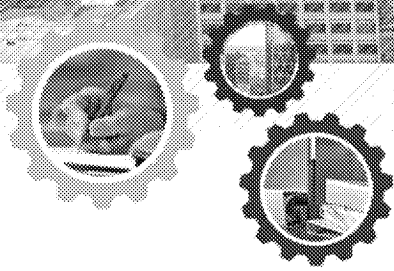




# 2015

## Corporate Governance and Financial Results



# Corporate Governance

## CORPORATE GOVERNANCE

### AESO Board

The Alberta Electric System Operator (AESO) is the business name of a statutory corporation, the Independent System Operator, established on June 1, 2003, under the *Electric Utilities Act* (EUA) of the Province of Alberta. The AESO's mandate is derived from the EUA and related regulations. The AESO is governed by its Board (AESO Board) which is comprised of individuals (Members) appointed by Alberta's Minister of Energy (Minister). Each Member must be independent of any person having a material interest in the Alberta electric industry.

The EUA, the AESO Bylaws and the *AESO Board Charter and Governance Document* set out the general responsibilities of the AESO Board. The AESO Board is responsible for overseeing the business and affairs of the AESO. The AESO Board is actively involved with the AESO executive in the strategic planning process and approves the AESO's strategic plan and its annual business plan and budget. The AESO Board also oversees succession planning, AESO executive compensation, budgeting and risk management.

The AESO Board enhances its governance practices through a continuous improvement approach. The AESO Board and its Committees, as well as individual Members, undertake governance processes and procedures with the view of aligning them with the AESO's vision, mission and principles.

The AESO's structure provides a strong governance model that promotes best practices, ethical behaviours, accountability and transparency to internal and external stakeholders in its business dealings. For example, the AESO Board annually reviews and updates its longstanding *AESO Complaint Policy*. This policy provides employees and contractors with a confidential, safe and, if desired, anonymous method to report activities related to the AESO that may be improper or illegal, including through an AESO Ethics Hotline. The AESO Board, as part of its governance practice, regularly retains the advisory services of independent, third-party experts.

The *Alberta Public Agencies Governance Act* of the Province of Alberta also sets out procedures to formalize the roles and mandate of the AESO in its relationship with the Government of Alberta.

### AESO Board Committees:

For 2015 the AESO Board had the following standing Committees:

- Audit Committee (AC)
- Human Resources Committee (HRC)
- Governance and Nominations Committee (GNC)
- Power System Committee (PSC)

Each Committee operates in accordance with its AESO Board approved Charter and follows best practices.

**Audit Committee (AC)**

The AC provides consultation, advice and recommendations to the AESO Board on financial reporting and budget matters, systems of internal controls, systems for managing risk, the external and internal audit processes and the AESO's process for monitoring compliance with laws and regulations.

**Human Resources Committee (HRC)**

The HRC provides consultation, advice and recommendations to the AESO Board with respect to human resources and compensation matters. This encompasses AESO executive compensation, including the AESO President and Chief Executive Officer (AESO CEO), officer selection, succession planning, human resources strategy and programs.

**Governance and Nominations Committee (GNC)**

The GNC provides consultation, advice and recommendations to the AESO Board regarding compliance with legislation, Member compensation, AESO Board succession planning and enhancement of the AESO's corporate governance practices as well as AESO Board nomination recommendations to the Minister. This includes the annual review of AESO governance documents and processes, Member orientation and ongoing education, AESO Board, Committee and Member performance assessments, and best practices in governance matters.

**Power System Committee (PSC)**

The PSC provides consultation, advice and recommendations to the AESO Board regarding long-term transmission system planning, project delivery, system operations, market operations, AESO tariffs and the AESO Competitive Process.

**AESO Board Members**

Members have extensive professional and business knowledge, skill and experience derived from careers in various fields including energy, utilities, engineering, technology, law and finance.

The following are Members who served during 2015:

| <b>Member</b>                 | <b>Member Since</b> | <b>AESO Board Position</b> | <b>Committee Member</b>                                      |
|-------------------------------|---------------------|----------------------------|--------------------------------------------------------------|
| Jan Carr                      | 2009                | Member                     | GNC; PSC                                                     |
| Linda Chambers                | 2010                | Member                     | HRC Chair; AC                                                |
| Michael Hogan                 | 2014                | Member                     | GNC; HRC; PSC                                                |
| Robert McClinton <sup>1</sup> | 2007                | Member; Vice-Chair; Chair  | AC Chair; GNC Chair, HRC and ex officio all other Committees |
| Patricia Newson               | 2012                | Member                     | AC; PSC                                                      |
| Sarah Raiss <sup>2</sup>      | 2012                | Member; Chair              | GNC; ex officio all other Committees                         |
| Gordon Ulrich                 | 2009                | Member                     | PSC Chair; HRC                                               |
| Vince Vavrek                  | 2013                | Member                     | AC Chair; PSC                                                |
| Chris Warren                  | 2013                | Member                     | GNC Chair; HRC                                               |

<sup>1</sup> Robert McClinton was appointed Chair on October 22, 2015

<sup>2</sup> Sarah Raiss resigned as Chair effective September 18, 2015

## AESO Board Effectiveness

### AESO Board Assessments

The AESO Board and its Committees have performance assessment processes in place. Formal assessments are conducted annually and specific follow-up action items are identified and tracked year-over-year. Assessments are completed on the AESO Board as a whole, the AESO Board Chair, Committee Chairs and each Committee. In addition, individual Member and Committee performances are monitored informally by the Chair throughout the year as part of the Chair's duties.

### Strategy

The AESO Board oversees the strategic planning process including holding an annual strategic planning meeting. In each AESO Board meeting, the AESO CEO provides an update on strategic priorities and accomplishments and engages in a discussion thereof with the AESO Board.

### Risk Management

The AESO Board retains overall risk accountability for the AESO. With the support of its Committees and AESO Management, it provides input into the identification and prioritization of risks as well as reviewing and monitoring risk and mitigation processes, plans and actions. Annually the AESO Board reviews its risk universe and allocates risk oversight to each of the Committees for matters that fall within their mandate. Under the direction of the AC, both internal and external auditing activities are planned in the context of overall risks and vulnerabilities.

### Financial Management

The AC oversees internal control processes. The AESO Controls and Audit Services group as well as the external auditors report to the AC. This ensures excellence and accuracy in financial reporting. The AESO Board approves the annual audited financial statements including Management's Discussion and Analysis of Financial Condition and Results of Operations.

### Succession Planning

The HRC reviews the succession planning and talent management processes for the AESO. This Committee reviews the succession and associated relevant development plans for the AESO CEO, AESO executives and key positions. The AESO Board reviews the succession and development plans for the AESO CEO and AESO executives.

### In-Camera Sessions

Members conduct an in-camera session without AESO Management at each of the AESO Board and Committee meetings.

### Charters and Work Plans

The AESO Board and Committees each have a Charter setting out their detailed mandate and an annual Work Plan. These guide their priorities and work to be completed in any given year and are reviewed not less than annually and updated as required.

### Member Appointments and Reappointments

The *Electric Utilities Act* provides that Member appointments are made by the Minister. In support of that, the AESO Board, through its Recruitment Committee, conducts a robust recruitment process to identify a slate of qualified individuals to be recommended to the Minister for new appointments or, where a

Member(s) is eligible for reappointment, to conduct a robust assessment process prior to recommending such Member to the Minister for reappointment. These processes include assessing Member performance and independence and ultimately, engaging the entire AESO Board, (excluding a Member(s) eligible for reappointment when process involves the Member(s)), to determine the recommendation.

#### Remuneration of Members

An independent, expert, third-party review of Member remuneration is conducted every second year, using benchmark comparisons to similar roles in Canadian organizations with an emphasis on Alberta.

A summary of remuneration Members are eligible to receive as at December 31, 2015, is as follows:

- **Chair** – \$90,000/year retainer, total compensation
- **Vice-Chair** – \$1,000/per AESO Board meeting when serving as Chair
- **Committee Chair** – \$7,500/year retainer
- **Members** – \$27,500/year retainer; \$1,000/per AESO Board and Committee meeting attended; plus per diem for additional AESO business, subject to Chair's authorization
- **Benefits** – Members appointed prior to December 1, 2013, are eligible to receive certain benefits. Members appointed after that date are not eligible for benefits

The AESO Board Chair does not receive meeting fees for AESO Board or Committee meetings or additional AESO business and is provided with a retainer of \$90,000/year.

#### Meeting Attendance and Remuneration

The following is Member attendance at AESO Board and Committee meetings for 2015:

| AESO Board Member   | AESO Board | AC       | GNC    | HRC      | PSC      | Meeting Attendance | Per cent Attendance | 2015 Remuneration <sup>3</sup> |
|---------------------|------------|----------|--------|----------|----------|--------------------|---------------------|--------------------------------|
| Jan Carr            | 7 of 7     |          | 2 of 2 |          | 4 of 4   | 13 of 13           | 100%                | \$ 48,004                      |
| Linda Chambers      | 7 of 7     | 6 of 6   |        | 4 of 4   |          | 17 of 17           | 100%                | \$ 60,504                      |
| Michael Hogan       | 7 of 7     |          |        | 3 of 3   | 4 of 4   | 15 of 15           | 100%                | \$ 43,004                      |
| Robert McClinton    | 7 of 7     | 6 of 6   | 1 of 1 | 1 of 1   | 1 of 1   | 16 of 16           | 100%                | \$ 61,868                      |
| Patricia Newson     | 7 of 7     | 5 of 5   |        |          | 4 of 4   | 16 of 16           | 100%                | \$ 46,364                      |
| Sarah Raiss         | 5 of 5     |          | 2 of 2 |          |          | 7 of 7             | 100%                | \$ 72,444                      |
| Gordon Ulrich       | 7 of 7     |          |        | 4 of 4   | 4 of 4   | 15 of 15           | 100%                | \$ 56,504                      |
| Vince Vavrek        | 7 of 7     | 6 of 6   |        |          | 4 of 4   | 17 of 17           | 100%                | \$ 52,567                      |
| Chris Warren        | 7 of 7     |          | 2 of 2 | 4 of 4   |          | 13 of 13           | 100%                | \$ 44,108                      |
| Attendance          | 61 of 61   | 23 of 23 | 7 of 7 | 20 of 20 | 21 of 21 | 129 of 129         |                     |                                |
| Per cent Attendance | 100%       | 100%     | 100%   | 100%     | 100%     | 100%               |                     |                                |

<sup>3</sup> 2015 Remuneration includes Chair retainer, Committee Chair retainer, Vice-Chair fees and Member meeting fees, and excludes benefits

The total remuneration, including benefits, provided to the Members in 2015 was \$485,367

## AESO Executive Compensation

### Program Objectives

The AESO compensation program (Program) is an integrated program designed to attract, retain and motivate the calibre of executives required to support the achievement of the AESO's statutory mandate, corporate vision and business objectives. Accordingly, the compensation philosophy and programs have been built on the following objectives:

- To focus AESO executives on meeting the AESO's business objectives
- To attract and retain qualified and talented executives to carry out the AESO's mandate
- To reward a combination of demonstrated results and competencies

The philosophy underlying these objectives is that total compensation for the AESO executives must be competitive with industry comparators in total target cash to attract and retain the skills and competencies necessary to fulfil the AESO's mandate.

### Program Governance

The HRC oversees Program governance. The HRC reviews compensation objectives, policies and programs and makes recommendations to the AESO Board.

The AESO Board and HRC, in carrying out their respective mandates, have access to AESO Management's perspectives as well as those of expert external consultants. AESO executive compensation is reviewed annually with respect to Program design, industry compensation trends, actual performance, internal existing compensation and external market relativities.

### Market Comparisons

The AESO annually benchmarks executive compensation. The peer group comparators include public and private sector utilities and pipeline companies, Alberta and energy sector government organizations and agencies and the North American Independent System Operators.

Total cash compensation (base plus short-term incentive) is targeted at market median. The AESO's total compensation program includes base pay, a short-term incentive plan, a flexible benefits program and a group retirement and savings program. For analysis and advice on market comparators, compensation trends and comparator information, the HRC obtains the services of an independent external expert. In 2015, the independent external expert services of Towers Watson were used.

