and accompanying notes. This MD&A is intended to provide an understanding of the AESO's business, financial operations, expectations of the future, and management of risk. The MD&A and financial statements are reviewed and approved by the AESO Board. Amounts within are expressed in Canadian dollars.

The AESO is responsible for:

- The operation of Alberta's fair, efficient and openly competitive energy 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.
- Administering the Renewable Electricity Program (REP).
- Administering load settlement.

The AESO recovers its costs through four separate revenue sources by way of collections from market participants, suppliers under the REP, owners of electric distribution systems, and wires service providers for load settlement. There is no government funding for the operations of the AESO.

2022 Accomplishments

Alberta is experiencing profound changes in the ways in which power is produced, consumed and exchanged, driven by changing consumer preferences, new generation technologies and a societal shift towards a greener, lower-carbon power system. The AESO is committed to playing a leadership role in enabling the transformation while ensuring reliable, affordable power is always available to Albertans. Efforts in 2022 were focused on cost management through optimization of the grid and enabling the transformation of the province's electricity system to facilitate business in Alberta while maintaining reliability. To deliver on this, the AESO made advancements and recognized accomplishments related to its key initiatives as follows.

Net-Zero

The AESO published its *Net-Zero Emissions Pathways Report* in June 2022, considering stakeholder feedback and presenting three plausible pathways that Alberta could follow to reach a net-zero electricity system by 2035, along with the high-level cost implications. These pathways provided insights to market participants and policy makers on future implications for the electricity system. The scenarios also formed the analytics basis on which the AESO is assessing reliability implications from the changing generation fleet, and identification of mitigation options to inform the *AESO 2023 Reliability Requirements Roadmap Report* scheduled for publication in Q1 2023.

Optimizing the Grid

The AESO focused on enhancing methods to maximize the use of existing transmission infrastructure, increase the certainty for the timing of new infrastructure, and seek lower-cost end solutions. The AESO completed testing on a SmartWire pilot project, scheduled for deployment in 2023, designed to optimize the grid; developed a plan to streamline the connection process for market participants and continue to reduce red tape for industry; established a Reliability Standards Discussion Group (RSDG), which reviewed a risk-based methodology (among other considerations); and advanced Dynamic Thermal Line Rating (DTLR) work with an aim to implement where feasible.

Overall ISO Tariff Modernization

The AESO focused on evolving and adapting the ISO Tariff (tariff) to provide efficient price signals to users of the transmission grid, as well as simplifying and making the tariff more accessible. In 2022, a process for updating Generating Unit Owner Contributions (GUOC) was developed and implemented and new GUOC rates were implemented for 2023 as a result. The 2022 Tariff Modernization application was filed with the AUC to better align the tariff terms and conditions with AESO processes, address outstanding AUC directions, and incorporate emissions costs into Conscripted Transmission Must-Run payments. Other regulatory activities related to the Adjusted Metering Practice, Bulk and Regional Rate Design and appeal of the Contribution Policy and Distributed Connected Generation credits were progressed throughout 2022. Notably in 2022, the AESO, along with industry stakeholders participated in the Bulk and Regional Rate Design proceeding, which ultimately resulted in the AUC denying the AESO's proposal and providing a number of directions and guidance to be considered in the development of a new application.

Market Sustainability and Evolution

The AESO looks to maintain system reliability, and ensure it is facilitating a fair, efficient and openly competitive (FEOC) market for an evolving electrical system while also providing certainty and stability to the market structure. In 2022, the AESO progressed rule changes to clarify energy storage participation in the market and finalized design recommendations for the mothball rule and operating reserve market to support the long-term sustainability and competitiveness of the energy-only market structure, to enable the integration of new technologies and to support increased flexibility on the system.

Red Tape Reduction

The Government of Alberta (GoA), through the Red Tape Reduction initiative, has committed to reducing regulatory requirements by one-third by 2023. The AESO has met its commitments in this regard, and it continues to look for opportunities to reduce regulatory burden for stakeholders.

Technology Advancement

The AESO is committed to enabling proactive awareness and integration of new technologies such as Energy Storage onto the grid and into our markets. Throughout 2022, the AESO gathered learnings from its Fast Frequency Response (FFR) technology pilot procurement, which will inform the eligibility and technical requirements for future FFR procurements.

Grid Resiliency

The AESO recognizes that Alberta's transmission system must continue to evolve and remain resilient in the face of the numerous challenges it faces. Some of these challenges include increasing levels of renewable generation, distributed resources, coal-to-gas conversions, electrification of the transportation system, climate change and cyber threats. In order to appropriately address these challenges and secure a resilient grid, the AESO is focused on enhancing system frequency response, ensuring extreme event preparedness, assessing future reliability needs as supply transforms, assessing need for climate adaptation plans, and enhancing cyber security capabilities. In 2022, the AESO designed, launched and executed the Alberta Coordinated Resilience Exercise (ACRE), a decentralized grid resiliency exercise open to Alberta's electricity industry participants, which explored the resilience of the electric system under adverse circumstances and defined how we collectively communicate and coordinate in a crisis situation.

Alberta Reliability Standards (ARS)

A number of advancements were made in the AESO's ARS development and monitoring initiative, the primary intent of which is to integrate risk-based approaches across the ARS lifecycle. A refreshed approach to the development of ARS and the approach to engagement with stakeholders have been established and the AESO continues to focus on integrating process efficiencies across the ARS lifecycle that are both internally and externally facing.

In addition to progressing the above key initiatives, the AESO continued to focus on other external and internal business initiatives in 2022 to advance its strategic plan and to maintain safe and reliable operations.

Summary Annual Highlights

The AESO, a not-for-profit statutory corporation, recovers its operating, right-of-use asset, intangible asset and property, plant and equipment (PP&E) costs through four 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,	**2022**	**2021**	**Change**	**% Change**
Collections	2,929.6	2,388.5	541.1	22.7
Deferred revenue	16.7	48.7	(32.0)	(65.7)
Other revenue	2.8	47.9	(45.1)	(94.2)
Total revenue	**2,949.1**	**2,485.1**	**464.0**	**18.7**
Transmission operating costs	2,801.8	2,296.6	505.2	22.0
Other industry costs	24.7	21.6	3.1	14.4
General and administrative costs	97.9	91.8	6.1	6.6
Amortization and depreciation	24.1	28.1	(4.0)	(14.2)
Borrowing costs	0.6	47.1	(46.5)	(98.7)
Total costs	**2,949.1**	**2,485.1**	**464.0**	**18.7**

Numbers may not add due to rounding

Total Costs

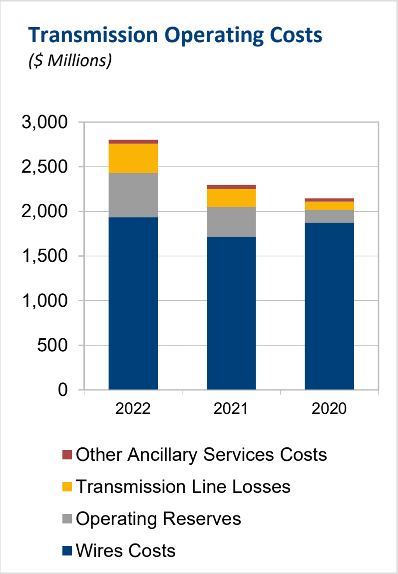
Transmission Operating Costs

Transmission operating costs represent wires costs, operating reserves, transmission line losses and other ancillary services costs. In 2022, transmission operating costs are $2,801.8 million, which is $505.2 million or 22.0 per cent higher than the 2021 costs of $2,296.6 million. This increase is associated with higher wires costs, operating reserves and transmission line losses costs, partially offset by lower other ancillary services costs.

($ Millions) Years ended December 31,	**2022**	**2021**	**Change**	**% Change**
Wires costs	1,933.8	1,713.6	220.2	12.9
Operating reserves	494.1	333.7	160.4	48.1
Transmission line losses	332.7	201.8	130.9	64.8
Other ancillary services costs	41.2	47.5	(6.3)	(13.2)
Transmission operating costs	**2,801.8**	**2,296.6**	**505.2**	**22.0**

Numbers may not add due to rounding

Wires costs represent regulated rates charged by the transmission facility owners (TFOs) for the current year, which are approved by the Alberta Utilities Commission (AUC) and are not controllable costs of the AESO.



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. The cost of operating reserves is impacted by actual volumes, hourly pool prices and operating reserve prices. Operating reserve costs in 2022 are $160.4 million higher than the 2021 costs, primarily due to higher pool prices. The average hourly pool price is $162 per megawatt hour (MWh) in 2022 compared to $102 per MWh in 2021, representing an increase of 58.8 per cent.

Transmission line losses represent the volume of energy that is lost as a result of electrical resistance on the transmission system. Volumes associated with line losses are determined through the energy market settlement process as the difference between generation and import volumes, less consumption and export volumes. The value of line losses is calculated based on the hourly pool price.

The cost of transmission line losses in 2022 is $130.9 million higher than the 2021 cost, primarily due to the impact of the higher average pool price in 2022.

Other Ancillary Services

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 instances where such procurement processes may not be feasible, through bilateral negotiations.

In 2022, other ancillary services costs are $41.2 million, which is $6.3 million or 13.2 per cent lower than the 2021 costs of $47.5 million. The decrease is mainly attributable to lower costs related to conscripted transmission must-run, transmission constraint rebalancing, and load shed service for imports.

($ Millions) Years ended December 31,	2022	2021	Change	% Change
Load shed service for imports	30.0	31.4	(1.4)	(4.5)
Fast frequency response	0.7	-	0.7	-
Transmission must-run				
Contracted	1.2	-	1.2	-
Conscripted	2.1	8.1	(6.0)	(74.1)
Reliability services	2.9	2.9	-	-
Black start	2.5	2.4	0.1	4.2
Transmission constraint rebalancing	1.8	2.7	(0.9)	(33.3)
Total Other Ancillary Services	**41.2**	**47.5**	**(6.3)**	**(13.2)**

Numbers may not add due to rounding

Load shed service for imports (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). LSSi costs are impacted by volume availability, contract prices and AIES requirements for arming and tripping. In 2021, LSSi arming costs were impacted by two significant disturbance events due to the tripping of the interties with British Columbia and Montana; there were no such events in 2022.

Fast frequency response is (FFR) is a fast-acting transmission reliability service that facilitates the arrest of, and recovery from, frequency decay caused by events such as the sudden loss of imports from the interties with British Columbia and Montana. This is a service adapted for new technology, such as energy storage. Two one-year pilot contracts were awarded and began providing FFR services in March 2022.

Transmission must-run (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). Contracted TMR costs in 2022 are $1.2 million, compared to nil in 2021, as a new contract was put into place in July 2022. Conscripted TMR costs in 2022 are $6.0 million lower than the 2021 costs, which is primarily a reflection of the new TMR contract put into place.

Reliability services are 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.

Black start services are 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.

Transmission constraint rebalancing costs are incurred 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 transmission constraint rebalancing under the ISO Rules and would receive a transmission constraint rebalancing payment for energy provided for that purpose. Transmission constraint rebalancing costs in 2022 are $0.9 million lower than the 2021 costs, reflecting a reduction in the frequency and magnitude of rebalancing events. In 2021, there were significant events requiring constrained down generation during islanded operations as well as constraints on generation due to transmission line upgrades and limits.

Other Industry Costs

Other industry costs represent fees or costs paid based on regulatory requirements or membership fees for industry organizations, which are not under the direct control of the AESO. Regulatory process costs are associated with the AESO's involvement in an AUC 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.

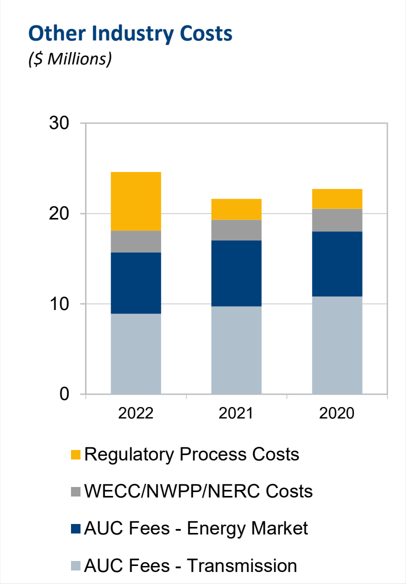
Other industry costs in 2022 are $24.7 million, which is $3.1 million or 14.4 per cent higher than the 2021 costs of $21.6 million, primarily due to an increase in regulatory process costs, partially offset by reduced AUC fees.

($ Millions) Years ended December 31,	**2022**	**2021**	**Change**	**% Change**
AUC Fees – Transmission	8.9	9.7	(0.8)	(8.2)
AUC Fees – Energy Market	6.8	7.3	(0.5)	(6.8)
WECC/NWPP/NERC costs	2.4	2.3	0.1	4.3
Regulatory process costs	6.5	2.3	4.2	182.6
Other industry costs	**24.7**	**21.6**	**3.1**	**14.4**

Numbers may not add due to rounding

Under the provisions of the Alberta Utilities Commission Act (AUC 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, levying two separate administration fees to the AESO – a transmission fee and an energy market fee.

Regulatory process costs in 2022 are $4.2 million higher than the 2021 costs, primarily due to the Bulk and Regional tariff and Modernized Demand Opportunity Service (DOS) Rate Design proceedings.



General and Administrative Costs

General and administrative costs in 2022 are $97.9 million, which is $6.1 million or 6.6 per cent higher than the 2021 costs of $91.8 million. This increase is primarily associated with an increase in staff costs and facilities costs, slightly offset by a decrease in contract services and consultants costs.

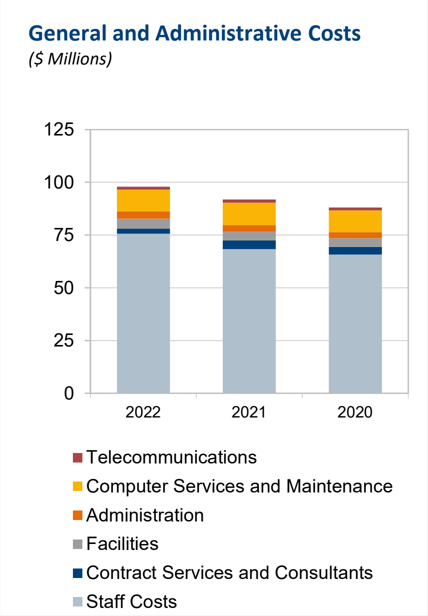
($ Millions) Years ended December 31,	**2022**	**2021**	**Change**	**% Change**
Staff costs	75.7	68.3	7.4	10.8
Contract services and consultants	2.3	4.1	(1.8)	(43.9)
Facilities	4.7	4.1	0.6	14.6
Administration	3.5	3.3	0.2	6.1
Computer services and maintenance	10.4	10.6	(0.2)	(1.9)
Telecommunications	1.3	1.4	(0.1)	(7.1)
General and administrative costs	**97.9**	**91.8**	**6.1**	**6.6**

Numbers may not add due to rounding

In 2022, staff costs are $7.4 million higher than the 2021 costs, primarily due to the impact of market adjustments following the Government of Alberta’s lifting of the Salary Restraint Regulation in July 2022; the implementation of a defined contribution Pension Plan and a defined benefit Retiree Benefits Plan that were put into place in July 2022, resulting in increased benefits costs as well as the initial recognition of actuarial estimates for past service costs; and the timing of vacation accruals.

In 2022, contract services and consultants costs are $1.8 million lower than the 2021 costs, primarily due to the timing of and changes to activities and initiatives requiring specialized external legal and consulting resources.

In 2022, facilities costs are $0.6 million higher than the 2021 costs, primarily due to increases in utilities and operating costs as employees returned to the AESO’s workplace facilities more frequently than over the past two years during the pandemic.



Amortization and Depreciation and Borrowing Costs

($ Millions) Years ended December 31,	**2022**	**2021**	**Change**	**% Change**
Amortization of right of use assets, intangible assets and depreciation of PP&E	24.1	28.1	(4.0)	(14.2)
Borrowing costs	0.6	47.1	(46.5)	(98.7)

Intangible Assets and Property, Plant and Equipment

The AESO’s development and acquisition of intangible assets and PP&E, most significantly the investment in information technology infrastructure and business systems, is a key component of 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 Corporate Capital Management Program facilitates the development, prioritization and approval of capital budgets and provides ongoing corporate visibility and coordination of the enterprise portfolio of capital projects and programs to ensure intangible asset and PP&E purchases achieve the most beneficial and cost-effective results, while continuing to meet operating requirements.

Right-of-use Assets

The AESO is a lessee under various lease contracts for office space with lease terms between 10 and 40 years. The AESO has a lease contract for land with a term of 55 years, commensurate with the expected life of the building owned by the AESO and located on the land.

No new leases were recognized during 2022.

Borrowing Costs

Debt financing occurs to fund intangible asset and PP&E purchases, prepayments of future expenses and working capital deficiencies due to timing differences in the collection of revenues and payment of costs. Intangible assets and PP&E are financed through the AESO's credit facilities and recovered as amortization and depreciation over the useful lives of the assets. Capitalized borrowing costs in 2022 were nil, as no debt financing was required during the year.

Service Area Cost Detail

Allocation of Costs for Revenue Requirements

The majority of the revenues the AESO collects relate to the recovery of transmission operating costs (wires, ancillary services and transmission line losses costs). The remaining costs (general and administrative, other industry, amortization and depreciation and borrowing costs) are recovered through a methodology intended to relate the costs to the specific services that they support (transmission, energy market, REP or load settlement).

The allocation of costs to one of the AESO's four 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 operating costs, borrowing costs, other industry costs, right-of-use asset, intangible asset and PP&E costs. Information technology costs are allocated based on an activity-based analysis to reflect the nature of the underlying costs. Office operating costs and right-of-use asset depreciation costs (office leases) are allocated based on the staff associated with the four services and specific uses of space. Borrowing costs are allocated based on the service for which the borrowed funds were required. Other industry costs are allocated based on the nature of the specific cost. Intangible asset and PP&E 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 assets.

Allocation and Cost Classifications

		AESO Services (%)			
General Classification	**Cost Categories**	Trans-mission	Energy Market	REP	Load Settlement
Operating	• Wires	100	-	-	-
	• Ancillary services	100	-	-	-
	• Transmission line losses	100	-	-	-
Non-operating	• Other industry • General and administrative • Amortization of intangible assets and depreciation of right-of-use assets and PP&E • Borrowing costs	Costs allocated based on established methodology			

Allocation of Non-Operating Costs

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

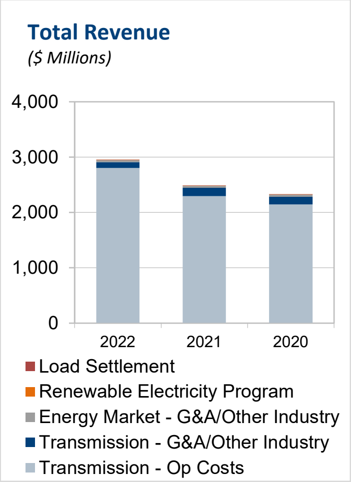
($ Millions) Years ended December 31,		**Trans-mission**	**Energy Market**	**REP**	**Load Settlement**	**Total**
Other industry	**2022**	**17.7**	**7.0**	**-**	**-**	**24.7**
	2021	14.2	7.4	-	-	21.6
General and administrative	**2022**	**73.3**	**22.3**	**1.3**	**1.1**	**97.9**
	2021	69.8	20.1	1.1	0.8	91.8
Amortization and depreciation	**2022**	**17.6**	**6.0**	**0.4**	**0.2**	**24.1**
	2021	21.0	6.5	0.4	0.2	28.1
Borrowing costs	**2022**	**0.5**	**0.1**	**-**	**-**	**0.6**
	2021	46.8	0.2	-	-	47.1
Total	**2022**	**109.0**	**35.4**	**1.7**	**1.2**	**147.4**
	2021	151.8	34.2	1.5	1.0	188.5

Numbers may not add due to rounding

In 2022, the allocation of non-operating costs resulted in an overall decrease to transmission costs and an increase to energy market, REP and load settlement costs compared to 2021. The decrease to the transmission allocation is primarily due to $45.8 million in borrowing costs in 2021 related to the settlement of historical loss factor charges. Slightly offsetting this decrease is an increase in the other industry costs allocation to transmission due to the Bulk and Regional tariff proceeding work in 2022.

Total Revenues

The 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 assets and depreciation of right-of-use assets and PP&E. When revenue collections differ from the annual operating costs, the difference is recorded as an adjustment to revenue, recognized as other accounts receivable or payable and subsequently collected or refunded. The AESO's four revenue sources are from market participants for transmission and energy market, REP suppliers, and owners of electric distribution systems and wires service providers for load settlement; there is no government funding for the operations of the AESO.