The HRC reviews the information from the independent external experts and confers with the AESO CEO. Recommendations for pay-for-performance adjustment are based on demonstrated results against objectives established at the beginning of the year as well as competencies, and are then put forward to the AESO Board for review and approval.

The AESO Board Chair and the HRC make recommendations regarding the AESO CEO's performance and pay based on individual performance, corporate performance and market data. The AESO Board approves the AESO CEO compensation.

### Base Pay

Base pay is determined for each AESO executive based on comparative market data, individual performance, achievement of business objectives and demonstration of competencies.

### Short-term Incentive Plan

The Short-term Incentive Plan (STIP) is an annual program available to all AESO employees and subject to the discretion of the AESO Board. The STIP is a lump-sum cash award based on two components: corporate performance and individual performance.

STIP payouts are based on achievement of specific annual corporate and individual goals, which are set through rigorous processes. Corporate goals are approved by the AESO Board and performance is monitored at each AESO Board meeting. Corporate goals are aligned with the AESO strategic plan, and ensure that an appropriate mix of risk, opportunity, single-year and multi-year initiatives are addressed across the organization.

The level of achievement of corporate goals is recommended by the AESO CEO to the HRC and is subject to approval by the AESO Board. The AESO CEO's performance and STIP payment is recommended by the AESO Board Chair and the HRC and approved by the AESO Board. For other AESO executives, the CEO makes recommendations to the HRC. The AESO Board approves all AESO executive compensation. In the event a corporate component is awarded by the AESO Board, both corporate and individual components are used to determine resulting incentive payments.

The target STIP for all AESO executives except the AESO CEO is 30 per cent of earnings with the ability to earn up to 60 per cent. For the AESO CEO, the target STIP is 50 per cent of earnings with the ability to earn up to 100 per cent. For the AESO executives except the AESO CEO, the allocation of corporate versus individual performance for the STIP is 70/30 per cent and for the AESO CEO it is 80/20 per cent.

### Long-term Incentive Plan

The AESO has no long-term incentive plans for any AESO employees, including the AESO executives.

### Flexible Benefits

The flexible benefits program for all AESO employees, including the AESO executives, provides for life insurance, dependent life insurance, accidental death and dismemberment, sick leave and short-term disability, group and individual long-term disability, critical illness, dental and health care benefits, as well as a health spending account and personal spending account for additional relevant expenses. Perquisites such as parking and fitness allowances are provided to the AESO executives.

### Registered Retirement and Group Savings Plans

A group plan is provided to all AESO employees, including the AESO executives. For this plan the AESO contributes six per cent of base salary to a retirement savings account. In addition, the AESO will match up to three per cent of salary for any employee contributions made. This can result in a total retirement savings contribution by the AESO of nine per cent of base salary. There is no defined benefit pension plan.

### Other Considerations

An employment agreement including, among other things, a severance provision for termination without cause, is in place for the AESO CEO.

## AESO Executive Compensation

The table below details the total compensation for the year ended December 31, 2015, for certain AESO executives. The AESO recovers its costs, including employee compensation, through revenue sources from market participants; there is no government funding provided for the operations of the AESO.

| Position                          | Name                        | Base Salary | STIP       | Perquisites <sup>4</sup> | Benefits & Savings <sup>5</sup> |
|-----------------------------------|-----------------------------|-------------|------------|--------------------------|---------------------------------|
| President & CEO                   | David Erickson              | \$ 475,000  | \$ 330,125 | \$ 13,930                | \$ 52,725                       |
| Vice-President<br>Market Services | Michael Law                 | \$ 277,113  | \$ 125,537 | \$ 7,930                 | \$ 34,915                       |
| Vice-President<br>Finance         | Todd Fior                   | \$ 263,295  | \$ 102,689 | \$ 7,930                 | \$ 33,672                       |
| Vice-President<br>Regulatory      | Heidi Kirrmaier             | \$ 260,660  | \$ 99,315  | \$ 8,875                 | \$ 33,434                       |
| Vice-President<br>Operations      | Miranda Keating<br>Erickson | \$ 251,220  | \$ 102,502 | \$ 8,875                 | \$ 32,585                       |

<sup>4</sup> Perquisites include car allowance, parking and fitness allowance

<sup>5</sup> Benefits & Savings include group savings/RRSP, dental, health, accidental death & dismemberment and critical illness insurance

## AESO Board and AESO Management

### Governance Practices

The AESO looks to private, public and not-for-profit sectors of industry to provide best business and governance practices. The following are some pertinent practices the AESO uses to provide sound corporate governance within the organization.

### AESO Code of Conduct

Prior to September 2015 the AESO maintained a code of conduct applicable to the Members and one applicable to officers, employees and contractors. These codes of conduct served as frameworks for these individuals when they are faced with difficult situations where laws and regulations may not provide sufficient direction and assistance. These codes of conduct formed part of the AESO Bylaws.

In September of 2015 the AESO Board approved a single AESO Code of Conduct to include Members, employees and contractors. All new AESO employees and contractors, as appropriate, are required to review and agree to abide by the AESO Code of Conduct from their first day of employment or engagement. All AESO employees must, at least annually, review and confirm compliance/non-compliance with and agree to abide by it. Similarly, each Member is bound by the AESO Code of Conduct, and Members must also confirm compliance at least annually.

The results of the annual AESO Code of Conduct compliance process are reported to the AC. The AESO also has a Complaint Policy (i.e., whistleblower policy), and an external Ethics Hotline, for confidential reporting by staff and others to a third party of a violation of the AESO's Code of Conduct or other unethical or illegal conduct.

### Strategic Planning and Budget Development

The strategic plan, budget and business plans are critical to the AESO's operations.

The strategic plan provides organizational direction for the development of corporate, departmental and individual plans and goals for the current and future years and links the AESO's vision, strategic

objectives, strategies and business initiatives to day-to-day operations. The strategic plan is reviewed and approved by the AESO Board and forms the foundation on which the AESO's annual business initiatives, budget and forecasted costs (*Business Plan and Budget*) are established.

As a part of the AESO's development of its *Business Plan and Budget*, the AESO undertakes a consultation process with stakeholders referred to as the Budget Review Process (BRP). The BRP is an open and transparent process that allows stakeholders the opportunity to provide input into the AESO's proposed *Business Plan and Budget* for the upcoming year.

The BRP's primary objective is for the AESO to work with stakeholders to develop a comprehensive *Business Plan and Budget* document that provides a common understanding of expected deliverables and related costs. Stakeholders provide input by submitting written comments on the proposed *Business Plan and Budget* and meeting with the AESO Board to further clarify those comments. At the conclusion of the BRP, the AESO Board publishes its decision on the AESO's *Business Plan and Budget Proposal*.

#### Performance Management

The AESO's salary administration process is pay-for-performance and is designed to align with and attain the goals to be achieved at the corporate level. The corporate goals are initially developed by the AESO executive based on business priorities set out in the Strategic Plan and the Business Plan. The AESO Board provides oversight and approves annual corporate goals.

Department plans and individual goals, which are developed annually, are designed with a view to support achievement of the corporate goals and advance the Strategic Plan. The individual AESO employee goals and departmental plans are established and approved by the AESO executive and AESO Management. The AESO CEO's goals are approved by the AESO Board.

#### Performance Reporting

The AESO executive updates the status of attaining corporate goals on a regular basis. The CEO reports the status of the corporate goals to the AESO Board on a regular basis. For those goals at risk of not being met, strategies are developed or altered to better achieve the desired goal, including reprioritizing the corporate goals.

#### Risk Management

The AESO's Controls and Audit Services group is responsible for development, implementation and ongoing maintenance of the organization's enterprise risk management program.

Regular risk management reporting by the AESO staff, including identified risks, related mitigation strategies and the status of the strategies, is provided to AESO Management and the AESO Board and the appropriate Committee.

The AESO prioritizes its risks and incorporates them into the annual goal-setting process as determined appropriate. Risk mitigation includes development and implementation of appropriate corporate policies and procedures, including various financial policies. The policies are communicated to employees and are accessible by employees at all times.

## Internal Controls

AESO Management has designed and implemented internal controls. These controls occur at varying levels of the organization and provide AESO Management and the AC with reasonable assurance of achieving:

- Strategic initiatives and goals
- Effective and efficient operations
- Reliability of financial reporting
- Compliance with laws, regulations, policies and procedures
- Protection against fraud
- Safeguarding of assets

## Audits/Reviews/Procedures

The AESO's Controls and Audit Services group was established in 2010 and reports to the AC. This function is a component of the AESO's governance framework and evaluates the organization's governance, risk management and control processes, as designed and represented by AESO Management, to determine they are adequate and functioning as intended.

Various audits, reviews and procedures are performed throughout the year by the AESO's Controls and Audit Services group. The scope of these includes financial, operations, compliance and reporting functions within the AESO. When required, third-party expertise is engaged to assist or supplement internal resources to execute reviews and assessments. The annual financial statements of the AESO are audited by an independent external audit firm, Ernst & Young LLP.

## AESO Executive

The AESO Board is responsible for appointing the AESO CEO pursuant to the *Electric Utilities Act*, and in accordance with the AESO Bylaws, other such officers as are necessary whose duties and powers may be prescribed by the AESO Bylaws or by the AESO CEO.

The AESO CEO leads an executive team that operates the day-to-day business and affairs of the AESO, including running the business and developing corporate practices required to meet best business practices.

The 2015 AESO executive team was as follows:

|                                                                       |                                                                                          |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| <b>David Erickson</b><br><i>President and Chief Executive Officer</i> | <b>Heidi Kirrmaier</b><br><i>Vice-President, Regulatory</i>                              |
| <b>Bill Baker</b><br><i>Vice-President, Information Technology</i>    | <b>Michael Law</b><br><i>Vice-President, Market Services</i>                             |
| <b>Todd Fior</b><br><i>Vice-President, Finance</i>                    | <b>Jerry Mossing</b><br><i>Vice-President, Transmission<br/>Planning and Performance</i> |
| <b>Miranda Keating Erickson</b><br><i>Vice-President, Operations</i>  | <b>Greg Retzer</b><br><i>Vice-President, Transmission<br/>Project Delivery</i>           |



# MD&A

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

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

This management's discussion and analysis of financial condition and results of operations (MD&A) as of February 18, 2016, should be read in conjunction with the Alberta Electric System Operator's (AESO) audited financial statements for the years ended December 31, 2015 and 2014 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. Until December 31, 2014, the AESO's financial statements were prepared in accordance with Canadian generally accepted accounting principles (GAAP). This is the first year in which the financial statements have been prepared under International Financial Reporting Standards (IFRS), which differ in some areas from Canadian GAAP. The transition date from Canadian GAAP to IFRS was January 1, 2014, and comparative data for 2014 has been restated in accordance with IFRS. The financial statements are expressed in Canadian dollars.

With the adoption of IFRS, the AESO no longer recognizes deferral account assets and liabilities as being associated with rate-regulated activities. Prior to the adoption of IFRS, the AESO recognized the transmission activities as arising from rate regulation on its balance sheet. Under IFRS, all assets and liabilities associated with the deferral account balances meet the recognition criteria to be recorded as assets and liabilities without applying the IFRS for rate-regulated activities. The presentation of the various deferral account balances in the statement of financial position are no longer offset and are disclosed separately as other accounts receivables and other accounts payables.

The transition from Canadian GAAP to IFRS resulted in no accounting differences between the AESO's previous GAAP and its IFRS financial position as at January 1, 2014 and December 31, 2014, its financial performance for the year ended December 31, 2014 and its cash flows for the year ended December 31, 2014.