Total Revenue

($ Millions) Years ended December 31,	**2022**	**2021**	**Change**	**% Change**
Revenue collections				
Transmission	2,893.2	2,388.3	504.9	21.1
Energy market	36.1	45.3	(9.2)	(20.4)
Renewable electricity program	2.1	1.4	0.7	49.5
Load settlement	1.1	1.4	(0.3)	(21.1)
Total revenue collections	**2,932.4**	**2,436.4**	**496.1**	**20.4**
(Deferred revenue) revenue				
Transmission	17.6	60.1	(42.5)	(70.7)
Energy market	(0.6)	(11.1)	10.5	(94.3)
Renewable electricity program	(0.4)	0.1	(0.5)	(477.3)
Load settlement	0.1	(0.4)	0.5	(133.4)
Total (deferred revenue) revenue	16.7	48.7	(32.0)	(65.7)
Total revenue	**2,949.1**	**2,485.1**	**464.0**	**18.7**

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 the metered demand and energy for system access service.

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 difference in the revenues collected and the costs incurred is accumulated in the AESO's transmission deferral account and can be attributed to several factors:

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

Transmission Deferral Summary

($ Millions) Years ended December 31,	**2022**	**2021**
Revenue collections	2,893.2	2,388.3
Costs	2,910.8	2,448.4
Transmission revenue	**17.6**	**60.1**
Other accounts payable, beginning of year	(11.0)	(88.4)
Disbursement of the deferral account reconciliation applications: 2021 and 2020	9.4	17.3
Remeasurement of post-employment benefit obligations	(0.0)	-
Other accounts receivable (payable), end of year	**16.0**	**(11.0)**

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 an additional percentage charge or credit that applies to each of the components of Rates Demand Transmission Service (DTS) and Fort Nelson Demand Transmission Service (FTS). 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 period 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 settlement deferral account at December 31, 2022 is a $16.0 million receivable compared to an $11.0 million payable at the end of 2021. The change of $27.0 million in 2022 is the result of the settlement of the 2021 Deferral Account Reconciliation resulting in a refund of $9.4 million, as well as transmission operating costs higher than forecast.

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, borrowing costs, amortization of intangible assets and depreciation of right-of-use assets and PP&E. The energy market trading charge also recovers the AUC administration fee and the operating costs for the Market Surveillance Administrator (MSA), which are organizations that are independent of the AESO's operations.

For 2022, the AESO's component of the energy market trading charge is 20.2 cents per MWh compared to 29.7 cents per MWh in 2021.

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

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,	**2022**	**2021**
Revenue collections	36.1	45.3
Costs	35.4	34.2
Energy market (deferred revenue)	**(0.7)**	**(11.1)**
Other accounts (payable) receivable, beginning of year	(7.8)	3.2
Remeasurement of post-employment benefit obligations	(0.0)	-
Other accounts payable, end of year	**(8.5)**	**(7.8)**

Numbers may not add due to rounding

The energy market deferral account at December 31, 2022 is an $8.5 million payable compared to a $7.8 million payable at the end of 2021. The change of $0.7 million is the result of collections exceeding costs. The collections are based on a forecast of volumes and costs allocated to the energy market. In 2022, actual volumes are higher than forecast and costs allocated to the energy market are lower than forecast.

Renewable Electricity Program

The AESO is responsible for administering the REP and recovering the costs through fees charged during each competition and in accordance with Renewable Electricity Support Agreements with generators. The REP service area at the AESO started in 2016 with the Government of Alberta’s announcement of the Climate Leadership Plan. AESO costs associated with the REP include general and administrative costs, borrowing costs, amortization of intangible assets and depreciation of right-of-use assets and PP&E.

The fee structure for the REP includes separate fees associated with the recovery of development, implementation and administration costs. Implementation and administration costs will be recovered from REP suppliers following their facility energization dates.

The REP deferral account is the accumulated difference between revenues collected and costs that will be settled with the Government of Alberta at the conclusion of the REP.

Renewable Electricity Program Deferral Summary

($ Millions) Years ended December 31,	**2022**	**2021**
Revenue collections	2.1	1.4
Costs	1.7	1.5
Renewable Electricity Program (deferred revenue) revenue	**(0.4)**	**0.1**
Other accounts (payable) receivable, beginning of year	(3.2)	17.1
Receipt of contractual payments directed to be applied against deferral balance	(2.4)	(20.4)
Remeasurement of post-employment benefit obligations	0.0	-
Other accounts payable, end of year	**(5.9)**	**(3.2)**

Numbers may not add due to rounding

The REP deferral account at December 31, 2022 is a $5.9 million payable compared to a $3.2 million payable at the end of 2021. The change of $2.7 million is the result of collections exceeding costs, as well as direction from the Government of Alberta to the AESO to retain a $2.4 million termination fee and offset it against the REP deferral account.

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, borrowing costs, amortization of intangible assets and depreciation of right-of-use assets and PP&E.

The load settlement deferral account is the accumulated difference between revenues collected and costs paid that is receivable from, or payable to, owners of electric distribution systems and wires service providers.

Load Settlement Deferral Summary

($ Millions) Years ended December 31,	**2022**	**2021**
Revenue collections	1.1	1.4
Costs	1.2	1.0
Load settlement revenue (deferred revenue)	**0.1**	**(0.4)**
Other accounts (payable) receivable, beginning of year	(0.1)	0.3
Remeasurement of post-employment benefit obligations	0.0	-
Other accounts receivable (payable), end of year	**0.0**	**(0.1)**

Numbers may not add due to rounding

The load settlement deferral account at December 31, 2022 is a $0.0 million receivable compared to a $0.1 million payable at the end of 2021. The change of $0.1 million is the result of costs exceeding collections. The collections are based on a forecast of 2022 costs.

Market Surveillance Administrator Charge

A portion of the energy market trading charge collected by the AESO is remitted to the MSA for its revenue requirement in accordance with the AUC Act. 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 2022, the MSA's portion of the total energy market trading charge is 2.8 cents per MWh compared to 3.1 cents in 2021.

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 2022, the MSA collections exceeded the MSA payments, resulting in a deferral accounts payable balance of $0.2 million, as compared to a less than $0.1 million receivable balance at the end of 2021.

Financial Position and Liquidity

At December 31, 2022, the cash position is $124.8 million, an increase of $65.0 million compared to 2021.

Notable changes are:

($ Millions) Years ended December 31,	**2022**	**2021**
Funds provided by operations	27.1	28.5
Prepayments used for future services	2.8	4.1
Change in long-term payables	77.9	45.4
Cash (used in) provided by settlements	(42.9)	50.8
Cash used for capital expenditures	(23.2)	(22.6)
Debt financing repayments	-	(43.0)
Other	23.2	(10.4)
Increase in cash	**65.0**	**52.9**

Cash Provided by Settlements

At December 31, 2021, the net balance of the settlement-related accounts receivable, accounts payable and accrued liabilities, and other accounts receivable and payable, was a payable of $33.6 million. The balances in these accounts are associated with cash collections for the transmission, energy market, REP, load settlement and MSA settlements offset by the cash payments made by the AESO.

During 2022, cash flows for these accounts and the 2022 transactions resulted in a December 31, 2022, net receivable balance of $9.3 million. The $42.9 million change from 2021 to 2022 is primarily due to transmission costs for 2022 exceeding revenue collected, as well as the $9.4 million settlement related to the 2021 deferral account reconciliation.

Debt Financing and Credit Facilities

At December 31, 2022, the AESO had the following credit facilities available to fund general operating, intangible asset and PP&E purchasing activities:

($ Millions) Year ended December 31, 2022	**Total**	**Available**	**Used**
Committed revolving facility	200.0	190.0	10.0

The committed facility includes a $10.0 million letter of credit at December 31, 2022 and 2021, which is issued as financial security for the AESO's procurement of operating reserves.

Throughout 2022 and 2021, the AESO's credit rating has been AA-/Stable from Standard and Poor's (S&P) Ratings Services. S&P is a leading global provider of independent credit risk research and benchmarks.

Future Outlook

Providing leadership to power Alberta today and into the future

Alberta's electricity industry is undergoing significant change, and the pace of this change is accelerating. The AESO is committed to playing a leadership role in enabling the transformation of the electricity industry while ensuring reliable, affordable power is always available to Albertans. Transitioning to a decarbonized grid, coupled with a growing volume of project connections, creates a highly complex environment. The AESO is prioritizing cost management through optimizing the use of our existing grid while minimizing or deferring the need for new infrastructure where appropriate, all the while recognizing that a lack of proper execution and planning today could have far-reaching cost and reliability impacts on Alberta's power system in the future. The AESO's comprehensive understanding of electricity in Alberta, in-depth expertise, strong leadership and focus will be instrumental to its success.

The AESO's key focus in 2023 continues to focus on "Enabling Transformation" which is further broken down into four strategic areas of work as described in more detail below.

Cost of Delivered Energy

The AESO will facilitate the development of meaningful solutions for both large and small consumers in managing the rising cost of delivered energy, while balancing polarized interests of various players across Alberta's electricity industry.

Reliability Implications and Impacts of our Changing System

The AESO will continue to focus on grid resiliency and reliability, ensuring it has a strong understanding of the risks, challenges and implications to the changing system. The AESO will work closely with industry to ensure a collective reinforcement of the reliability of the system through this transformation.

Transformation

Recognized internally and by stakeholders as some of the most critical and challenging work the AESO will undertake over the next decade, the AESO will play a vital role in ensuring the reliability of the system and proper functioning of the market during the net-zero transition.

Market Sustainability

The AESO will foster market fidelity and investor confidence through the transformation, addressing the impacts to the market of an influx of renewables on the system and the potential pathways to net-zero.

These strategic areas are complemented by ongoing efforts related to the following key initiatives, in addition to continuous improvements on the core work that is essential to Albertans.

Response to Bulk and Regional Transmission Rate Design and Overall ISO Tariff Modernization

The AESO will continue to progress with tariff structure changes and process improvements throughout 2023. Priorities will be guided by the AUC Bulk and Regional Decision, stakeholder input and government policy activity.

Distributed Energy Resources and Grid Optimization

The AESO Distributed Energy Resources (DER) Roadmap was published in June of 2020, with ongoing work being completed to progress this initiative since. The AESO will keep the DER initiative moving forward in 2023, with plans to continue to monitor DER growth to determine when enhanced forecasting will be beneficial and continue to explore impacts to the AESO's Under Frequency Load Shedding program, system restoration coordination and other technical requirements for DER integration.

In the area of Grid Optimization, the AESO will continue to make use of construction milestones and congestion assessments for AESO system projects and is also exploring the use of dynamic line ratings, remedial action scheme optimization and the use of power flow control devices. The AESO is facing an unprecedented volume of customer projects resulting from the rapid transformation of the grid and will continue to engage with stakeholders to streamline the Connections Process.

In addition, the AESO will continue to focus on other external and internal business initiatives to advance its strategic plan and to maintain safe and reliable operations. The AESO will continue to efficiently and effectively deliver on its activities to create value for stakeholders and the province as a whole.

By performing the work described, the AESO will continue to demonstrate that Albertans can look to our organization for electricity industry leadership, and that they can be confident the transmission system and electricity framework are managed efficiently and reliably, every day.

In accordance with the EUA, the AESO Board approves an annual budget to support ongoing operations and to procure transmission services. To recover the costs that are incurred while adhering to the requirement of the EUA for the AESO to operate with no profit or loss on an annual basis, cost-recovery mechanisms are established and approved 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 costs in 2023, the AESO established a cost estimate of $2,520.1 million, which is $390.7 million or 13.4 per cent lower than the 2022 actual costs of $2,910.8 million. This decrease is primarily due to lower ancillary services and transmission line losses costs associated with lower forecasted pool prices, partially offset by an increase in forecasted general and administrative costs.

For energy market-related activities, the annual costs are forecast to increase to $39.5 million in 2023 from the 2022 actual costs of $35.4 million, a $4.1 million or 11.6 per cent increase. This increase is associated with higher forecasted other industry costs, general and administrative costs and borrowing costs in 2023.

For REP-related initiatives, the annual costs are forecast to be $1.7 million in 2023, which is consistent with the 2022 actual costs.

For load settlement-related initiatives, the annual costs are forecast to increase to $1.4 million in 2023 from the 2022 actual costs of $1.2 million, a $0.2 million or 16.7 per cent increase. This increase is associated with higher forecasted general and administrative costs in 2023.

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 Board is responsible for understanding and providing oversight for principal risks associated with the AESO's duties and responsibilities. AESO management is responsible for the ongoing operations of the organization including integrating risk management into operations.

The risk management processes that the AESO has developed are designed to proactively identify the risks confronting the AESO, to assess the impact and likelihood of those risks occurring, and to determine mitigation strategies to acceptable levels of residual risk.

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* (EUA). 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 Board or the President and Chief Executive Officer as delegated by the 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 Board and AESO management foster these values throughout the organization, including through the Complaints Procedures, which provide an avenue for employees and/or other third parties to submit their concerns. In addition, the AESO maintains a code of conduct applicable to its Members, officers, employees and contractors, which serves as a framework for these individuals when they are faced with difficult situations where laws and regulations may not provide sufficient direction and assistance. The AESO Code of Conduct is a policy by which all employees must abide. All employees must acknowledge their agreement with that policy when hired and review it at least annually to confirm compliance/non-compliance. AESO contractors have similar requirements, as appropriate, given the nature of their work for the AESO. Each Member of the Board is bound by the AESO 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 International Financial Reporting Standards. 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 or fraud and error.

- 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, 2022, the AESO maintains, in all material respects, effective internal controls over financial reporting.
- The Audit Committee provides oversight, in accordance with the Audit Committee Charter, on the system of internal controls, the processes 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 Audit Services function provides the AESO with an objective and independent assessment of internal controls, and coordinates and identifies opportunities for improvement. The Audit Services function reports directly to the Audit Committee and meets regularly with the Audit Committee independent of AESO management.
- Ongoing communication and reporting related to identified risk events and opportunities and the activities to mitigate or capitalize on them are provided to AESO Management and the AESO Board through various risk reports. Risk reporting is updated on a quarterly basis, and the AESO's overall listing of risk events (Risk Event Register) is refreshed annually; however, it is updated with new and emerging risk events as they arise.
- The AESO, its Members, officers, employees and contractors are extended a degree of statutory liability protection consistent with the execution of the AESO's public interest mandate.
- The AESO carries insurance coverage that is reviewed and approved as appropriate by the 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

AESO 2022 YEAR IN REVIEW

Financial Statements & Notes

2022 YEAR IN REVIEW

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 (Board). These financial statements have been prepared by management in accordance with International Financial Reporting Standards, appropriate in the circumstances, and include the use of estimates and assumptions that have been made using management's best judgment. Financial information contained in the management's discussion and analysis of financial condition and results of operations (MD&A) 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 Code of Conduct*, which sets forth the AESO's commitment to conduct business with integrity and to comply with the law.

The 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 Board.

The financial statements have been examined by Ernst & Young LLP, the external independent auditors engaged by the Board. The responsibility of this external auditor is to examine the financial statements and express its opinion on the fairness of the financial statements in accordance with International Financial Reporting Standards. The external auditor's report outlines the scope of its examination and states its opinion. Internal and external auditors have access to the Audit Committee, with and without the presence of management.

Michael La

Michael Law
President and Chief Executive Officer

Nicole Kinch, CPA, CA, CPA (WA, US)
Vice-President, Finance

INDEPENDENT AUDITOR'S REPORT

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

Opinion

We have audited the financial statements of the Alberta Electric System Operator ("AESO"), which comprise the statements of financial position as at December 31, 2022 and 2021, and the statements of income and comprehensive income and cash flows for the years then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects the financial position of the AESO as at December 31, 2022 and 2021, and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the AESO in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

Management is responsible for the other information. The other information comprises:

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

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information, and in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

We obtained Management's Discussion and Analysis of Financial Condition and Results of Operations prior to the date of this auditor's report. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with IFRSs, 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.

In preparing the financial statements, management is responsible for assessing the AESO's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the AESO or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the AESO's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit 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 AESO's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the AESO's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the AESO to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Ernst + Young LLP

Chartered Professional Accountants

Calgary, Canada
March 9, 2023

STATEMENTS OF FINANCIAL POSITION

(in millions of Canadian dollars)

As at December 31	2022	2021
Assets		
Current assets		
Cash and cash equivalents	$ 124.8	$ 59.8
Accounts receivable (*note 3*)	284.3	178.4
Other accounts receivable (*note 4*)	16.0	-
Prepaids and deposits	9.7	9.5
	434.8	**247.7**
Non-current assets		
Long-term prepaids (*note 5*)	18.6	21.4
Right-of-use assets, net (*note 6*)	14.4	17.8
Intangible assets, net (*note 7*)	47.9	43.8
Property, plant and equipment, net (*note 8*)	44.4	46.0
	$ 560.1	**$ 376.7**
Liabilities		
Current liabilities		
Accounts payable and other liabilities (*note 9*)	$ 322.3	$ 209.0
Other accounts payable (*note 10*)	8.7	19.0
Current portion of lease liabilities (*note 11*)	3.3	3.2
Current portion of post-employment benefit obligations (*note 13*)	0.1	-
	334.4	**231.2**
Non-current liabilities		
Long-term other accounts payable (*note 10*)	5.9	3.2
Long-term portion of lease liabilities (*note 11*)	9.2	12.5
Long-term portion of post-employment benefit obligations (*note 13*)	2.9	-
Generating unit owner's contribution (*note 14*)	207.1	128.7
Asset retirement obligation (*note 15*)	0.6	1.1
Equity (*note 1*)	-	-
	$ 560.1	**$ 376.7**

Commitments and contingencies *(notes 16 and 17)*

See accompanying notes to the financial statements.

STATEMENTS OF INCOME AND COMPREHENSIVE INCOME

(in millions of Canadian dollars)

For the year ended December 31	**2022**	**2021**
Revenue		
Revenue from contracts with market participants		
Transmission tariff	$ 2,909.4	$ 2,400.8
Energy market charge	34.3	33.9
Renewable electricity program charges	1.4	1.5
Load settlement charge	1.2	1.0
	2,946.3	**2,437.2**
Interest and other *(note 24)*	2.8	47.9
	2,949.1	**2,485.1**
Operating costs and expenses		
Wires costs	1,933.8	1,713.5
Ancillary services costs	535.3	381.2
Transmission line losses	332.7	201.8
General and administrative (*notes 19, 23*)	97.9	91.8
Other industry costs	24.7	21.6
Amortization and depreciation (*notes 6, 7 and 8)*	24.1	28.1
Borrowing costs (*note 24*)	0.6	47.1
	2,949.1	**2,485.1**
Net income and comprehensive income	**$ -**	**$ -**

See accompanying notes to the financial statements.

STATEMENTS OF CASH FLOWS

(in millions of Canadian dollars)

For the year ended December 31	2022	2021
Operating activities		
Net income	**$ -**	**$ -**
Items not affecting cash		
Amortization and depreciation	24.1	28.1
Accretion of asset retirement provision	(0.5)	(0.2)
Accretion of right-of-use lease liability	0.5	0.5
Change in post-employment benefit obligations	3.0	-
Change in long-term other accounts receivable	-	17.3
Change in long-term prepaids	2.8	4.1
Change in long-term payables	77.9	45.3
Change in long-term other accounts payable	2.7	3.2
Change in non-cash operating working capital balances		
Accounts receivable	(105.9)	97.2
Other accounts receivable	(16.0)	3.5
Prepaids and deposits	(0.2)	0.3
Accounts payable and other liabilities	113.8	(7.7)
Other accounts payable	(10.3)	(69.4)
Net cash provided by operating activities	**91.9**	**122.2**
Investing activities		
Additions to intangible assets	(18.4)	(17.3)
Additions to property, plant and equipment	(4.8)	(5.0)
Change in non-cash investing working capital balances		
Accounts payable and other liabilities	-	(0.3)
Net cash used in investing activities	**(23.2)**	**(22.6)**
Financing activities		
Payment of lease liabilities	(3.7)	(3.7)
Change in credit facility	-	(43.0)
Net cash used in financing activities	**(3.7)**	**(46.7)**
Increase in cash position	65.0	52.9
Beginning of year	59.8	6.9
End of year	**$ 124.8**	**$ 59.8**
Cash interest paid	$ 0.5	$ 71.1

See accompanying notes to the financial statements.

NOTES TO THE FINANCIAL STATEMENTS

(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 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; administering the Renewable Electricity Program (REP); 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 (Board) and act in the public interest. As at December 31, 2022, the Board has 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, REP charges 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 and accordingly these statements contain no Statement of Changes in Equity.

2. Significant Accounting Policies

2.1 Basis of presentation and statement of compliance

These financial statements have been prepared by management in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

The financial statements have been prepared on the historical cost basis except for financial instruments that have been measured at fair value. The financial statements are presented in millions of Canadian dollars, which is the AESO's functional currency.

The AESO Board authorized these financial statements for issue on March 9, 2023.

2.2 Summary of significant accounting policies

a) Revenue recognition

The AESO's revenue is derived through four separate charges: the (i) transmission tariff; (ii) energy market charge; (iii) REP charges; and (iv) 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.

Transmission tariff revenue is recognized on a monthly basis consistent with the billing cycle in which the AESO invoices market participants for transmission system access services. Revenues are based on the metered demand and energy for system access service, as specified in the Alberta Utilities Commission-approved tariff rates.