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

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

## Summary Annual Highlights

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

(\$ Millions) Years ended December 31,

|                                  | 2015           | 2014           | Change      | % Change |
|----------------------------------|----------------|----------------|-------------|----------|
| Collections                      | 1,895.9        | 1,823.1        | 72.8        | 4        |
| Revenue                          | 12.7           | 54.8           | (42.1)      | (77)     |
| Other revenue                    | 1.0            | 2.3            | (1.3)       | (58)     |
| <b>Total revenue</b>             | <b>1,909.6</b> | <b>1,880.2</b> | <b>29.4</b> | <b>2</b> |
| Transmission operating costs     | 1,767.1        | 1,732.3        | 34.8        | 2        |
| Other industry costs             | 22.6           | 23.0           | (0.4)       | (2)      |
| General and administrative costs | 93.4           | 97.9           | (4.5)       | (5)      |
| Amortization and depreciation    | 26.0           | 26.9           | (0.9)       | (3)      |
| Interest costs                   | 0.5            | 0.1            | 0.4         | 400      |
| <b>Total costs</b>               | <b>1,909.6</b> | <b>1,880.2</b> | <b>29.4</b> | <b>2</b> |

Numbers may not add due to rounding

## Total Costs

### Transmission Operating Costs

Transmission operating costs represent wires costs, operating reserves, transmission line losses and other ancillary services costs. In 2015, transmission operating costs are \$1,767.1 million, which is \$34.8 million or two per cent higher than the 2014 costs of \$1,732.3 million. This increase is associated with higher wires costs in 2015 resulting from Alberta Utilities Commission (AUC) decisions on regulated rates charged by the transmission facility owners (TFOs) offset by lower operating reserves and transmission line losses costs.

(\$ Millions) Years ended December 31,

|                                     | 2015           | 2014    | Change | % Change |
|-------------------------------------|----------------|---------|--------|----------|
| Wires costs                         | <b>1,518.5</b> | 1,399.9 | 118.6  | 8        |
| Operating reserves                  | <b>137.3</b>   | 180.8   | (43.5) | (24)     |
| Transmission line losses            | <b>76.7</b>    | 118.0   | (41.3) | (35)     |
| Other ancillary services costs      | <b>34.6</b>    | 33.6    | 1.0    | 3        |
| <b>Transmission operating costs</b> | <b>1,767.1</b> | 1,732.3 | 34.8   | 2        |

Numbers may not add due to rounding

### Wires Costs

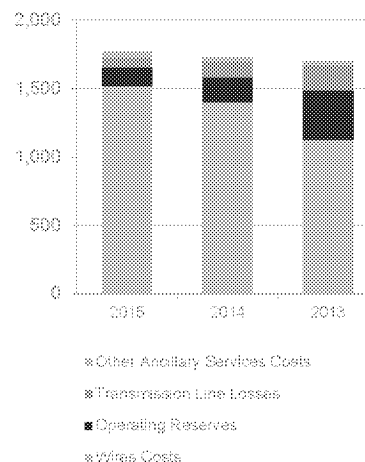
Wires costs represent the amounts paid primarily to TFOs in accordance with their AUC-approved tariffs and are not controllable costs of the AESO. Wires costs in 2015 are \$1,518.5 million, which is \$118.6 million or eight per cent higher than the 2014 costs of \$1,399.9 million due to higher regulated rates charged by the TFOs. The AESO understands that the higher TFO tariffs reflect capital and operating costs associated with projects providing additional transmission system capacity, as well as higher costs to operate and maintain existing transmission facilities.

### Operating Reserves

Operating reserves are generating capacity or load that is held in reserve and made available to the System Controller to manage the transmission system supply-demand balance in real time. There are three types of operating reserves with the minimum volumes of operating reserves required based on Alberta Reliability Standards:

- **Regulating reserves** – The generation capacity, energy and maneuverability responsive to the AESO's automatic generation control (AGC) system that is required to automatically balance supply and demand on a minute-to-minute basis in real time.
- **Spinning reserves** – Unloaded generation that is synchronized to the transmission system, automatically responsive to frequency deviation and ready to provide additional energy in response to an AESO system controller directive. Spinning reserve suppliers must be able to ramp up their generator within 10 minutes of receiving a system controller directive.

Transmission Operating Costs  
(\$ Millions)



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

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

Operating reserve costs in 2015 are \$137.3 million, which is \$43.5 million or 24 per cent lower than the 2014 costs of \$180.8 million due to the impact of the lower hourly pool prices and lower operating reserve volumes in 2015. The average hourly pool price is \$33 per megawatt hour (MWh) in 2015 compared to \$49 per MWh in 2014, representing a decrease of 33 per cent. Operating reserve volumes financially settled in 2015 are 7,545 gigawatt hours (GWh) compared to 8,115 GWh in 2014, representing a seven per cent decrease due to the impact of a new contingency reserve standard (BAL-002) that came into effect in October 2014 which lowered the requirements for reserve volumes on the Alberta Interconnected Electric System (AIES).

#### Transmission Line Losses

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

The cost of transmission line losses in 2015 is \$76.7 million, which is \$41.3 million or 35 per cent lower than the 2014 cost of \$118.0 million due to the impact of a 33 per cent lower average pool price and lower line loss volumes in 2015. Line loss volumes financially settled in 2015 are 2,330 GWh compared to 2,467 GWh in 2014, representing a six per cent decrease associated with additional generation in Southern Alberta and transmission system enhancements.

### Other Ancillary Services

The AESO procures other ancillary services for the secure and reliable operation of the AES. 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 2015, other ancillary services costs are \$34.6 million, which is \$1.0 million or three per cent higher than the 2014 costs of \$33.6 million. The increase is mainly attributable to higher costs related to transmission must-run and reliability services offset by lower costs for load shed service for imports in 2015.

(\$ Millions) Years ended December 31,

|                                       | 2015        | 2014        | Change     | % Change |
|---------------------------------------|-------------|-------------|------------|----------|
| Load shed service for imports         | 17.4        | 24.4        | (7.0)      | (29)     |
| Transmission must-run                 |             |             |            |          |
| Contracted                            | -           | -           | -          | -        |
| Conscripted                           | 10.4        | 5.4         | 5.0        | 93       |
| Poplar Hill                           | 2.6         | 2.8         | (0.2)      | (7)      |
| Reliability services                  | 2.1         | -           | 2.1        | 100      |
| Black start                           | 2.1         | 1.0         | 1.1        | 110      |
| Transmission constraint rebalancing   | -           | -           | -          | -        |
| <b>Total other ancillary services</b> | <b>34.6</b> | <b>33.6</b> | <b>1.0</b> | <b>3</b> |

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). The 2015 costs for LSSi are \$17.4 million, which is \$7.0 million or 29 per cent lower than the 2014 costs of \$24.4 million due to a reduced number of arming and tripping events required for operational purposes in 2015.

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). Conscripted TMR costs in 2015 are \$10.4 million, which is \$5.0 million or 93 per cent higher than the 2014 costs of \$5.4 million. During 2015, there were two notable conscripted TMR events which were in response to real time conditions. The first event occurred while the system was already accommodating new facility construction and the second event was to address the immediate system impact of physical damage to transmission structures.

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. A new agreement came into effect on April 1, 2015.

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 Independent System Operator (ISO) Rules

and would receive a transmission constraint rebalancing payment for energy provided for that purpose. Transmission constraint rebalancing came into effect on November 26, 2015.

### 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. These costs relate to the annual administration fee for the AUC, the AESO's share of Western Electricity Coordinating Council (WECC) and Northwest Power Pool (NWPP) membership fees and regulatory process costs. 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; this does not include application preparation costs.

Other industry costs in 2015 are \$22.6 million, which is \$0.4 million or two per cent lower than the 2014 costs of \$23.0 million. The decrease is mainly attributable to lower AUC administration fees which are offset by higher WECC membership fees in 2015.

(\$ Millions) Years ended December 31,

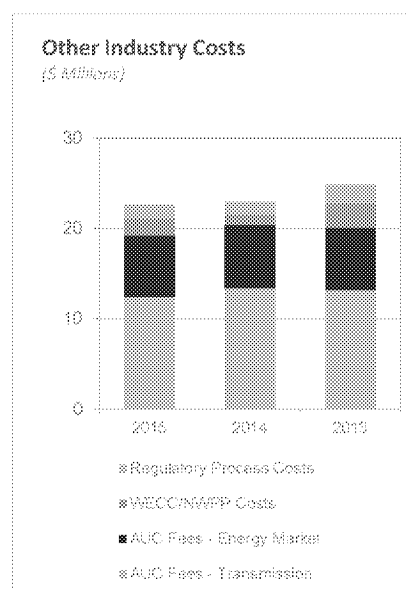
|                             | 2015        | 2014        | Change       | % Change   |
|-----------------------------|-------------|-------------|--------------|------------|
| AUC Fees – Transmission     | 12.5        | 13.4        | (0.9)        | (7)        |
| AUC Fees – Energy Market    | 6.8         | 7.0         | (0.2)        | (3)        |
| WECC/NWPP costs             | 1.9         | 1.1         | 0.8          | 73         |
| Regulatory process costs    | 1.4         | 1.5         | (0.1)        | (7)        |
| <b>Other industry costs</b> | <b>22.6</b> | <b>23.0</b> | <b>(0.4)</b> | <b>(2)</b> |

Numbers may not add due to rounding

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

The AESO's share of WECC membership fees in 2015 is \$1.5 million, payable in US dollars, which is \$0.6 million or 67 per cent higher than the 2014 fees of \$0.9 million. The increase in WECC membership fees is the result of increased WECC costs which are allocated to the AESO on a percentage share basis. Also impacting the costs in 2015 is the higher Canadian to US dollar exchange rate.

Regulatory process costs in 2015 are \$1.4 million, which is \$0.1 million or seven per cent lower than the 2014 costs of \$1.5 million. The 2015 costs are mainly associated with ISO Rule objections and



complaints of \$1.1 million (most notably the transmission loss factor proceeding) and regulatory proceedings of \$0.3 million (most notably the ISO 2014 tariff application proceeding).

## General and Administrative Costs

(\$ Millions) Years ended December 31,

|                                         | 2015        | 2014 | Change | % Change |
|-----------------------------------------|-------------|------|--------|----------|
| Staff costs                             | <b>64.8</b> | 63.2 | 1.6    | 3        |
| Contract services and consultants       | <b>6.5</b>  | 13.5 | (7.0)  | (52)     |
| Facilities                              | <b>7.6</b>  | 6.2  | 1.4    | 23       |
| Administration                          | <b>4.1</b>  | 5.0  | (0.9)  | (18)     |
| Computer services and maintenance       | <b>9.0</b>  | 8.5  | 0.5    | 6        |
| Telecommunications                      | <b>1.4</b>  | 1.4  | -      | -        |
| <b>General and administrative costs</b> | <b>93.4</b> | 97.9 | (4.4)  | (4)      |

Numbers may not add due to rounding

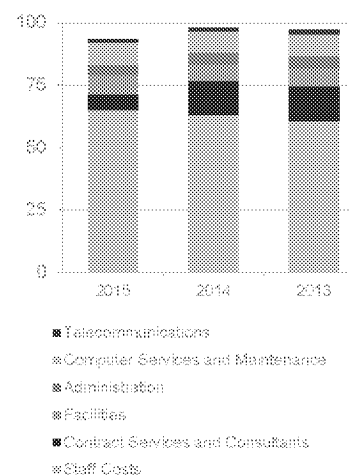
General and administrative costs in 2015 are \$93.4 million, which is \$4.4 million or four per cent lower than the 2014 costs of \$97.9 million. This decrease is mainly associated with a decrease in contract services and consultants costs partially offset by increases in staff and facilities costs.

## Staff Costs

The AESO is committed to the successful delivery of its corporate objectives, and to achieve this, it is supported by knowledgeable and dedicated staff. To retain this strong resource base, a competitive compensation package is offered and a rewarding work environment has been created.

In 2015, staff costs are \$64.8 million, which is \$1.6 million or three per cent higher than the 2014 costs of \$63.2 million. The increase is mainly attributable to annual staff salary adjustments and a lower vacancy rate in 2015 compared to 2014.

General and Administrative Costs  
(\$ Millions)



### Contract Services and Consultants

The AESO uses contract services and consultants to supplement staff resources for two general purposes: to provide knowledgeable experts to address specific work assignments and to provide resource support to address workload peaks to maintain seamless operations.

In 2015, contract services and consultants costs are \$6.5 million, which is \$7.0 million or 52 per cent lower than the 2014 costs of \$13.5 million due to a reduction in the business requirements mainly associated with several non-recurring initiatives from 2014. The two most notable projects completed in 2014 were:

- Competitive Process for the Fort McMurray West 500kV Transmission Project; and
- Phase II (Sourcing/Request for Proposal) of the Market Systems Replacement and Reengineering (MSR) Project.