When a market participant reduces or terminates contract capacity for system access service, a lump sum payment may be required in lieu of notice under the terms of the transmission tariff. A payment received by the AESO in advance of the effective date of a change to a system access service agreement is recognized as deferred revenue and subsequently recognized as transmission tariff revenue on the effective date of the change.

Energy market charge revenue is recognized on a monthly basis consistent with the billing cycle in which the AESO invoices market participants to recover the costs of operating the real-time energy market. Revenues are based on the per-megawatt-hour energy market charge and the volume of energy traded through the power pool.

REP revenue is recognized as the AESO invoices market participants in accordance with Renewable Electricity Support Agreements (RESAs). Revenues are based on the costs directly attributable to REP services.

Load settlement revenue is recognized as the AESO invoices load settlement agents. Revenues are based on the costs directly attributable to the load settlement services.

Payment of transmission tariff, energy market and REP revenue is generally due on the twentieth (20th) business day following the month in which the revenue is recognized. Amounts receivable represent the AESO's right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due). Payment terms for all other revenue are typically within 30 days of receipt of an invoice.

The AESO utilizes deferral accounts to record the differences between revenues and costs, including remeasurement gains or losses on post-employment benefit obligations, with the amounts recognized as other accounts receivable or other accounts payable. On an individual basis for the transmission, energy market, REP and load settlement services, in circumstances where collections are greater than costs, the surplus is recorded as a reduction in revenue, recognized as other accounts payable and subsequently refunded. In circumstances where collections are less than costs, the shortfall is recorded as revenue, recognized as other accounts receivable and subsequently collected. The refunds or collections are settled with market participants for the transmission, energy market, and REP services and with the owners of electric distribution systems and wires service providers for load settlement services.

Interest and other revenue represents revenue received from third parties and includes, but is not limited to, bank interest and interest on past due accounts; cancellation and performance forfeitures by market participants; interest on delayed settlement related to Alberta Utilities Commission (AUC) decisions; sublease rent and services; market participant fees; and cost recoveries for training courses. Interest and other revenue are recognized on the accrual basis as the revenue is earned.

As directed in the *Alberta Utilities Commission Act (AUC Act)*, the AESO is required to provide funding for the Market Surveillance Administrator (MSA), a separate statutory corporation. The amounts paid by the AESO are recovered through the energy market charge as directed in the EUA. The energy market charge included in the AESO's statement of income 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.

Revenues are measured at the fair value of the consideration received or receivable.

b) Other accounts receivable/payable

As the EUA requires the AESO to be managed with no profit or loss on an annual basis from its operations, differences in revenues and costs are: recorded as adjustments to revenue, and along with remeasurement gains or losses on post-employment benefit obligations, are recognized as other accounts receivable or other accounts payable; and subsequently collected or refunded. The collection of deferral account shortfalls and payment of deferral account surpluses is embodied in the legislative rights granted in the EUA and *Renewable Electricity Act (REA)* to the Board or AUC. Settlement of the surplus or shortfall occurs through deferral account adjustment riders as part of the transmission tariff, deferral account applications submitted to the AUC, adjustments to the energy market trading charge, settlement with the Minister of Energy for the REP, or settlement with the owners of electric distribution systems and wires service providers conducting load settlement.

The AESO recognizes amounts as long-term other assets or other liabilities when the collection or refund is expected to occur beyond one year from the date of the statement of financial position.

c) Offsetting financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the statement of financial position if there is a legally enforceable right to offset the recognized amounts, and if the AESO intends either to settle on a net basis or to realize the assets and settle the liabilities simultaneously.

d) Current versus non-current classification

The AESO presents assets and liabilities in the statement of financial position based on current/non-current classification. An asset is current when it is:

- Expected to be realized or intended to be sold or consumed in the normal operating cycle;
- Held primarily for the purpose of trade;
- Expected to be realized within twelve months after the reporting period; or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in the normal operating cycle;
- It is held primarily for the purpose of trade;
- It is due to be settled within twelve months after the reporting period; or
- There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period.

e) Cash and cash equivalents

Cash and cash equivalents consist of cash and term deposits issued by credit-worthy financial institutions with maturities within three months from the date of acquisition.

f) Intangible assets

Intangible assets are recorded at cost less accumulated amortization. Cost includes the purchase price, plus any additional costs directly attributable to the development of the asset and preparing the asset for its intended use. Such costs include staff, consulting resources and borrowing costs incurred during the development of qualifying assets.

Maintenance and repair costs which do not enhance or extend the useful life of the asset are expensed as incurred.

Amortization is calculated on a straight-line basis over the estimated useful lives of the assets. No amortization is provided on intangible assets under development. The expected useful lives, amortization method and residual values of the assets are reviewed annually, with any changes accounted for on a prospective basis. Amortization periods for intangible assets are shown in the following table.

Computer software	5 to 7 years

Intangible assets are retired when they are fully amortized and derecognized when no future benefits are expected to arise from their use.

g) Property, plant and equipment

Property, plant and equipment are recorded at cost less accumulated depreciation. Cost includes the purchase price, plus any additional costs directly attributable to the construction of the asset and preparing the asset for its intended use. Such costs include materials, staff, consulting resources, borrowing costs incurred during construction for qualifying assets and asset retirement costs.

Maintenance and repair costs which do not enhance or extend the useful life of the asset are expensed as incurred.

Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets. No depreciation is provided on assets under construction. The expected useful lives, depreciation method and residual values of the assets are reviewed annually, with any changes accounted for on a prospective basis. Depreciation periods for property, plant and equipment are shown in the following table.

System Coordination Centre & Operations Support Centre	20 years; or Over the land-lease term ending in 2060
Computer hardware	4 years
Backup Coordination Centre	Over the lease term ending in 2033
Leasehold improvements	Over the applicable lease terms ending in 2024
Furniture and office equipment	10 years

Property, plant and equipment are retired when they are fully depreciated and derecognized when no future benefits are expected to arise from their use.

h) *Capitalized borrowing costs*

Borrowing costs directly incurred during a development or construction period of substantial duration are added to the cost of the asset. Qualifying assets are those that take a substantial period of time to develop or construct and are developed over periods of time exceeding 12 months. Borrowing costs are considered to be directly attributable if they could have been avoided if the expenditure on the qualifying asset had not been made. Borrowing cost capitalization commences when expenditures and borrowing costs are incurred and ceases when the qualifying asset is substantially complete and ready for its intended use.

i) *Impairment of right-of-use assets, intangible assets and property, plant and equipment*

Impairment indicators for right-of-use assets, intangible assets with finite useful lives and property, plant and equipment are reviewed annually or whenever events or changes in circumstance may indicate possible impairment. Impairment is assessed at the cash-generating unit level to which the asset belongs. Impairment charges, when identified, are included in amortization and depreciation on the Statement of Income and Comprehensive Income. Under the legislative requirements associated with the AESO’s financial operations, any asset impairment charges that might occur would be fully recoverable.

j) *Asset retirement obligations*

Decommissioning liabilities are legal and constructive obligations for decommissioning assets. The fair value approximates the cost a third party would charge to perform the tasks necessary to retire the asset and is recognized at the present value of expected future cash flows. Decommissioning liabilities are added to the carrying amount of the associated asset and depreciated over its estimated useful life. The corresponding liability is accreted over time through charges to earnings and is reduced by actual costs of decommissioning. Decommissioning liabilities may change as a result of a new decommissioning cost estimate or the timing of the obligation.

k) *Provisions and contingencies*

Provisions are recognized when a present obligation (legal or constructive) is a result of a past event, it is probable that an outflow of resources will be required to settle the obligation, and the amount can be reliably estimated. The amount recognized as a provision is the best estimate of the expenditure required to settle the obligation at the end of the reporting period.

If the effect is material, provisions are determined by discounting the expected future cash flows at a risk-adjusted, market-based discount rate. If discounting is used, the increase in the provision due to the passage of time is recognized as interest expense.

A contingent liability is a possible obligation, and a contingent asset is a possible asset, that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the AESO. A contingent liability may also be a present obligation that arises from past events that is not recognized because it is not probable that an outflow of economic resources will be required to settle the obligation, or the amount of the obligation cannot be measured reliably.

Neither contingent liabilities nor assets are recognized in the financial statements. However, a contingent liability is disclosed, unless the possibility of an outflow of resources is remote. A contingent asset is only disclosed where an inflow of economic benefits is probable.

l) Employee benefits and post-employment benefits

A liability is recognized for a present legal or constructive obligation to pay an amount as a result of past service provided by employees, and the obligation can be estimated reliably. The liability recognizes the amount expected to be paid for short-term employee benefits such as the variable pay program; paid annual leave; paid sick leave; post-employment benefits; and termination benefits.

The AESO provides a registered defined contribution pension plan for all of its employees. The cost of pension benefits earned by employees related to the defined contribution pension plan is expensed as incurred.

The AESO offers additional post-employment healthcare benefits to qualifying retired employees and their dependents. The cost of providing benefits under this defined benefit plan is actuarially determined using the projected unit credit method, which takes into account various assumptions and inputs related to the plan. Under this method the defined benefit liability is the present value of projected defined benefits earned as of the date of the statement of financial position. In the event that experience differs from assumptions, remeasurements comprising of actuarial gains or losses are recorded as other accounts receivable or other accounts payable, as ultimately receivable from or refundable to market participants for the transmission, energy market, REP and load settlement services.

m) Leases

At contract inception the AESO assesses whether a contract is, or contains, a lease by determining whether the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

AESO as a lessee

The AESO applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The AESO recognizes right-of-use assets representing the right to use the underlying assets and lease liabilities to make lease payments.

i) Right-of-use assets

The AESO recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are initially measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any re-measurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of a period from the commencement date of the lease term and the estimated useful lives of the assets, as follows:

Office Space	10-40 years
Land	55 years

Right-of-use assets are subject to impairment.

ii) Lease liabilities

At the commencement date of the lease, the AESO recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the AESO and payments of penalties for terminating the lease, if the lease term reflects the AESO exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the AESO uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is re-measured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

iii) Short-term leases and leases of low-value assets

The AESO has elected not to recognize right-of-use assets and lease liabilities for short-term leases that have a term of less than 12 months and leases of low-value assets. Lease payments associated with these leases are recognised as expense on a straight-line basis over the lease term.

n) Long-term prepaids

The AESO recognizes advance cash payments associated with information technology licenses and ancillary services agreements with terms longer than one year from the statement of financial position date as long-term assets.

o) Long-term payables

A generating unit connected to the Alberta Interconnected Electric System (AIES) is required to pay the AESO a generating unit owner's contribution which is refundable over a period of not more than 10 years, subject to satisfactory annual performance. The carrying amount of the contributions is measured as the amount required to settle the obligations at the end of the reporting period. The AESO recognizes refundable amounts as long-term liabilities when the refund term is longer than one year from the statement of financial position date.

p) Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

i) Financial assets

Except for those trade receivables that do not contain a significant financing component and are measured at the transaction price in accordance with IFRS 15 *Revenue from Contracts with Customers*, all financial assets are initially measured at fair value and adjusted for transaction costs (where applicable). Financial assets are classified at initial recognition and subsequently measured at amortized cost, fair value through other comprehensive income, or fair value through profit or loss. The classification is determined by both the AESO's model for managing the financial asset and the contractual cash flow characteristics of the financial asset.

ii) Financial liabilities

All financial liabilities are recognized initially at fair value and adjusted for transaction costs (where applicable). Financial liabilities are classified at initial recognition and subsequently measured at amortized cost, except for financial liabilities which are measured at fair value through profit or loss.

q) Comprehensive income

As the AESO does not have any other comprehensive income, net income equals comprehensive income.

2.3 Changes in accounting policies and disclosures

New and amended standards and interpretations

Onerous Contracts – Costs of Fulfilling a Contract – Amendments to IAS 37

The amendments to IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*, specify which costs an entity needs to include when assessing whether a contract is onerous or loss-making. The costs that relate directly to a contract to provide goods or services include both incremental costs and an allocation of costs directly related to contract activities. General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract.

While the above amendments were adopted by the AESO on January 1, 2022, they had no impact on the financial statements of the AESO.

There are no other new or amended IFRS or IFRS Interpretations Committee (IFRIC) interpretations that would be expected to have a material impact on the AESO.

2.4 Standards issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the AESO's financial statements and could have an impact to the AESO are disclosed below. The AESO intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

Classification of Liabilities as Current or Non-current – Amendments to IAS 1

In January 2020, the IASB issued amendments to paragraphs 69 to 76 of IAS 1 to specify the requirements for classifying liabilities as current or non-current. The amendments clarify:

- What is meant by a right to defer settlement
- That a right to defer must exist at the end of the reporting period
- That classification is unaffected by the likelihood that an entity will exercise its deferral right
- That only if an embedded derivative in a convertible liability is itself an equity instrument would the terms of a liability not impact its classification

The amendments are effective for annual reporting periods beginning on or after January 1, 2024 and must be applied retrospectively.

The amendments are not expected to have a material impact on the AESO.

Definition of Accounting Estimates – Amendments to IAS 8

In February 2021, the IASB issued amendments to IAS 8, in which it introduces a definition of 'accounting estimates'. The amendments clarify the distinction between changes in accounting estimates and changes in accounting policies and the correction of errors. Also, they clarify how entities use measurement techniques and inputs to develop accounting estimates.

The amendments are effective for annual reporting periods beginning on or after January 1, 2023 and apply to changes in accounting policies and changes in accounting estimates that occur on or after the start of that period. Earlier application is permitted.

The amendments are not expected to have a material impact on the AESO.

Disclosure of Accounting Policies – Amendments to IAS 1 and IFRS Practice Statement 2

In February 2021, the IASB issued amendments to IAS 1 and IFRS Practice Statement 2 *Making Materiality Judgements*, in which it provides guidance and examples to help entities apply materiality judgements to accounting policy disclosures. The amendments aim to help entities provide accounting policy disclosures that are more useful by replacing the requirement for entities to disclose their 'significant' accounting policies with a requirement to disclose their 'material' accounting policies and adding guidance on how entities apply the concept of materiality in making decisions about accounting policy disclosures.

The amendments to IAS 1 are applicable for annual reporting periods beginning on or after January 1, 2023 with earlier application permitted. Since the amendments to the Practice Statement 2 provide non-mandatory guidance on the application of the definition of material to accounting policy information, an effective date for these amendments is not necessary.

The AESO is currently revisiting its accounting policy information disclosures to ensure consistency with the amended requirements.

There are no other IFRS or IFRIC interpretations that are issued but not yet effective that would be expected to have an impact on the AESO.

2.5 Significant accounting judgements and estimates

The preparation of these financial statements requires management to select appropriate accounting policies and to make judgments, estimates, and assumptions that could affect the reported amounts of assets, liabilities, revenues, expenses and disclosures of contingent assets and liabilities during the period. Most often these estimates and judgments concern matters that are inherently complex and uncertain. Judgments and estimates are reviewed on an on-going basis; changes to accounting estimates are recognized prospectively.

The key judgments and sources of estimation uncertainty are described below:

a) Useful lives of right-of-use assets, intangible assets and property, plant and equipment

Useful lives are determined based on past experience and current facts, taking into account future expected usage and potential for technological obsolescence.

b) Asset retirement obligation

Measurement of the AESO's asset retirement obligation requires the use of estimates with respect to the amount and timing of the asset retirement; the extent of site remediation required; and related future cash flows, inflation rates and discount rates. The estimated obligation is present valued using a risk-adjusted, market-based discount rate. A change in estimated cash flows, market interest rates, or timing could have a material impact on the carrying amount of the obligation.

c) Impairment of assets

The AESO conducts impairment tests on long-lived assets and right-of-use assets annually and where impairment indicators exist.

d) Leases

i) Estimating the incremental borrowing rate

The AESO cannot readily determine the interest rate implicit in its leases and therefore uses its incremental borrowing rate (IBR) to measure lease liabilities. The IBR is the rate of interest that the AESO would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. As such, the IBR requires estimation when no observable rates are available or when it needs to be adjusted to reflect the terms and conditions of the leases concerned.

ii) Determining the lease term of contracts with renewal and termination options

The AESO determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease, if it is reasonably certain not to be exercised. The AESO applies judgement in evaluating whether it is reasonably certain whether or not to exercise the option to renew or terminate the lease.

e) Defined benefit plan

The cost of post-employment healthcare benefits and the present value of the defined benefit obligation are estimated based on actuarial valuation methods which involve making assumptions that may differ from actual developments in the future.

The significant assumptions include: discount rate, rates of employee turnover and employee opt-in to the plan, future medical costs, healthcare cost trend rates and mortality rates. The defined benefit obligation is highly sensitive to changes in assumptions due to the complexities involved in the valuation and its long-term nature. A change in these assumptions could have a material impact on the measurement of the related expense. The AESO consults with actuarial specialists when setting the key assumptions and all assumptions are reviewed at least annually.

f) Comparative Figures

Certain comparative figures have been reclassified to conform to the current period's presentation.

3. Accounts Receivable

The transmission settlement receivables are subject to offsetting *(note 22)*.

As at December 31,	**2022**	**2021**
Transmission settlement, net	278.4	162.9
Energy market settlement	5.0	5.2
Renewable Electricity Program	0.8	0.2
Trade	0.1	10.1
	284.3	**178.4**

4. Other Accounts Receivable

As at December 31,	**2022**	**2021**
Current		
Transmission receivable	16.0	-
	16.0	**-**

5. Long-term Prepaids

As at December 31,	**2022**	**2021**
Licenses and maintenance	0.8	0.7
Prepaid reliability services agreement (*note 16*)	17.8	20.7
	18.6	**21.4**

6. Right-of-Use Assets

The right-of-use assets recognized and the movements during the year are as follows:

	Office Space	**Land**	**Total**
As at January 1, 2021	18.1	3.2	21.3
Depreciation expense	(3.4)	(0.1)	(3.5)
As at December 31, 2021	**14.7**	**3.1**	**17.8**
Depreciation expense	(3.3)	(0.1)	(3.4)
As at December 31, 2022	**11.4**	**3.0**	**14.4**

The AESO is a lessee under various lease contracts for office space with lease terms between 10 and 40 years. The AESO has a lease contract for land with a term of 55 years, commensurate with the expected life of the building owned by the AESO and located on the land.

7. Intangible Assets

	Computer Software	Intangible Assets Under Development	Total
Cost:			
January 1, 2021	101.5	4.0	105.5
Additions	11.7	5.6	17.3
Transfers	3.6	(3.6)	-
Retirements	(31.1)	-	(31.1)
Disposal	(0.4)	-	(0.4)
December 31, 2021	**85.3**	**6.0**	**91.3**
Additions	10.9	7.5	18.4
Transfers	3.5	(3.5)	-
Retirements	(31.5)	-	(31.5)
December 31, 2022	**68.2**	**10.0**	**78.2**
Accumulated amortization:			
January 1, 2021	61.2	-	61.2
Amortization	17.6	-	17.6
Retirements	(31.1)	-	(31.1)
Disposal	(0.2)	-	(0.2)
December 31, 2021	**47.5**	**-**	**47.5**
Amortization	14.3	-	14.3
Retirements	(31.5)	-	(31.5)
December 31, 2022	**30.3**	**-**	**30.3**
Net Book Value:			
December 31, 2021	*37.8*	*6.0*	*43.8*
December 31, 2022	***37.9***	***10.0***	***47.9***

Intangible assets under development relate to intangible assets associated with various computer software development projects that were not commissioned or operational by the end of the year.

For the year ended December 31, 2022, $7.0 million of payroll costs associated with employees directly involved in preparing intangible assets for their intended use have been capitalized (2021 – $7.3 million).

There was no addition of capitalized borrowing costs to intangible assets (2021 – $0.1 million at an average rate of 1.7 per cent).

8. Property, Plant and Equipment

	System Coordination Facility	Computer Hardware	Backup Coordination Centre	Leasehold Improvements	Furniture and Office Equipment	Assets Under Construction	Total
Cost:							
January 1, 2021	42.3	31.0	2.0	1.5	4.3	1.9	83.0
Additions	2.1	2.2	-	-	0.2	0.5	5.0
Transfers	0.3	1.6	-	-	-	(1.9)	-
Retirements	-	(15.7)	-	-	-	-	(15.7)
December 31, 2021	**44.7**	**19.1**	**2.0**	**1.5**	**4.5**	**0.5**	**72.3**
Additions	-	4.3	-	-	0.2	0.3	4.8
Transfers	-	0.5	-	-	-	(0.5)	-
Retirements	-	(3.1)	-	-	-	-	(3.1)
December 31, 2022	**44.7**	**20.8**	**2.0**	**1.5**	**4.7**	**0.3**	**74.0**
Accumulated depreciation:							
January 1, 2021	13.5	18.9	0.6	1.1	1.1	-	35.2
Depreciation	0.9	5.3	0.1	0.1	0.4	-	6.8
Retirements	-	(15.7)	-	-	-	-	(15.7)
December 31, 2021	**14.4**	**8.5**	**0.7**	**1.2**	**1.5**	**-**	**26.3**
Depreciation	0.9	4.8	0.2	0.1	0.4	-	6.4
Retirements	-	(3.1)	-	-	-	-	(3.1)
December 31, 2022	**15.3**	**10.2**	**0.9**	**1.3**	**1.9**	**-**	**29.6**
Net Book Value:							
December 31, 2021	*30.3*	*10.6*	*1.3*	*0.3*	*3.0*	*0.5*	*46.0*
December 31, 2022	***29.4***	***10.6***	***1.1***	***0.2***	***2.8***	***0.3***	***44.4***

Assets under construction relate to property, plant and equipment in development that were not commissioned or operational by the end of the year.