### Facilities

In 2015, facilities costs are \$7.6 million, which is \$1.4 million or 23 per cent higher than the 2014 costs of \$6.2 million. In late 2014 and early 2015, the base rental rates for 80,000 square feet of downtown office space were adjusted based on the terms in the lease agreements. The operating costs associated with the downtown office leases also increased in 2015.

### Administration

Administration costs include training, travel, insurance, corporate subscriptions, AESO Board fees and office costs. In 2015, administration costs are \$4.1 million, which is \$0.9 million or 18 per cent lower than the 2014 costs of \$5.0 million. The decrease is associated with lower travel, meeting and meal costs; fewer notices and publications for need applications; and non-recurring training for new operational technology (e.g., integration of the high-voltage direct current transmission lines).

### Computer Services and Maintenance

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

In 2015, computer services and maintenance costs are \$9.0 million, which is \$0.5 million or six per cent higher than the 2014 costs of \$8.5 million. The increase in costs is associated with additional license and maintenance agreements and a higher Canadian to US dollar exchange rate in 2015, as several of the major license and maintenance agreements are denominated in US dollars.

### Telecommunications

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

In 2015, telecommunication costs are \$1.4 million, which is consistent with the 2014 costs of \$1.4 million.

## Amortization and Depreciation and Interest

(\$ Millions) Years ended December 31,

|                                                            | 2015 | 2014 | Change | % Change |
|------------------------------------------------------------|------|------|--------|----------|
| Amortization of intangible assets and depreciation of PP&E | 26.0 | 26.9 | (0.9)  | (3)      |
| Interest costs                                             | 0.5  | 0.1  | 0.4    | 400      |

### Amortization of Intangible Assets and Depreciation of Property, Plant and Equipment

Intangible assets are amortized and PP&E is depreciated over their estimated useful lives. Intangible assets include the AESO's computer software purchases and development costs.

In 2015, amortization of intangible assets and depreciation of PP&E collectively total \$26.0 million, which is \$0.9 million or three per cent lower than the 2014 amortization of \$26.9 million. The decrease in 2015 is due to a reduced depreciable asset base, as \$11.1 million of fully depreciated assets were retired in 2015 and only \$9.3 million of depreciable assets were added over the course of the year.

### Interest

Interest costs are associated with borrowing costs for debt financing, portions of which are capitalized when directly incurred during the development or construction of an asset, and financing costs associated with adjustments to the recognized decommissioning liability.

Debt financing occurs to fund intangible asset and PP&E purchases 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 2015 were \$0.2 million compared to less than \$0.1 million in 2014.

Interest costs in 2015 are \$0.5 million, which is \$0.4 million higher than the 2014 costs of \$0.1 million. In 2015, the average borrowing requirements increased due to lower cash surpluses throughout the year associated with the deferral accounts, most notably the transmission deferral account.

### Intangible Assets and Property, Plant and Equipment

Intangible asset and PP&E purchases total \$27.4 million in 2015 compared to \$17.2 million in 2014. 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 the business operations. As with all information technology-intensive organizations, the AESO's challenge is to find the appropriate balance between implementing technology advancements, determining the level of information technology development that can be supported by business operations, and validating the overall financial requirement. To address these challenges, a vetting and prioritization process occurs to ensure intangible asset and PP&E purchases achieve the most beneficial and cost-effective results, while continuing to meet operating requirements.

In 2015, more than half of the intangible asset and PP&E purchases relate to two major capital projects – the Energy Management System (EMS) Definition and Implementation Project and the Market Systems Replacement and Reengineering (MSR) Implementation Project.

- The EMS is a critical control system used by the AESO to manage and operate the AIES. The EMS project was initiated in 2014 and is planned to be completed in 2017, resulting in the implementation of an upgraded EMS (version 3.0).
- The MSR project was initiated in 2013, with intangible asset and PP&E costs being recognized for the first time in 2015. The objective of the project is to secure the reliability and flexibility of the AESO's market systems with the project development and implementation expected to span multiple years.

The remainder of the intangible asset and PP&E purchases in 2015 are mainly associated with base system hardware and software application replacements, additions, and continued development and upgrades to operational systems.

In 2014, intangible asset and PP&E purchases related primarily to base system hardware and software application replacements, additions, and continued development and upgrades to operational systems. The AESO also focused on the integration of the high-voltage direct current (HVDC) transmission lines, which were commissioned in 2015, into the AESO's critical software and the advancement of the AESO's document management systems. In addition, the AESO initiated the multi-year project to upgrade the EMS.

The AESO's net book value for intangible assets and PP&E total \$81.3 million in 2015 compared to \$78.8 million in 2014. As of December 31, 2015, approximately 81 per cent (2014 – 79 per cent) of the net book value relates to computer infrastructure and business systems with the remaining value associated with the AESO's system coordination facility, furniture and office equipment.

## Service Area Cost Detail

### Allocation of Costs for Revenue Requirements

The AESO recovers its operating, intangible assets and PP&E costs through three separate revenue sources. Each revenue source is designed to recover the costs directly related to a specific service as well as a portion of the shared corporate services costs. The majority of 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 interest costs) are recovered through a methodology intended to relate the costs to the specific services that they support (transmission, energy market or load settlement).

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

Exceptions to this general methodology arise for information technology, office rent, other industry costs and intangible 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 rent costs are allocated based on the staff associated with the three services. Other industry costs are allocated based on the nature of the specific regulatory proceeding or the administration or membership fee. Intangible 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 systems (hardware and software).

#### Allocation and Cost Classifications

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

#### Allocation of Non-Operating Costs

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

(\$ Millions) Years ended December 31,

|                               |      | Trans-<br>mission | Energy<br>Market | Load<br>Settlement | Total |
|-------------------------------|------|-------------------|------------------|--------------------|-------|
| Other industry                | 2015 | 14.8              | 7.8              | -                  | 22.6  |
|                               | 2014 | 15.3              | 7.6              | -                  | 23.0  |
| General and administrative    | 2015 | 67.8              | 24.6             | 1.0                | 93.4  |
|                               | 2014 | 70.7              | 26.0             | 1.2                | 97.9  |
| Amortization and depreciation | 2015 | 16.3              | 9.5              | 0.2                | 26.0  |
|                               | 2014 | 15.8              | 10.9             | 0.2                | 26.9  |
| Interest                      | 2015 | (0.0)             | 0.5              | 0.0                | 0.5   |
|                               | 2014 | (0.7)             | 0.8              | 0.0                | 0.1   |
| Total                         | 2015 | 98.8              | 42.4             | 1.2                | 142.4 |
|                               | 2014 | 101.1             | 45.3             | 1.4                | 147.9 |

Numbers may not add due to rounding

#### Other Industry

The percentage allocation of other industry costs to the three services is consistent in 2015 and 2014.

#### General and Administrative

The percentage allocation of general and administrative costs to the three services is consistent in 2015 and 2014.

#### Amortization and Depreciation

The percentage allocation of amortization and depreciation to the three services is consistent in 2015 and 2014.

#### Interest

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

The cash surpluses relating to the transmission service in 2015 relate to generating unit owner's contribution deposits and surplus deferral accounts which offset the net book value of the assets. As a result, imputed interest income is allocated to the transmission service. In 2014, there was higher imputed interest income due to overall higher monthly deferral account surpluses.

For the energy market and load settlement services, debt financing is required for the net book value of the assets and deferral accounts receivable which results in interest expense.

## Total Revenues

The *Electric Utilities Act* (EUA) requires that the AESO operates so that no profit or loss results on an annual basis from its operations. To achieve this, revenue is recognized to the extent of annual operating costs, including the amortization of intangible assets and depreciation of 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 three revenue sources are from transmission, energy market or load settlement market participants; there is no government funding provided for AESO operations.

### Total Revenue

(\$ Millions) Years ended December 31,

|                                         | 2015           | 2014           | Change        | % Change    |
|-----------------------------------------|----------------|----------------|---------------|-------------|
| <b>Revenue collections</b>              |                |                |               |             |
| Transmission                            | 1,849.0        | 1,776.1        | 72.9          | 4           |
| Energy market                           | 46.3           | 49.6           | (3.3)         | (7)         |
| Load settlement                         | 1.5            | (0.2)          | 1.7           | 850         |
| <b>Total revenue collections</b>        | <b>1,896.8</b> | <b>1,825.4</b> | <b>71.4</b>   | <b>4</b>    |
| <b>Revenue (deferred revenue)</b>       |                |                |               |             |
| Transmission                            | 17.0           | 57.4           | (40.4)        | (70)        |
| Energy market                           | (4.0)          | (4.2)          | 0.2           | 5           |
| Load settlement                         | (0.3)          | 1.6            | (1.9)         | (119)       |
| <b>Total revenue (deferred revenue)</b> | <b>12.7</b>    | <b>54.8</b>    | <b>(42.1)</b> | <b>(77)</b> |
| <b>Total revenue</b>                    | <b>1,909.6</b> | <b>1,880.2</b> | <b>29.3</b>   | <b>2</b>    |

Numbers may not add due to rounding

## Transmission

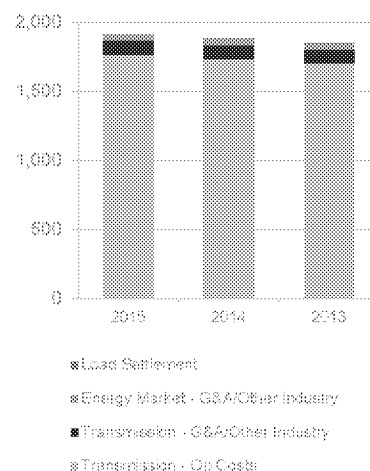
The AESO is responsible for paying all of the costs incurred in managing the provincial transmission system and recovering the costs through a tariff approved by the AUC. The transmission tariff is designed to allocate the costs to all users of the transmission system based on the metered demand and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

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

When transmission revenue collections are greater than transmission costs, the surplus is recorded as a reduction in revenue, recognized as other accounts payable and subsequently refunded. When transmission revenue collections are less than transmission costs, the shortfall is recorded as revenue, recognized as other accounts receivable and subsequently collected.

**Total Revenue**  
(\$ Millions)



## TRANSMISSION DEFERRAL SUMMARY

(\$ Millions) Years ended December 31,

|                                                        | 2015        | 2014        |
|--------------------------------------------------------|-------------|-------------|
| Revenue collections                                    | 1,849.0     | 1,776.1     |
| Costs                                                  | 1,866.0     | 1,833.5     |
| <b>Transmission revenue</b>                            | <b>17.0</b> | <b>57.4</b> |
| Other accounts receivable (payable), beginning of year | 7.7         | (49.7)      |
| <b>Other accounts receivable, end of year</b>          | <b>24.7</b> | <b>7.7</b>  |

*Numbers may not add due to rounding*

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

For rate categories other than transmission line losses, the AESO files a retrospective deferral account reconciliation application with the AUC for approval of the final settlement amounts. The final

reconciliation process associates all revenue and cost adjustments by rate category to the appropriate production month and allocates the corresponding charges and refunds to market participants. For transmission line losses, Rate Rider E is a prospective adjustment for the reconciliation of deferral account balances.

The transmission settlement deferral account at December 31, 2015 is a \$24.7 million receivable compared to a \$7.7 million receivable at the end of 2014. The change of \$17.0 million during 2015 is the result of transmission costs exceeding collections associated with higher AUC-approved wire costs than the AESO incorporated into transmission tariff rates.

### Energy Market

The AESO recovers the costs of operating the real-time energy market through an energy market trading charge on all MWh traded. The AESO's component of the energy market trading charge recovers regulatory process costs, general and administrative costs, interest, amortization of intangible assets and depreciation of 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 2015, the AESO's component of the energy market trading charge is 30.2 cents per MWh compared to 32.3 cents per MWh in 2014.

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

When energy market revenue collections are greater than energy market costs, the surplus is recorded as a reduction in revenue, recognized as other accounts payable and subsequently refunded. When energy market revenue collections are less than energy market costs, the shortfall is recorded as revenue, recognized as other accounts receivable and subsequently collected.