For the year ended December 31, 2022, $1.0 million of payroll costs associated with employees directly involved in preparing property, plant and equipment for their intended use have been capitalized (2021 – $0.9 million).

There was no addition of capitalized borrowing costs to property, plant and equipment (2021 – less than $0.1 million at an average rate of 1.7 per cent).

9. Accounts Payable and Other Liabilities

The transmission settlement payables are subject to offsetting *(note 22)*.

As at December 31,	**2022**	**2021**
Transmission settlement, net	272.5	174.0
Energy market settlement	3.3	5.8
Trade payables	3.1	2.3
Generating unit owner's contribution (*note 13*)	7.4	8.4
Accrued liabilities	12.6	12.0
Taxes payable	1.1	0.4
Security deposits (*note 17*)	22.3	6.1
	322.3	**209.0**

10. Other Accounts Payable

As at December 31,	**2022**	**2021**
Current		
Transmission payable	-	11.1
Energy market payable	8.5	7.8
Load settlement payable	-	0.1
MSA payable	0.2	-
	8.7	**19.0**
Non-current		
Long-term Renewable Electricity Program payable	5.9	3.2
	5.9	**3.2**

11. Lease Liabilities

The carrying amounts of lease liabilities and the movements during the period are as follows:

	2022	**2021**
As at January 1,	15.7	18.9
Accretion of interest	0.5	0.5
Payments	(3.7)	(3.7)
As at December 31,	**12.5**	**15.7**
Current	3.3	3.2
Non-current	9.2	12.5

The estimated future lease payments associated with these leases are as follows:

	2022
As at December 31,	6.1
No later than 1 year and no later than 5 years	6.8
Later than 5 years	6.7
	19.6

Differences between the lease liability at December 31, 2022 and the estimated future lease payments are due to the discounting of future payments to net present value.

Differences between the year-end reported amounts of right-of-use assets and corresponding lease liabilities are due to prepayments recognized in the measurement of right-of-use-assets, which are not recognized as part of the lease liabilities.

The following are the amounts recognized in profit or loss:

	2022	**2021**
Depreciation expense of right-of-use assets	3.4	3.5
Interest expense on lease liabilities *(note 24)*	0.5	0.5
Total amount recognized in net income	**3.9**	**4.0**

The AESO had cash outflows for leases of $3.7 million in 2022 (2021 – $3.7 million).

The undiscounted potential future rental payments relating to periods following the exercise date of extension options that are not included in the lease term are as follows:

	Within five years	**More than five years**	**Total**
Extension options expected not to be exercised	4.3	2.7	7.0

12. Credit Facility

In November 2021, the AESO amended its credit agreement, reducing the committed facility to $200.0 million and extending the maturity date to December 2024. The facility provides that borrowings may be made by way of fixed rate advances, Canadian Dollar Offered Rate (CDOR) advances or bankers' acceptances, which bear interest at the bank's prime rates, or at bankers' acceptance or CDOR rates plus a stamping fee. There is an option to request letters of credit under the credit facility.

At December 31, 2022, no funds were drawn on the available credit facility (2021 – nil) and a $10.0 million (2021 - $10.0 million) letter of credit was issued as security for operating reserve procurement.

The interest paid related to the credit facility during 2022 was $0.5 million (2021 – $0.9 million) at an average interest rate of 0.19 per cent (2021 – 0.24 per cent) for standby fees.

13. Pension and post-employment benefit obligation

The AESO introduced a registered defined contribution pension plan for all employees effective July 1, 2022, in addition to a supplemental retirement plan (SRP) for members whose benefits are limited by maximum pension rules under the Canadian Income Tax Act. The SRP plan is unfunded. The expense recognized is $4.0 million in 2022 (2021 – nil) for the pension plan and less than $0.1 million (2021 – nil) for the SRP plan.

The AESO also provides other post-employment benefits effective July 1, 2022 comprising of health care benefits for qualifying retired employees and eligible dependants under a defined benefit plan. This plan is unfunded. As a result of introducing this benefit, the expense recorded on initial recognition for past services rendered by employees is $2.8 million (2021 – nil), with an additional $0.1 million (2021 – nil) in expense related to current service costs.

The following tables summarize the net benefit expense recognized in the statements of income and comprehensive income and the post-employment benefit obligations in the statements of financial position.

Net benefit expense:

	2022
Current service cost	0.1
Interest cost	0.1
Past service cost	2.8
Net benefit expense	**3.0**

Changes in the present value of the post-employment benefit obligations:

	2022
Post-employment benefit obligations	
Beginning of year	-
Current service cost	0.1
Interest cost	0.1
Past service cost	2.8
End of year	**3.0**

Remeasurement of post-employment benefit obligations

The remeasurement gain arising from changes in demographic assumptions during the year is less than $0.1 million (2021 – nil). The amount is recorded within other accounts receivable or other accounts payable and subsequently recovered from or refunded to market participants.

Actuarial assumptions

The significant actuarial assumptions used to measure the post-employment benefit obligations are as follows:

	2022
Discount rate at July 1	5.05%
Discount rate at December 31	5.05%
Health care annual trend rate(1)	7.0%
Dental care annual trend rate	4.0%
Health care spending account annual increase rate	0.0%
Percentagage of retirees that opt in	80.0%
Expected long term rate of return on assets during period	0.0%
Average expected remaining service lifetime at January 1, 2023	25.83 years

(1) The AESO uses health care annual trend rates, which assumes 7.0 per cent rate per annum, reducing to 4.5 per cent by 2033, then reducing to 4.0 per cent by 2043.

Sensitivities

The 2022 sensitivities of significant assumptions are as follows:

		Post-employment benefit obligations		Service Cost	
Assumption	Per cent Change	Increase in Assumption	Decrease in Assumption	Increase in Assumption	Decrease in Assumption
Discount rate	1%	(0.3)	0.4	-	-
Trend rate	1%	0.3	(0.2)	-	-
Mortality rate	10%	-	-	-	-

The sensitivity analyses above are based on changing one assumption while holding all other assumptions constant. This is unlikely to occur as changes in some of the assumptions may be correlated and therefore, the sensitivity analyses may not be representative of an actual change in the defined benefit obligation.

Contributions

The expected contributions to the post-employment benefit obligation for 2023 are $0.1 million.

14. Generating Unit Owner's Contribution

Under the terms of the transmission tariff, a market participant is required to pay a generating unit owner's contribution. 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 generating unit owner's contribution in annual amounts during the refund period which is not more than 10 years. The eligibility for the annual refund amount is dependent on the generation facility meeting specified performance criteria.

	Total
January 1, 2021	82.9
Contributions received	54.2
Contributions forfeited	-
Contributions reclassified to current (*note 9*)	(8.4)
December 31, 2021	**128.7**
Contributions received	86.2
Contributions forfeited	(0.4)
Contributions reclassified to current (*note 9*)	(7.4)
December 31, 2022	**207.1**

15. Asset Retirement Obligation

The land on which the AESO's System Coordination Centre (SCC) and Operations Support Centre (OSC) resides must be returned to its original state at the conclusion of the land lease in 2060 on request by the landlord, the Government of Alberta. The asset retirement obligation recognizes the approximate third-party costs for the decommissioning based on the timing of expected cash flows.

The AESO has estimated the net present value of the decommissioning liability related to dismantling the SCC and OSC and restoring the land based on an independent third-party valuation of estimated costs.

The present value of the decommissioning liability is $0.6 million (2021 – $1.1 million). The total undiscounted future liability is estimated to be $5.1 million (2021 – $5.1 million). The AESO has calculated the present value of the obligation using a discount rate of 5.9 per cent (2021 – 4.0 per cent) to reflect the market assessment of the time value of money and an inflation rate of 2.0 per cent (2021– 2.0 per cent).

16. Commitments

a) 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, reliability services, load shed, system restoration and transmission must-run. The contracts are for future generation capacity and load reduction capabilities with expiry dates ranging from 2025 to 2030, in addition to short-term contracts for operating reserves. The amount to be paid under each contract is dependent on fixed and variable terms. Variable terms include items such as commodity prices, dispatch volumes and frequency of events and are determined when the services are provided. The fixed payments associated with the service contracts are as follows:

As at December 31,	**2022**
No later than 1 year	2.9
Later than 1 year and no later than 5 years	5.3
Later than 5 years	1.3
	9.5

b) In 2015, the AESO entered into a 15-year reliability services agreement with Powerex Corp. for the provision of certain emergency energy services from British Columbia, including grid restoration balancing support in the event of an Alberta blackout and emergency energy in the event of supply shortfall. The total cost of the agreement is $42.9 million and was paid in equal amounts in the three-year period from 2015 to 2017. As the payments were made, they were recognized as long-term prepaids on the statement of financial position and amortized on a straight-line basis over the 15-year term of the agreement.

	Total
January 1, 2021	**23.5**
Payment reclassified to current	(2.8)
December 31, 2021	**20.7**
Payment reclassified to current	(2.8)
December 31, 2022	**17.9**

c) Under the direction of the EUA, the AESO established and executed an AUC-approved competitive process for transmission infrastructure and in December 2014, selected the party to develop, design, build, finance, own, operate and maintain the Fort McMurray West 500 kV Transmission Project. In February 2017, the AUC granted the permit and license for this transmission project. In January 2018, the AUC approved the transmission facility owner's tariff rates, which are based upon the monthly amounts in the project agreement between the AESO and the transmission facility owner.

The AESO is obligated to pay monthly amounts for the use of the transmission facilities over the operating period set out in the project agreement, which commenced on the energization date for the transmission facilities (March 2019) and continues until the expiry of the agreement in approximately 35 years.

The monthly amounts are applicable for the entire term of the agreement, subject to allowable adjustments (e.g., inflation). The amounts payable will be confirmed in future periods by the occurrence or non-occurrence of certain events (e.g., a termination of the project agreement would affect monthly amounts). The AESO will recover the monthly amounts paid to the transmission facility owner through the ISO tariff in the same manner that AUC-approved amounts paid to other transmission facility owners are recovered.