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,

|                                                         | 2015         | 2014         |
|---------------------------------------------------------|--------------|--------------|
| Revenue collections                                     | 46.3         | 49.6         |
| Costs                                                   | 42.4         | 45.3         |
| <b>Energy market deferred revenue</b>                   | <b>(4.0)</b> | <b>(4.2)</b> |
| Other accounts receivable, beginning of year            | 3.6          | 7.8          |
| <b>Other accounts (payable) receivable, end of year</b> | <b>(0.4)</b> | 3.6          |

*Numbers may not add due to rounding*

The energy market deferral account at December 31, 2015 is a \$0.4 million payable compared to a \$3.6 million receivable at the end of 2014. The change of \$4.0 million is the result of energy market collections exceeding costs to recover the shortfall in collections from prior years.

## Load Settlement

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

When load settlement revenue collections are greater than load settlement costs, the surplus is recorded as a reduction in revenue, recognized as other accounts payable and subsequently refunded. When load settlement revenue collections are less than load settlement costs, the shortfall is recorded as revenue, recognized as other accounts receivable and subsequently collected.

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,

|                                                   | 2015         | 2014         |
|---------------------------------------------------|--------------|--------------|
| Revenue collections                               | 1.5          | (0.2)        |
| Costs                                             | 1.2          | 1.5          |
| <b>Load settlement (deferred revenue) revenue</b> | <b>(0.3)</b> | <b>1.6</b>   |
| Other accounts payable, beginning of year         | (0.2)        | (1.8)        |
| <b>Other accounts payable, end of year</b>        | <b>(0.5)</b> | <b>(0.2)</b> |

*Numbers may not add due to rounding*

The load settlement deferral account at December 31, 2015 is a \$0.5 million payable compared to a \$0.2 million payable at the end of 2014. The change of \$0.3 million is the result of load settlement collections exceeding costs; the collections are based on a forecast of 2015 costs.

## Market Surveillance Administrator Charge

A portion of the energy market charge collected by the AESO is remitted to the MSA for its revenue requirement in accordance with the *Alberta Utilities Commission 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 2015, the MSA's portion of the total energy market trading charge is 5.0 cents per MWh compared to 3.3 cents per MWh in 2014.

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 December 31, 2015, the accumulated payments made to the MSA in 2015 and prior years equal the revenues collected and there is no MSA deferral balance at the end of 2015.

## Financial Position and Liquidity

At December 31, 2015, the cash position is \$0.7 million, a decrease of \$29.1 million compared to 2014. Major movements are outlined in the following table:

(\$ Millions) Years ended December 31,

|                                    | 2015          | 2014        |
|------------------------------------|---------------|-------------|
| Funds provided by operations       | 26.0          | 26.9        |
| Prepayments for future services    | (9.9)         | 0.7         |
| Payments for long-term payables    | (4.0)         | 8.1         |
| Cash used for settlements          | (44.0)        | (3.8)       |
| Cash used for capital expenditures | (27.4)        | (17.2)      |
| Proceeds from debt financing       | 31.7          | -           |
| Other                              | (1.5)         | (2.2)       |
| <b>(Decrease) increase in cash</b> | <b>(29.1)</b> | <b>12.5</b> |

### Cash Used For Settlements

At December 31, 2014, the net balance of the accounts receivable, accounts payable and accrued liabilities, other accounts receivable and other accounts payable, which are settlement-related was a payable of \$27.7 million. The balances in these accounts are associated with cash collections for the transmission, energy market, load settlement and MSA settlements offset by the cash payments made by the AESO.

During 2015, cash flows for these accounts and the 2015 transactions resulted in a December 31, 2015 net receivable balance of \$16.3 million. The change in the cash balance of \$44.0 million during the year is primarily associated with the transmission settlement.

### Credit Facilities

As at December 31, 2015, the AESO had the following credit facilities available to fund general operating, intangible asset and PP&E purchasing activities:

(\$ Millions) Year ended December 31, 2015

|                                          | Total | Available | Used |
|------------------------------------------|-------|-----------|------|
| Demand revolving facility                | 160.0 | 118.3     | 41.7 |
| Demand treasury risk management facility | 9.0   | 9.0       | -    |

The demand facility includes a \$10.0 million letter of credit at December 31, 2015 and 2014, which is issued as financial security for the AESO's procurement of operating reserves.

Throughout 2015, 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

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

For transmission-related activities in 2016, the AESO has established a revenue requirement of \$2,079.2 million through the 2016 Budget Review Process for costs related to wires, ancillary services, transmission line losses, other industry, general and administrative, amortization and depreciation, and interest. The total transmission revenue requirement in 2016 is \$213.2 million or 11 per cent higher than the 2015 actual costs of \$1,866.0 million. The higher 2016 forecast is associated with higher wires costs based on TFO tariffs approved or applied for in late 2015 when the forecast was prepared and higher transmission line losses associated with a higher forecasted pool price and higher transmission line loss volumes.

For energy market-related activities, the annual costs are forecast to decrease to \$41.9 million in 2016 from the 2015 actual costs of \$42.4 million, a \$0.5 million or one per cent decrease. This forecast decrease is associated with lower amortization and depreciation. The AESO's portion of the 2016 energy market trading charge will decrease to 26.2 cents per MWh in 2016 compared to 30.2 cents per MWh in 2015, a decrease of 4.0 cents per MWh. The total energy market trading charge, which includes components for funding the AUC and the MSA, will be 31.5 cents per MWh in 2016 compared to 40.7 cents per MWh in 2015.

The AESO continues to enhance the transmission system in Alberta by advancing the electric system development plans referenced in the 2015 Long-term Transmission Plan (Plan). The Plan describes the transmission facilities required to connect generation facilities to consumers of electricity, ensure continued reliability, facilitate the fair, efficient and openly competitive operation of the market, and support long-term economic development in Alberta. The Plan uses the AESO's 2014 Long-Term Outlook (2014 LTO) as a key input, however, since 2014 the province's economic outlook has changed significantly. As a result, a Low-growth Scenario, using slower economic growth from lower oil prices and the deferment of large capital oilsands investments, was evaluated along with the 2014 main outlook from the 2014 LTO. The costs for new transmission projects to be built by 2020 is estimated to be in the range of \$880 million, based on the Low-growth Scenario, to \$2.5 billion based on the main outlook in the 2014 LTO; these projects still require regulatory approval.

In December 2014, the AESO executed the first of two contracts in respect of the Competitive Process. This process was used to select a party to develop, design, construct, finance, own, operate and maintain the Fort McMurray West 500kV Transmission Project. The term of the two contracts will collectively span a period of approximately 38 years with the targeted in-service date for this new transmission facility in 2019. In 2015, the AESO integrated the commercial management of this project into its operations and will continue to do so throughout 2016. While plans remain to facilitate a similar Competitive Process for the Fort McMurray East 500 kV Transmission Project, the timing is currently uncertain.

The AES supply margins increased in 2015 as generation development exceeded load growth in the province. Of particular note, the addition of an 873 megawatt natural gas-fired generation facility in the first quarter of 2015 increased the supply margin which resulted in downward pressure on pool prices for the year. The current market has served Alberta well and the AESO has confidence it will continue to do so. It also recognizes the need to continuously monitor the market to identify any future advancements that may be required.

In 2016, the AESO will continue to advance initiatives to integrate energy storage technologies and restore the capacity of the interties to their rated capability.

In November 2015, the Alberta government released its *Climate Leadership Plan*, outlining a number of changes to take place in Alberta as it relates to climate change and specifically the electric industry. The AESO is committed to working with government and stakeholders to implement the new climate change policies that fall within the AESO's mandate. This will include the integration of new sources of renewable power, while maintaining the reliability of Alberta's transmission system.

In 2015, two major initiatives were advanced that will continue into 2016. The first is an upgrade to the AESO's Energy Management System (EMS) which is the application that enables the real-time operations of the transmission system. This project will deliver necessary security requirements and technology and functionality advancements to meet current and future needs. The total estimated cost for the EMS project is \$39.0 million with a completion date in 2017. The second major initiative is the implementation of the Critical Infrastructure Protection Alberta Reliability Standards. These mandatory Reliability Standards address the security of cyber and physical assets essential to the reliable operation of the transmission system. The AESO and all market participants must be compliant with these new standards by October 2017.

During 2016, the AESO will continue to advance several multi-year initiatives, including the Market System Replacement and Reengineering Project sustainment activities; completion of the AESO's website design and development; implementation of enhancements to the customer connection process; and various general opportunities identified through targeted industry consultation.

## Risk Management

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

The risk management processes that the AESO has developed are designed to 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. AESO Management is responsible for the ongoing operations of the organization including integrating risk management into operations.

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 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 AESO Board or the President and Chief Executive Officer as delegated by the AESO Board. AESO policies are communicated to employees and, as appropriate, to contractors. AESO policies are reviewed on a regular basis and are accessible by employees at all times.

- The AESO is committed to maintaining a high level of ethics and integrity. The AESO Board and AESO Management foster these values throughout the organization and maintain an effective whistleblower policy. The AESO maintains 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 that all employees must agree to when hired, review at least annually to confirm compliance/non-compliance, and affirm their agreement to abide by the policy. Contractors of the AESO have similar requirements, as appropriate, given the nature of their work for the AESO. Each Member of the AESO Board is bound by the *AESO Code of Conduct* and similarly provides an annual confirmation of their compliance/non-compliance.
- AESO Management is responsible for establishing and maintaining adequate internal controls over financial reporting. These controls are designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. Internal controls over financial reporting, no matter how well designed, have inherent limitations and provide only reasonable assurance with respect to financial statement preparation. Accordingly, they may not prevent or detect all misstatements.

The AESO conducts an annual assessment of the design and effectiveness of its internal controls over financial reporting based on an accepted industry framework. The framework adopted by the AESO for this assessment is the Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, AESO Management has concluded that, as of December 31, 2015, the AESO maintained effective internal controls over financial reporting.

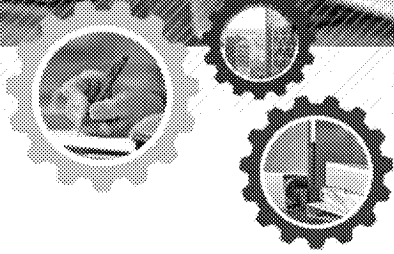
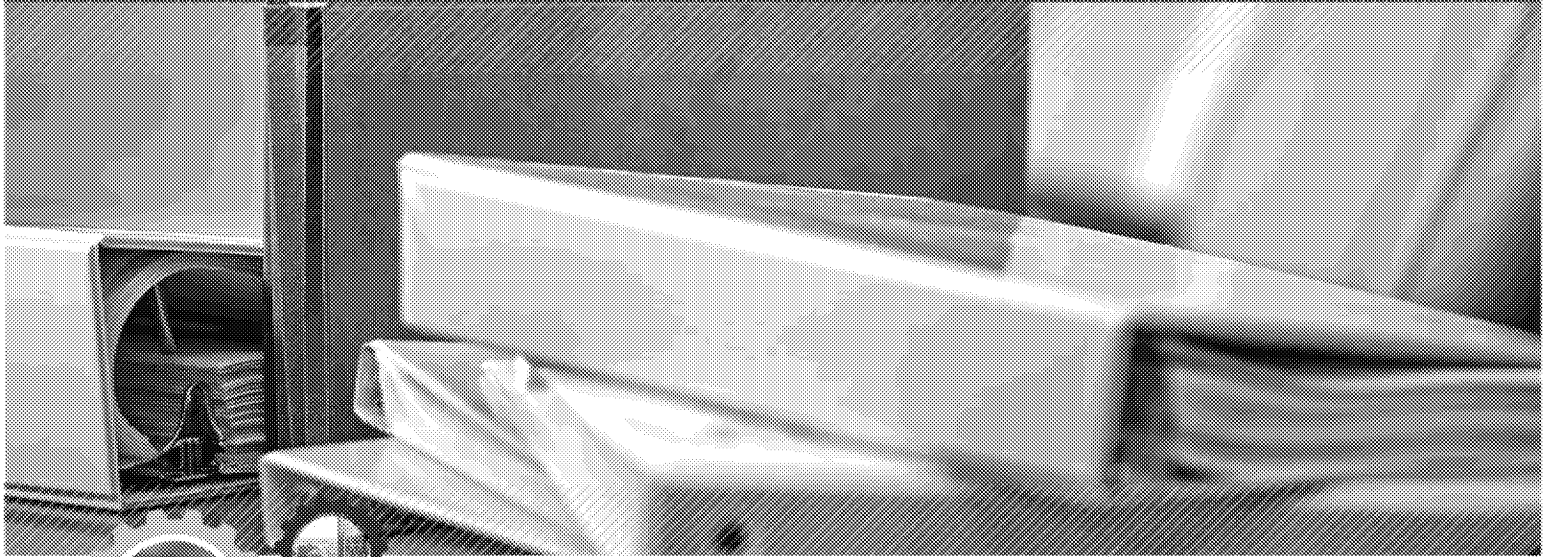
- The Audit Committee reviews and monitors the system of internal controls, the systems for managing risk, the external audit process and the AESO's process for monitoring compliance with laws and regulations, with a view to adopt best practices, as appropriate.
- The AESO's Controls and Audit Services function provides the AESO with an objective and independent assessment of internal controls, coordinating and reporting on risk management activities and identifying opportunities for operational improvements. Controls and Audit Services reports directly to the Audit Committee and if required, discusses matters with the Audit Committee independent of AESO Management.
- AESO Management identifies and reports any significant risks to the AESO Board and the appropriate AESO Board Committee on a regular basis and provides updates on the implementation of mitigation strategies that are undertaken to address these.
- The AESO, its Members, officers, employees and contractors are extended a degree of statutory liability protection consistent with the AESO's public interest mandate.
- The AESO carries insurance coverage that is reviewed and approved as appropriate by the AESO Board, through the Audit Committee. The insurance coverage may not be adequate to cover all possible risks and the proceeds of any insurance claim may not be adequate to cover all potential losses.

## Forward-looking Statements

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

## Additional Information

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



# Financial Statements and Notes

## MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

The financial statements of the Alberta Electric System Operator (AESO) are the responsibility of management and have been approved by the AESO Board. These financial statements have been prepared by management in accordance with 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 elsewhere in this annual report is consistent with that in the financial statements.

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

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

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



**David Erickson, CPA, CA, ICD.D**  
President and Chief Executive Officer



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

## INDEPENDENT AUDITORS' REPORT

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

We have audited the accompanying financial statements of the Alberta Electric System Operator, which comprise the statements of financial position as at December 31, 2015 and 2014, and January 1, 2014, and the statements of income and comprehensive income and cash flows for the years ended December 31, 2015 and 2014, and a summary of significant accounting policies and other explanatory information.

#### Management's responsibility for the financial statements

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

#### Auditors' responsibility

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

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

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

#### Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Alberta Electric System Operator as at December 31, 2015 and 2014, and January 1, 2014, and its financial performance and its cash flows for the years ended December 31, 2015 and 2014 in accordance with International Financial Reporting Standards.



Calgary, Canada

February 18, 2016  
Chartered Professional Accountants

## STATEMENT OF FINANCIAL POSITION

(in millions of Canadian dollars)

|                                                   | December 31,<br>2015 | December 31,<br>2014 | January 1,<br>2014 |
|---------------------------------------------------|----------------------|----------------------|--------------------|
| <b>Assets</b>                                     |                      |                      |                    |
| Current assets                                    |                      |                      |                    |
| Cash                                              | \$ 0.7               | \$ 29.8              | \$ 17.3            |
| Accounts receivable (note 3)                      | 111.3                | 108.0                | 115.4              |
| Other accounts receivable (note 4)                | 24.7                 | 14.0                 | 8.1                |
| Prepays and deposits                              | 6.5                  | 3.7                  | 3.6                |
|                                                   | 143.2                | 155.5                | 144.4              |
| Non-current assets                                |                      |                      |                    |
| Long-term prepaids (note 5)                       | 14.3                 | 4.4                  | 5.1                |
| Intangible assets, net (note 6)                   | 51.9                 | 49.3                 | 55.7               |
| Property, plant and equipment, net (note 7)       | 29.4                 | 29.5                 | 32.7               |
|                                                   | \$ 238.8             | \$ 238.7             | \$ 237.9           |
| <b>Liabilities</b>                                |                      |                      |                    |
| Current liabilities                               |                      |                      |                    |
| Accounts payable and accrued liabilities (note 8) | \$ 136.9             | \$ 165.5             | \$ 118.8           |
| Deferred rent                                     | -                    | -                    | 0.3                |
| Other accounts payable (note 9)                   | 0.9                  | 0.2                  | 51.5               |
| Security deposits (note 15)                       | 1.3                  | 2.2                  | 4.6                |
| Bank debt (note 10)                               | 31.7                 | -                    | -                  |
|                                                   | 170.8                | 167.9                | 175.2              |
| Non-current liabilities                           |                      |                      |                    |
| Long-term payables (note 11)                      | 66.8                 | 70.8                 | 62.7               |
| Asset retirement obligation (note 12)             | 1.2                  | -                    | -                  |
| <b>Equity (note 1)</b>                            | -                    | -                    | -                  |
|                                                   | \$ 238.8             | \$ 238.7             | \$ 237.9           |

Commitments and contingencies (notes 13 and 14)

See accompanying notes to the financial statements, including note 21 – Transition to IFRS

## STATEMENTS OF INCOME AND COMPREHENSIVE INCOME

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

|                                               | 2015           | 2014           |
|-----------------------------------------------|----------------|----------------|
| <b>Revenue</b>                                |                |                |
| Transmission tariff                           | \$ 1,865.3     | \$ 1,831.4     |
| Energy market charge                          | 42.0           | 44.9           |
| Load settlement charge                        | 1.2            | 1.5            |
| Interest and other                            | 1.1            | 2.4            |
|                                               | <b>1,909.6</b> | <b>1,880.2</b> |
| <b>Operating costs and expenses</b>           |                |                |
| Wires costs                                   | 1,518.5        | 1,399.9        |
| Ancillary services costs                      | 171.9          | 214.4          |
| Transmission line losses                      | 76.7           | 118.0          |
| General and administrative (note 19)          | 93.4           | 97.9           |
| Other industry costs                          | 22.6           | 23.0           |
| Amortization and depreciation (notes 6 and 7) | 26.0           | 26.9           |
| Interest expense (note 20)                    | 0.5            | 0.1            |
|                                               | <b>1,909.6</b> | <b>1,880.2</b> |
| <b>Net income and comprehensive income</b>    | <b>\$ -</b>    | <b>\$ -</b>    |

See accompanying notes to the financial statements, including note 21 – Transition to IFRS

## STATEMENTS OF CASH FLOWS

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

|                                                        | 2015          | 2014           |
|--------------------------------------------------------|---------------|----------------|
| <b>Operating activities</b>                            |               |                |
| Net income                                             | \$ -          | \$ -           |
| Items not affecting cash:                              |               |                |
| Amortization and depreciation (notes 6 and 7)          | 26.0          | 26.9           |
| Accretion of asset retirement provision (note 12)      | 0.0           | -              |
| Change in long-term prepaids (notes 5 and 13)          | (9.9)         | 0.7            |
| Change in long-term payables (note 11)                 | (4.0)         | 8.1            |
| Change in non-cash operating working capital balances: |               |                |
| Accounts receivable (note 3)                           | (3.3)         | 7.4            |
| Other accounts receivable (note 4)                     | (10.7)        | (5.9)          |
| Prepaids and deposits                                  | (2.8)         | (0.1)          |
| Accounts payable and accrued liabilities (note 8)      | (30.3)        | 47.0           |
| Deferred rent                                          | -             | (0.3)          |
| Other accounts payable (note 9)                        | 0.7           | (51.3)         |
| Security deposits (note 15)                            | (0.9)         | (2.4)          |
| Net cash (used in) provided by operating activities    | (35.2)        | 30.1           |
| <b>Investing activities</b>                            |               |                |
| Additions to intangible assets (note 6)                | (20.9)        | (12.5)         |
| Additions to property, plant and equipment (note 7)    | (6.5)         | (4.7)          |
| Change in non-cash investing working capital balances: |               |                |
| Accounts payable and accrued liabilities (note 8)      | 1.8           | (0.4)          |
| Net cash (used in) investing activities                | (25.6)        | (17.6)         |
| <b>Financing activities</b>                            |               |                |
| Increase in debt financing (note 10)                   | 31.7          | -              |
| Net cash provided by (used in) financing activities    | 31.7          | -              |
| <b>(Decrease) increase in cash</b>                     | <b>(29.1)</b> | <b>12.5</b>    |
| <b>Cash, beginning of year</b>                         | <b>29.8</b>   | <b>17.3</b>    |
| <b>Cash, end of year</b>                               | <b>\$ 0.7</b> | <b>\$ 29.8</b> |
| Cash interest paid (note 10)                           | \$ 0.7        | \$ 0.1         |

See accompanying notes to the financial statements, including note 21 – Transition to IFRS

## 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-only market for electricity; determining the order of dispatch of electric energy and ancillary services; providing system access service on the electric transmission grid; directing the safe, reliable and economic operation of the interconnected electric system; planning the capability of the transmission system to meet future needs; and administering load settlement.

The AESO's business is governed by Members of the AESO (Members). Members are individuals who are independent from any person or entity having a material interest in the Alberta electricity industry and are appointed by the Alberta Minister of Energy. The Members function as a board of directors (AESO Board) and act in the public interest. As of December 31, 2015, the AESO 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 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. Summary of Significant Accounting Policies

**STATEMENT OF COMPLIANCE** ► These financial statements have been prepared by management in accordance with International Financial Reporting Standards (IFRS) as set out in Part I of the *Chartered Professional Accountants (CPA) Canada Handbook*. Subsequent to a period of allowable deferral options permitted by the Canadian Accounting Standards Board, the AESO has applied IFRS 1, *First-time Adoption of International Financial Reporting Standards* to prepare the opening statement of financial position as at January 1, 2014, the transition date. Until December 31, 2014, management prepared the financial statements in accordance with Part V of the *CPA Canada Handbook*, Canadian generally accepted accounting principles (GAAP).

IFRS issued and effective as of December 31, 2015, have been applied in preparing the financial statements as at and for the years ended December 31, 2015 and 2014 and in preparing the opening IFRS Statement of Financial Position as at January 1, 2014.

The AESO Board authorized these financial statements for issue on February 18, 2016.

**BASIS OF MEASUREMENT** ► The financial statements have been prepared on the historical cost basis except for financial instruments that are measured at fair value.

**FUNCTIONAL AND PRESENTATION CURRENCY** ► The financial statements are presented in millions of Canadian dollars, which is the AESO's functional currency.

**SIGNIFICANT ACCOUNTING JUDGMENTS 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:

- **Useful lives of 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.
- **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.
- **Impairment of long-lived assets** - The AESO conducts impairment tests on long-lived assets annually and where impairment indicators exist.

**REVENUE RECOGNITION** ► The AESO's revenue is primarily derived through three separate charges: (i) transmission tariff; (ii) energy market charge; and (iii) 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 calculated based on the metered demand and energy for system access service, as specified in the Alberta Utility Commission-approved tariff rates.

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 calculated based on the per-megawatt-hour energy market charge and the volume of energy traded through the power pool.

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

The AESO utilizes deferral accounts to record the differences between revenues collected and costs paid with the amounts recognized as other accounts receivable or other accounts payable. On an individual basis for the transmission, energy market 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 and energy market 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, cost recoveries for services and interest on past due accounts. Interest and other revenue is recognized on the accrual basis as the revenue is earned or related costs are incurred.

As directed in the *Alberta Utility Commission (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.

**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 collected and costs paid are: recorded as adjustments to revenue; 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 to the AESO Board or AUC.

**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.

**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; or<br>Over the term of the licence agreement for customization of Software as a Service |
|-------------------|-------------------------------------------------------------------------------------------------------|

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

**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 table below.

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

**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 typically include computer software applications that 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. Interest capitalization commences when expenditures and borrowing costs are incurred and ceases when the asset is substantially complete and ready for its intended use.

**IMPAIRMENT OF INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT ►** Impairment indicators for 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. Based on the legislative

requirements associated with the AESO's financial operations, an asset impairment cannot occur as the recoverable amount is equal to its carrying amount.