As at December 31,	**2022**
No later than 1 year	107.9
Later than 1 year and no later than 5 years	431.4
Later than 5 years	2,856.4
	3,395.7

Pursuant to Section 37 of the *Electric Utilities Act*, each owner of an electric transmission facility must submit to the AUC for approval of a tariff setting out the rates to be paid by the AESO to the owner for the use of the owner's transmission facility. The AESO pays eight other transmission facility owners in the province for the use of their facilities in accordance with AUC approvals. Each transmission facility owner operates in an AUC-approved service area and typically applies to the AUC for approval of its costs one to three years in advance, in contrast to the fore-mentioned long-term contractual agreement with the AESO. For these transmission facility owners, uncertainties relating to the AUC-approved amounts and timing of future cash flows limit the reliability of quantifying similar financial obligations.

d) The AESO is party to RESAs under the REP with selected counterparties to promote the development of renewable generation in Alberta.

The RESAs require the AESO to make variable payments or collections over a period of up to 20 years based on the difference between the counterparty-specific contract price and the hourly pool prices for the actual volumes of electricity delivered to the AIES. The REA stipulates that the funding or settlement for RESA financial obligations, excluding fees for the development, implementation and administration of the REP, is funded by or provided to the Minister of Energy.

17. Contingencies

In accordance with Section 5 of the *Small Scale Generation Regulation*, the AESO must compensate distribution owners for the purchase of meter costs related to certain community generating units. The AUC approves the compensation amounts and may state specific criteria which must be met prior to settlement of such costs. Where such criteria have been met, the AESO has recognized $0.2 million (2021 – nil) in accrued liabilities (*note 9*) for unsettled meter costs. As of December 31, 2022, there was an additional $0.2 million (2021– nil) of unsettled estimated meter costs for which the stated AUC criteria for compensation had not been met, therefore these contingent liabilities have not been recognized in the financial statements.

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.

18. 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 limits are 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.

19. Key Management Compensation

Key management personnel include members of executive management and the AESO Board, a total of 17 individuals (2021 – 17 individuals). The compensation paid or payable to key management for services is as follows:

As at December 31,	2022	2021
Salaries and other short-term employee benefits	3.5	3.6
Post-employment pension and benefits	0.3	-
Termination benefits	0.2	-
	4.0	**3.6**

20. Government-Related Entities

The members of the Board are appointed by the Minister of Energy of the Government of Alberta. Based on this relationship, the AESO's transactions and outstanding balances with the Government of Alberta and other entities in a similar related party relationship with the Government of Alberta are reported.

The AESO considers the following entities as government-related:

- **Balancing Pool**: established under the EUA to manage the transition to competition in Alberta's electric industry;
- **AUC**: established under the AUC Act to ensure that the delivery of Alberta's utility service takes place in a manner that is fair, responsible and in the public interest; and
- **MSA**: established under the AUC Act to monitor Alberta's electricity and retail natural gas markets to ensure that they operate in a fair, efficient and openly competitive manner.

Pursuant to the EUA, on an annual basis the Balancing Pool determines an annualized amount to pay distributions from its revenues to eligible consumers or collect shortfalls in its revenues from eligible consumers. The Government of Alberta guarantees the obligations of the Balancing Pool. Through the transmission tariff, the AESO facilitates the allocation of the annualized amount as directed in the EUA. In 2022, the annualized amount was a shortfall of $131.7 million, of which $12.0 million was payable as at December 31, 2022 (2021 – $135.8 million due, of which $12.8 million was payable as at December 31). The shortfall was collected or receivable from eligible consumers and due to the Balancing Pool.

The Balancing Pool is a market participant and was due $2.7 million related to electricity sales in 2022, of which nil was payable as at December 31, 2022 (2021 – $2.4 million due, of which $1.0 million was payable as at December 31).

As directed in the AUC Act, the AESO is required to pay an administration fee to the AUC. The amounts paid by the AESO are recovered through the transmission tariff and the energy market charge as directed in the EUA. In 2022, $15.7 million was paid to the AUC (2021 – $17.0 million).

As directed in the AUC Act, the AESO is required to provide funding for the MSA. The amounts paid by the AESO are recovered through the energy market charge as directed in the EUA. In 2022, $3.5 million in payments were made to the MSA (2021 – $3.8 million).

The AESO leases 12 acres of land in the Calgary area from the Minister of Infrastructure of the Government of Alberta. The land lease is for a 55-year term ending in 2060 which is comprised of an initial 20-year term that began in 2005 followed by several renewal options at the discretion of the AESO. In 2022, $0.1 million of costs were incurred (2021 – $0.1 million).

21. Financial Instruments

Financial Instrument	Classification	Measurement Basis	Associated Risks	Fair Value at December 31, 2021 and 2020
Cash and cash equivalents	Financial assets at amortized cost	Initially at fair value, adjusted for transaction costs (where applicable) and subsequently at amortized cost	Liquidity risk	Carrying value approximates fair value due to short-term nature and variable interest rates
Accounts receivable Other accounts receivable	Financial assets at amortized cost	Initially at transaction price and subsequently at amortized cost	Credit risk	Carrying value approximates fair value due to short-term nature
Long-term receivables	Financial assets at amortized cost	Initially at transaction price and subsequently at amortized cost	Credit risk	Carrying value approximates fair value due to short-term nature
Accounts payable and accrued liabilities Other accounts payable Deferred revenue	Financial liability at amortized cost	Initially at fair value, adjusted for transaction costs (where applicable) and subsequently at amortized cost	Liquidity risk Market risk	Carrying value approximates fair value due to short-term nature
Security deposits	Financial liability at amortized cost	Initially at fair value, adjusted for transaction costs (where applicable) and subsequently at amortized cost	Liquidity risk	Carrying value approximates fair value due to short-term nature
Credit facility	Financial liability at amortized cost	Initially at fair value, adjusted for transaction costs (where applicable) and subsequently at amortized cost	Liquidity risk Market risk	Carrying value approximates fair value due to short-term nature and variable interest rates
Long-term payables and lease liabilities	Financial liability at amortized cost	Initially at fair value, adjusted for transaction costs (where applicable) and subsequently at amortized cost	Liquidity risk	Carrying value approximates fair value due to the nature of the liability

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

Credit risk is the risk that counterparties may default on their 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 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, 2022 and 2021, the amount of financial assets that were past due was not material and there were no material uncollectible receivable balances.

b) Market Risk

Market risk is the risk of a potential negative impact on the statement of financial position and/or statement of income 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.

Bank debt is comprised of short-term bankers' acceptances or prime rate advances that bear interest at market rates. Accordingly, the exposure to interest rate price risk in relation to the bank debt at the statement of financial position date is not material.

Investments are comprised of short-term bankers' acceptances or term deposits that bear interest at market rates. Accordingly, the exposure to interest rate price risk in relation to the investments at the statement of financial position date is not material.

The AESO conducts less than one per cent of its business in US 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

Liquidity risk is 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 available to the AESO under the existing credit facility.

In managing capital, the AESO reviews its cash flows from operations, including the transmission tariff, energy market charge, REP charges and load settlement charge, to determine whether there are sufficient funds to cover its operating costs and pay for intangible asset and property, plant and equipment 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.

Summarized Quantitative Data Associated with the Above Risks

a) Credit Risk

At December 31, 2022, the AESO's maximum exposure to receivable credit risk was $284.3 million (December 31, 2021 – $178.4 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, 2022, the amount of financial assets that were past due was $2.2 million (December 31, 2021 – $1.3 million).

b) Market Risk

The AESO is exposed to currency risk of less than $0.1 million (December 31, 2021 – less than $0.1 million) of US dollar denominated financial liabilities at December 31, 2022.

If the Canadian dollar decreases (increases) against the US dollar by five per cent prior to the payment by the AESO, operating costs would increase (decrease) by less than $0.1 million (December 31, 2021 – less than $0.1 million) and intangible asset costs would increase (decrease) by less than $0.1 million (December 31, 2021 – 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. The estimated future undiscounted annual refund amounts associated with long-term payables are as follows:

As at December 31,	**2022**
2024	7.2
2025	10.0
2026	12.2
2027	15.6
2028	17.5
2029 and thereafter	144.6
	207.1

22. Offsetting Financial Assets and Liabilities

The following transmission settlement receivables and payables are subject to offsetting as presented in the statement of financial position *(notes 3 and 9).*

As at December 31,	**2022**	**2021**
Transmission settlement receivables, gross	339.4	206.9
Transmission settlement, offsets	(61.0)	(44.0)
Transmission settlement receivables, net	**278.4**	**162.9**

As at December 31,	**2022**	**2021**
Transmission settlement payables, gross	333.5	218.0
Transmission settlement, offsets	(61.0)	(44.0)
Transmission settlement payables, net	**272.5**	**174.0**

23. General and Administrative Expenses

General and administrative expenses classified by nature are as follows:

As at December 31,	**2022**	**2021**
Salaries and benefits	75.7	68.3
Other	22.2	23.5
	97.9	**91.8**

24. Borrowing Costs

As at December 31,	**2022**	**2021**
Borrowing costs	0.6	1.1
Interest on settlement of historical loss factors	-	45.8
Capitalized borrowing costs (*notes 7 and 8*)	-	(0.1)
Interest on lease liability *(note 11)*	0.5	0.5
Accretion of asset retirement obligation *(note 15)*	(0.5)	(0.2)
	0.6	**47.1**

During 2021, following a decision by the AUC (AUC Decision 790), the AESO continued the settlement of adjustments in respect of the recalculation of historical loss factor charges. The AUC decision directed the AESO to modify the methodology used to calculate loss factor charges for the period from January 1, 2006 to December 31, 2016. In accordance with the decision, interest was calculated from the time of original settlement until final settlement for any amount due to and from the AESO. Accordingly, interest expense of $45.8 million and interest income of $47.3 million were recognized for the year ended December 31, 2021.

25. Events After the Reporting Period

On March 8, 2023, the AESO executed a Lease Amending Agreement to secure downtown office space for a term of 10 years commencing on January 1, 2025. The agreement allows for early occupancy prior to the termination of the AESO’s current downtown leases ending in October and December 2024. The agreement consists of basic rent at current market rates for comparable downtown office space over the lease term, in addition to basic rent reductions in 2023 and 2024 for the current leased premises within the same building. The remainder of the agreement is consistent with standard office space lease agreements and includes a leasehold improvement allowance, additional optional storage space for a fee, underground parking stalls and up to two additional 5-year extension terms at the then prevailing standard market rates for basic rent.

The basic rent reductions for the current lease term ending in December 2024 will be reflected by way of an adjustment to the right of use asset and a remeasurement of the related lease liability in the AESO’s financial statements for the year ended December 31, 2023.