**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.

**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 in 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.

**EMPLOYEE BENEFITS OBLIGATIONS** ► 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 short-term incentive plan, paid annual leave, paid sick leave; post-employment benefits; and termination benefits.

**LEASES** ► When an arrangement is entered into for the use of capital assets, the arrangement is evaluated to determine whether it contains a lease. A specific asset would qualify as a lease if fulfillment of the arrangement is dependent on the use of the specific asset. An arrangement constitutes the right to use the asset if the AESO has the right to control the use of the underlying asset. When an arrangement is determined to be a lease, the lease is classified as either operating or financing depending on whether substantially all the risks and rewards of the asset have been transferred.

**LONG-TERM PREPAIDS** ► The AESO recognizes advance cash payments associated with operating leases, information technology licences and ancillary service agreements with terms longer than one year from the statement of financial position date as long-term assets.

**LONG-TERM PAYABLES** ► A generating unit connected to the Alberta Interconnected Electric System is required to pay the AESO a generating unit owner's contribution which is refundable over a period of not more than ten 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.

**FINANCIAL INSTRUMENTS** ► The AESO classifies financial instruments at their initial recognition. Financial assets are classified as fair value through profit or loss (including held for trading), held-to-maturity investments, loans and receivables or available-for-sale. Financial liabilities are classified as fair value through profit or loss or amortized cost.

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

#### **RECENT ACCOUNTING PRONOUNCEMENTS NOT YET ADOPTED** ►

The following standards and interpretations are not yet effective and have not been applied in preparing these financial statements.

- **IFRS 9 (July 2014) Financial Instruments** ► The final standard replaces IAS 39 Financial Instruments: Recognition and Measurement and previous versions of IFRS 9. The entire standard provides guidance and requirements on classification and measurement of financial assets and liabilities, impairment and hedging. The standard is effective for annual periods beginning on or after January 1, 2018, with early adoption permitted. The AESO is currently assessing the impact of adopting this standard.
- **IFRS 15 Revenue From Contracts With Customers** ► The new standard provides a framework that replaces existing revenue recognition guidance. Entities will apply a five-step model to determine when to recognize revenue and at what amount. The model specifies that revenue should be recognized when (or as) an entity transfers control of goods or services to a customer at the amount to which the entity expects to be entitled. The standard is effective for annual periods beginning on or after January 1, 2018, with early adoption permitted. The AESO is currently assessing the impact of adopting this standard.

**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 18*).

| As at                        | Dec 31, 2015 | Dec 31, 2014 | Jan 1, 2014 |
|------------------------------|--------------|--------------|-------------|
| Transmission settlement, net | 101.1        | 99.9         | 107.4       |
| Energy market settlement     | 7.2          | 4.9          | 4.1         |
| Trade                        | 3.0          | 3.2          | 3.9         |
|                              | 111.3        | 108.0        | 115.4       |

### 4. Other Accounts Receivable

When revenue collections are less than costs, the shortfall is recorded as revenue, recognized as other accounts receivable and subsequently collected.

| As at                      | Dec 31, 2015 | Dec 31, 2014 | Jan 1, 2014 |
|----------------------------|--------------|--------------|-------------|
| Transmission receivable    | 24.7         | 7.7          | -           |
| Energy market receivable   | -            | 3.6          | 7.7         |
| Load settlement receivable | -            | -            | -           |
| MSA receivable             | -            | 2.7          | 0.4         |
|                            | 24.7         | 14.0         | 8.1         |

### 5. Long-term Prepaids

| As at                                                     | Dec 31, 2015 | Dec 31, 2014 | Jan 1, 2014 |
|-----------------------------------------------------------|--------------|--------------|-------------|
| Licenses and maintenance                                  | 1.0          | 0.2          | 0.6         |
| Prepaid rent                                              | 4.0          | 4.2          | 4.5         |
| Prepaid reliability services agreement ( <i>note 13</i> ) | 9.3          | -            | -           |
|                                                           | 14.3         | 4.4          | 5.1         |

## 6. Intangible Assets

|                                  | Computer<br>Software | Intangible<br>Assets Under<br>Development | Total        |
|----------------------------------|----------------------|-------------------------------------------|--------------|
| <b>Cost:</b>                     |                      |                                           |              |
| January 1, 2014                  | 95.6                 | 5.6                                       | 101.2        |
| Additions                        | 8.7                  | 3.8                                       | 12.5         |
| Transfers                        | 2.6                  | (2.6)                                     | -            |
| Write-off                        | -                    | (0.5)                                     | (0.5)        |
| Retirements                      | (4.3)                | -                                         | (4.3)        |
| <b>December 31, 2014</b>         | <b>102.6</b>         | <b>6.3</b>                                | <b>108.9</b> |
| Additions                        | 6.5                  | 14.4                                      | 20.9         |
| Transfers                        | 1.0                  | (1.0)                                     | -            |
| Write-off                        | -                    | (0.1)                                     | (0.1)        |
| Retirements                      | (2.0)                | -                                         | (2.0)        |
| <b>December 31, 2015</b>         | <b>108.1</b>         | <b>19.6</b>                               | <b>127.7</b> |
| <b>Accumulated amortization:</b> |                      |                                           |              |
| January 1, 2014                  | 45.5                 | -                                         | 45.5         |
| Amortization                     | 18.4                 | -                                         | 18.4         |
| Retirements                      | (4.3)                | -                                         | (4.3)        |
| <b>December 31, 2014</b>         | <b>59.6</b>          | <b>-</b>                                  | <b>59.6</b>  |
| Amortization                     | 18.2                 | -                                         | 18.2         |
| Retirements                      | (2.0)                | -                                         | (2.0)        |
| <b>December 31, 2015</b>         | <b>75.8</b>          | <b>-</b>                                  | <b>75.8</b>  |
| <b>Net Book Value:</b>           |                      |                                           |              |
| January 1, 2014                  | 50.1                 | 5.6                                       | 55.7         |
| December 31, 2014                | 43.0                 | 6.3                                       | 49.3         |
| <b>December 31, 2015</b>         | <b>32.3</b>          | <b>19.6</b>                               | <b>51.9</b>  |

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 12 months ended December 31, 2015, \$5.0 million of payroll costs associated with staff directly involved in preparing intangible assets for their intended use have been capitalized (2014 – \$3.5 million).

The additions of intangible assets include \$0.2 million (2014 – nil) of capitalized borrowing costs at an average rate of 1.6 per cent (2014 – nil).

## 7. Property, Plant and Equipment

|                                           | System<br>Coordination<br>Facility | Computer<br>Hardware | Backup<br>Coordination<br>Centre | Leasehold<br>Improvements | Furniture and<br>Office<br>Equipment | Assets Under<br>Construction | Total       |
|-------------------------------------------|------------------------------------|----------------------|----------------------------------|---------------------------|--------------------------------------|------------------------------|-------------|
| <b>Cost:</b>                              |                                    |                      |                                  |                           |                                      |                              |             |
| January 1, 2014                           | 22.3                               | 27.4                 | 2.0                              | 6.6                       | 0.7                                  | 0.2                          | 59.2        |
| Additions                                 | 0.4                                | 3.8                  | -                                | (0.4)                     | 0.1                                  | 0.7                          | 4.6         |
| Transfers                                 | -                                  | 0.1                  | -                                | -                         | -                                    | (0.1)                        | -           |
| Retirements                               | -                                  | -                    | -                                | -                         | (0.1)                                | -                            | (0.1)       |
| <b>December 31, 2014</b>                  | <b>22.8</b>                        | <b>31.4</b>          | <b>2.0</b>                       | <b>6.2</b>                | <b>0.7</b>                           | <b>0.8</b>                   | <b>63.9</b> |
| Additions                                 | -                                  | 0.9                  | -                                | (0.5)                     | 0.1                                  | 6.0                          | 6.5         |
| Transfers                                 | -                                  | 0.2                  | -                                | -                         | -                                    | (0.2)                        | -           |
| Changes to asset<br>retirement obligation | 1.1                                | -                    | -                                | -                         | -                                    | -                            | 1.1         |
| Retirements                               | -                                  | (4.4)                | -                                | (4.6)                     | (0.1)                                | -                            | (9.1)       |
| <b>December 31, 2015</b>                  | <b>23.9</b>                        | <b>28.1</b>          | <b>2.0</b>                       | <b>1.2</b>                | <b>0.7</b>                           | <b>6.6</b>                   | <b>62.5</b> |
| <b>Accumulated depreciation:</b>          |                                    |                      |                                  |                           |                                      |                              |             |
| January 1, 2014                           | 8.6                                | 13.5                 | 0.0                              | 4.2                       | 0.2                                  | -                            | 26.6        |
| Depreciation                              | 1.2                                | 5.7                  | 0.1                              | 0.7                       | 0.2                                  | -                            | 7.9         |
| Retirements                               | -                                  | -                    | -                                | -                         | (0.1)                                | -                            | (0.1)       |
| <b>December 31, 2014</b>                  | <b>9.9</b>                         | <b>19.1</b>          | <b>0.1</b>                       | <b>4.9</b>                | <b>0.4</b>                           | <b>-</b>                     | <b>34.4</b> |
| Depreciation                              | 1.3                                | 6.1                  | 0.1                              | 0.1                       | 0.2                                  | -                            | 7.8         |
| Retirements                               | -                                  | (4.4)                | -                                | (4.6)                     | (0.1)                                | -                            | (9.1)       |
| <b>December 31, 2015</b>                  | <b>11.2</b>                        | <b>20.8</b>          | <b>0.2</b>                       | <b>0.4</b>                | <b>0.5</b>                           | <b>-</b>                     | <b>33.1</b> |
| <b>Net Book Value:</b>                    |                                    |                      |                                  |                           |                                      |                              |             |
| January 1, 2014                           | 13.7                               | 13.9                 | 2.0                              | 2.4                       | 0.5                                  | 0.2                          | 32.7        |
| December 31, 2014                         | 12.9                               | 12.3                 | 1.9                              | 1.3                       | 0.3                                  | 0.8                          | 29.5        |
| <b>December 31, 2015</b>                  | <b>12.7</b>                        | <b>7.3</b>           | <b>1.8</b>                       | <b>0.8</b>                | <b>0.2</b>                           | <b>6.6</b>                   | <b>29.4</b> |

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

For the 12 months ended December 31, 2015, \$0.4 million of payroll costs associated with staff directly involved in preparing property, plant and equipment for their intended use have been capitalized (2014 – \$0.6 million).

The additions of property, plant and equipment includes less than \$0.1 million (2014 – nil) of capitalized borrowing costs at an average rate of 1.6 per cent (2014 – nil).

## 8. Accounts Payable and Accrued Liabilities

The transmission settlement payables are subject to offsetting (*note 18*).

| As at                                                   | Dec 31, 2015 | Dec 31, 2014 | Jan 1, 2014 |
|---------------------------------------------------------|--------------|--------------|-------------|
| Transmission settlement, net                            | 115.8        | 146.3        | 99.5        |
| Trade payables                                          | 6.4          | 6.2          | 6.4         |
| Generating unit owner's contribution ( <i>note 11</i> ) | 4.4          | 3.4          | 2.7         |
| Accrued liabilities                                     | 10.3         | 9.6          | 10.2        |
|                                                         | 136.9        | 165.5        | 118.8       |

## 9. Other Accounts Payable

When revenue collections are greater than costs, the surplus is recorded as a reduction in revenue, recognized as other accounts payable and subsequently refunded.

| As at                   | Dec 31, 2015 | Dec 31, 2014 | Jan 1, 2014 |
|-------------------------|--------------|--------------|-------------|
| Transmission payable    | -            | -            | 49.7        |
| Energy market payable   | 0.4          | -            | -           |
| Load settlement payable | 0.5          | 0.2          | 1.8         |
|                         | 0.9          | 0.2          | 51.5        |

## 10. Bank Debt

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

In addition to the credit facilities, a demand treasury risk management facility of \$9.0 million in deemed risk content is available to provide for interest swaps for up to \$35.0 million in notional debt. This facility was not used in 2015 or 2014.

At December 31, 2015, \$31.7 million was drawn on the facilities (2014 – nil) and a \$10.0 million letter of credit was issued as security for operating reserve procurement.

The amount of interest paid during 2015 was \$0.7 million (2014 – \$0.1 million) at an average interest rate of 1.9 per cent (2014 – 2.2 per cent).

## 11. Long-term Payables

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 ten years. The eligibility for the annual refund amount is dependent on the generation facility meeting specified performance criteria.

|                                                         | Total       |
|---------------------------------------------------------|-------------|
| January 1, 2014                                         | 62.7        |
| Contributions received                                  | 11.5        |
| Contributions reclassified to current ( <i>note 8</i> ) | (3.4)       |
| <b>December 31, 2014</b>                                | <b>70.8</b> |
| Contributions received                                  | 0.4         |
| Contributions reclassified to current ( <i>note 8</i> ) | (4.4)       |
| <b>December 31, 2015</b>                                | <b>66.8</b> |

## 12. Asset Retirement Obligation

The land on which the AESO's system coordination facility resides must be returned to its original state at the conclusion of the land lease on request by the landlord, the Government of Alberta. The decommissioning liability recognizes the approximate third party costs for the decommissioning and the timing of expected cash flows.

The AESO has estimated the net present value of the decommissioning obligation based on an independent third party valuation of current costs to dismantle the system coordination facility and restore the land. The timing for the decommissioning will occur at the discretion of the AESO, based on the allowable lease termination options of 2025, 2035 or 2045. Based on current information, the AESO has assumed the decommissioning will occur in 2025.

During 2015, a liability of \$1.1 million was recorded for the present value of the decommissioning costs based on additional information obtained from a third party. This change of estimate has been made in accordance with IFRIC 1, *Changes in Existing Decommissioning, Restoration and Similar Liabilities*.

The total undiscounted future liability is estimated to be \$1.7 million (2014 - nil). The AESO has calculated the present value of the obligations using a discount rate of 3.7% to reflect the market assessment of the time value of money and an inflation rate of 2.0%.

|                          | Total      |
|--------------------------|------------|
| December 31, 2014        | -          |
| Liabilities incurred     | -          |
| Liabilities settled      | -          |
| Accretion expense        | 0.0        |
| Revisions in estimates   | 1.1        |
| <b>December 31, 2015</b> | <b>1.2</b> |

### 13. Commitments

- (i) The AESO is committed to operating leases for real estate that have expiry dates between 2024 and 2033. Renewal options exist to extend certain leases to dates ranging between 2045 and 2053. The estimated future minimum lease payments associated with these non-cancellable operating leases for the initial lease terms are as follows:

|                                             | As of December 31, 2015 |
|---------------------------------------------|-------------------------|
| No later than 1 year                        | 6.0                     |
| Later than 1 year and no later than 5 years | 24.9                    |
| Later than 5 years                          | 28.2                    |
|                                             | 59.1                    |

The AESO, as the landlord, has entered into a sublease agreement for a portion of the system coordination facility with expiry in 2025 and renewal options to extend the sublease to 2045. The estimated future minimum sublease payments expected to be received under this non-cancellable sublease are \$1.5 million.

During the year ended December 31, 2015, \$6.5 million (2014 - \$5.3 million) was recognized as an expense in respect of these operating leases and \$0.1 million (2014 - \$0.1 million) was recognized as revenue in respect of the sublease.

- (ii) To fulfil the duties of the AESO in accordance with the EUA, the AESO manages the procurement of ancillary services through contracts with third-party suppliers. These ancillary services include operating reserves, 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 2019 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 of December 31, 2015 |
|---------------------------------------------|-------------------------|
| No later than 1 year                        | 20.3                    |
| Later than 1 year and no later than 5 years | 33.1                    |
| Later than 5 years                          | 3.6                     |
|                                             | 57.0                    |

- (iii) In 2015, the AESO entered into a 15-year reliability services agreement with Powerex 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 \$45 million payable in equal amounts in the three-year period from 2015 to 2017. As the payments are made, they are 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.
- (iv) Under the direction of the EUA, the AESO established and executed an AUC-approved Competitive Process to select the party to develop, design, build, finance, own, operate and maintain the Fort McMurray West 500 kV Transmission Project. In December 2014, the AESO executed the first of two contracts with the counterparty that combined, will span a period of approximately 38 years. As the amounts to be paid under the contract are dependent on fixed and variable terms and will not be finalized until certain events occur and receive regulatory approval, the value of the obligation cannot be measured with sufficient reliability. Variable terms include, for example, adjustments related to the indexation for inflation, regulatory approval of the route, debt funding and the occurrence of certain pre-determined relief events.

There are no scheduled financial obligations for the AESO under the contract until 2019 when it is anticipated the facilities will be energized and the AUC will have approved a transmission tariff application with respect to the facilities.

#### 14. Contingencies

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.

#### 15. Security Deposits

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

## 16. Key Management Compensation

Key management personnel include members of executive management and the AESO Board, a total of 17 individuals (2014 – 17 individuals). The compensation paid or payable to key management for services are as follows:

| As of December 31,                              | 2015 | 2014 |
|-------------------------------------------------|------|------|
| Salaries and other short-term employee benefits | 4.2  | 4.2  |

## 17. Government-Related Entity

The members of the AESO Board are appointed by the Alberta 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;
- **Alberta Utilities Commission (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
- **Market Surveillance Administrator (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. Through the transmission tariff, the AESO facilitates the allocation of the annualized amount as directed in the EUA. In 2015, \$324.1 million was collected from the Balancing Pool as the annualized amount and paid to eligible customers (2014 – \$324.7 million collected).

The Balancing Pool is a market participant and received \$205.7 million related to electricity sales in 2015 (2014 - \$304.2 million).

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 2015, \$19.3 million was paid to the AUC (2014 – \$20.4 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 2015, \$3.8 million was paid to the MSA (2014 – \$6.5 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 an initial 20-year term beginning in 2005, with two additional 10-year renewal term options. In 2015, \$0.1 million of costs were incurred (2014 - \$0.1 million).

## 18. Financial Instruments

| <b>Financial Instrument</b>                                        | <b>Designated Category</b>  | <b>Measurement Basis</b>                                   | <b>Associated Risks</b>       | <b>Fair Value at December 31, 2015, 2014 and January 1, 2014</b>                            |
|--------------------------------------------------------------------|-----------------------------|------------------------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------|
| Cash                                                               | Held for trading            | Fair value                                                 | Liquidity risk                | Carrying value approximates fair value due to short-term nature                             |
| Accounts receivable<br>Other accounts receivable                   | Loans and receivables       | Initially at fair value and subsequently at amortized cost | Credit risk                   | Carrying value approximates fair value due to short-term nature                             |
| Accounts payable and accrued liabilities<br>Other accounts payable | Other financial liabilities | Initially at fair value and subsequently at amortized cost | Liquidity risk<br>Market risk | Carrying value approximates fair value due to short-term nature                             |
| Security deposits                                                  | Other financial liabilities | Initially at fair value and subsequently at amortized cost | Liquidity risk                | Carrying value approximates fair value due to short-term nature                             |
| Bank debt                                                          | Other financial liabilities | Initially at fair value and subsequently at amortized cost | Liquidity risk<br>Market risk | Carrying value approximates fair value due to short-term nature and variable interest rates |
| Long-term payables                                                 | Other financial liabilities | Initially at fair value 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** ► The risk that a counterparty may default on its financial obligations to the AESO. Due to the EUA requirement that the AESO be operated with no profit or loss from its operations, credit risk is ultimately borne by market participants, though managed by the AESO.

Counterparties are granted certain levels of unsecured credit 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, 2015 and 2014 and January 1, 2014, the amount of financial assets that were past due was not material and there were no material uncollectible receivable balances.

- (b) **MARKET RISK** ► The risk of a potential negative impact on the 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 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.

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

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

In managing capital, the AESO reviews its cash flows from operations, including the transmission tariff, energy market charge and load settlement charge, to determine whether there are sufficient funds to cover its operating costs and pay for intangible 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, 2015, the AESO's maximum exposure to receivable credit risk was \$136.0 million (December 31, 2014 – \$122.0 million, January 1, 2014 – \$123.5 million), which is the aggregate of accounts receivable and other 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, 2015, the amount of financial assets that were past due was not material (December 31, 2014 and January 1, 2014 – not material).

- (b) **MARKET RISK ►** The AESO is exposed to currency risk on \$0.2 million (December 31, 2014 – \$0.6 million, January 1, 2014 – \$0.8 million) of U.S. dollar denominated financial liabilities at December 31, 2015.

If the Canadian dollar decreases (increases) against the U.S. 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, 2014 and January 1, 2014 – less than \$0.1 million) and intangible asset costs would increase (decrease) by less than \$0.1 million (December 31, 2014 and January 1, 2014 – 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 of December 31, 2015 |
|---------------------|-------------------------|
| 2017                | 6.4                     |
| 2018                | 8.3                     |
| 2019                | 9.5                     |
| 2020                | 9.4                     |
| 2021                | 9.8                     |
| 2022 and thereafter | 23.4                    |
|                     | 66.8                    |

## 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 8)*

| As at                                      | Dec 31, 2015 | Dec 31, 2014 | Jan 1, 2014 |
|--------------------------------------------|--------------|--------------|-------------|
| Transmission settlement receivables, gross | 143.9        | 140.3        | 143.2       |
| Transmission settlement, offsets           | (42.8)       | (40.4)       | (35.8)      |
| Transmission settlement receivables, net   | 101.1        | 99.9         | 107.4       |

| As at                                   | Dec 31, 2015 | Dec 31, 2014 | Jan 1, 2014 |
|-----------------------------------------|--------------|--------------|-------------|
| Transmission settlement payables, gross | 158.6        | 186.7        | 135.3       |
| Transmission settlement, offsets        | (42.8)       | (40.4)       | (35.8)      |
| Transmission settlement payables, net   | 115.8        | 146.3        | 99.5        |

## 19. General and Administrative Expenses

General and administrative expenses classified by nature are as follows:

*As of December 31,*

|                       | 2015 | 2014 |
|-----------------------|------|------|
| Salaries and benefits | 64.8 | 63.2 |
| Other                 | 28.6 | 34.7 |
|                       | 93.4 | 97.9 |

## 20. Interest Expense

*As of December 31,*

|                                                           | 2015  | 2014 |
|-----------------------------------------------------------|-------|------|
| Interest on bank debt                                     | 0.7   | 0.1  |
| Capitalized interest <i>(notes 6 and 7)</i>               | (0.2) | -    |
| Accretion of asset retirement obligation <i>(note 12)</i> | 0.0   | -    |
|                                                           | 0.5   | 0.1  |

## 21. Transition to IFRS

### (a) Application of IFRS 1

These financial statements are the first annual financial statements that comply with IFRS; prior to this, the AESO prepared its financial statements in accordance with Canadian GAAP.

These financial statements have been prepared as described in Note 2, including the application of IFRS 1 *First-time Adoption of International Financial Reporting Standards*, with the AESO's transition date to IFRS as of January 1, 2014. IFRS is applied retrospectively, unless the exemptions in IFRS 1 are applied.

In order to facilitate an effective adoption of IFRS, there are mandatory exceptions as well as optional exemptions from retrospective application for a number of IFRS standards that are applicable to the AESO.

| Mandatory Exceptions | Impact                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Estimates</b>     | In accordance with IFRS 1, an entity's estimates under IFRS at the date of transition to IFRS must be consistent with estimates made for the same date under previous GAAP, unless there is objective evidence that those estimates were in error. The estimates previously made by the AESO under Canadian GAAP were applied consistently under IFRS, except to reflect any changes in accounting policies. |

| Optional Exemptions    | Impact                                                                                                                                                                                                                                                                                         |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Borrowing Costs</b> | Capitalized borrowing costs have been calculated from the date of transition. Any borrowing costs capitalized prior to the transition date were included in the intangible asset and property, plant and equipment balances recognized as deemed cost in accordance with the IFRS 1 exemption. |

### (b) Reconciliation between Canadian GAAP and IFRS

The transition from Canadian GAAP to IFRS resulted in no accounting differences between the AESO's previous GAAP and its IFRS financial position as at January 1, 2014 and December 31, 2014, its financial performance for the year ended December 31, 2014 and its cash flows for the year ended December 31, 2014.