

EB-2015-0275
ONTARIO ENERGY BOARD

IN THE MATTER OF subsection 25.(1) of the *Electricity Act, 1998*;

AND IN THE MATTER OF a Submission by the Independent Electricity System Operator to the Ontario Energy Board for the review of its proposed expenditure and revenue requirements for the fiscal year 2016 and the fees it proposes to charge during the fiscal year 2016.

SUBMISSION FOR REVIEW

1. The Independent Electricity System Operator (the "IESO") submitted its 2016 business plan to the Minister of Energy (the "Minister") for approval pursuant to section 24.(1) of the *Electricity Act, 1998* as amended (the "Act") and the IESO received a letter from the Minister approving the Business Plan.
2. The IESO hereby submits to the Ontario Energy Board (the "Board") its proposed 2016 expenditure and revenue requirement and the fees it proposes to charge in 2016 (the "2016 Revenue Requirement Submission" or "Submission") for review and approval pursuant to subsection 25.(1) of the Act.
3. The IESO proposes a 2016 revenue requirement, excluding forecast revenue, of \$182.1 million and a net revenue requirement of \$181.1 million.
4. The IESO proposes a usage fee of \$1.13/MWh effective January 1, 2016.
5. The current IESO usage fee of \$0.803/MWh and the current Ontario Power Authority (the "OPA") usage fee of \$0.439/MWh were made interim effective January 1, 2016 by a

December 22, 2015 Board Order. Ontario demand, not including embedded generation, therefore currently pays \$1.24/MWh.

6. Pursuant to subsection 25.(1) of the Act, the IESO is seeking the following approvals from the Board:

- a) Approval of the proposed IESO usage fee of \$1.13/MWh to be paid commencing January 1, 2016 by all market participants based on energy withdrawn from the IESO-controlled grid (including scheduled exports) and embedded generation.
- b) Approval to discontinue the OPA usage fee effective January 1, 2016 after Board approval is received for the IESO's 2016 usage fee.
- c) Approval to rebate to (or charge) market participants the difference between the 2016 IESO usage fee approved by the Board and the interim usage fee they paid, if any, based on their proportionate quantity of energy withdrawn, which may include scheduled exports and embedded generation, in 2016. Any such rebates (or charges) will be provided in the next billing cycle following the month in which Board approval is received.
- d) Approval of the proposed 2016 revenue requirement, excluding forecast revenue, of \$182.1 million and net revenue requirement of \$181.1 million.
- e) Approval to use amounts from the IESO's Board approved operating reserve of \$5 million and the amounts tracked in the Registration Fees Deferral Account (the "RFDA") and the Forecast Variance Deferral Account (the "FVDA") (which includes the OPA's Board approved operating reserve of \$5 million), to cover the

merger costs incurred by the OPA and by the IESO in 2014 as described in the evidence.

- f) Approval to retain \$10 million as an operating reserve.
- g) Approval to rebate (or charge) any balance in the year-end 2015 FDVA above the \$10 million operating reserve, based on the IESO's audited 2015 financial statement as approved by the IESO Board. Any such rebates (or charges) will be provided in the next billing cycle following the month in which Board approval is received.

As the merger of the IESO and OPA took effect on January 1, 2015 and as is described more fully beginning on page 6 of Exhibit B-3-1, the IESO only recorded IESO expenses in 2015, no expenses in 2015 were recorded as OPA expenses. Therefore the IESO proposes that any year-end 2015 balance in the operating reserve in excess of \$10 million be returned to the OPA and IESO usage fee payers in a manner which accurately and fairly reflects the revenues paid by each in 2015 as a percentage of total IESO revenues.

This proposal will result in 31.3% of the year-end 2015 operating reserve in excess of \$10 million being returned to the OPA usage fee payers and 68.7% of any year-end 2015 operating reserve in excess of \$10 million being returned to IESO usage fee payers.

- h) Approval to continue to charge registration fees of up to \$10,000 per proposal for electricity supply and capacity procurements, including conservation and load management procurements.

- i) Approval to continue to charge non-refundable application fees for the Feed-in-Tariff ("FIT") program of \$0.50/kW of proposed Contract Capacity, having a minimum of \$500 and to a maximum of \$5,000.
 - j) Approval to continue charging the Large Renewable Procurement qualification submission fee from Request for Qualification applicants which is the sum of:
 - a. The greater of: (a) \$2,000 for the first (or only, if only one renewable fuel is proposed) proposed renewable fuel submitted; or (b) \$1.00 per KW of estimated contract capacity for all large renewable projects to a maximum amount of \$30,000; plus
 - b. \$2,000 for each additional renewable fuel proposed.
 - k) Approval to continue charging \$1,000 for the IESO's market participation application fee.
 - l) All necessary interim orders, orders and directions, pursuant to the *Ontario Energy Board Act, 1998* and the Board's Rules of Practice and Procedure, as may be necessary in relation to this Submission and execution of the approvals requested in the Business Plan.
7. The IESO intends to submit its 2015 Audited Financial Statements, as well as any supplementary evidence, to the Board and all intervenors on March 31, 2016.
8. The IESO proposes that the Board review of the Submission proceed by way of a written hearing.

The IESO may amend its pre-filed evidence from time to time, prior to and during the course of the Board proceeding. Furthermore, the IESO may seek to have additional meetings with Board Staff and intervenors in order to identify and address any further issues arising from this Submission, with a view to an early settlement and disposition of this proceeding.

9. The IESO requests that a copy of all documents filed with the Board by each party to this proceeding, be served on the IESO and the IESO's counsel in this proceeding as follows:

- a) The Independent Electricity System Operator Ms. Miriam Heinz
Regulatory Coordinator

Courier Address: 120 Adelaide Street West, Suite 1600
Toronto, ON, M5H 1T1

Telephone: 416 969-6045
Fax: 416 969-6383
E-mail: miriam.heinz@ieso.ca

- b) Aird & Berlis LLP Mr. Fred D. Cass
Counsel

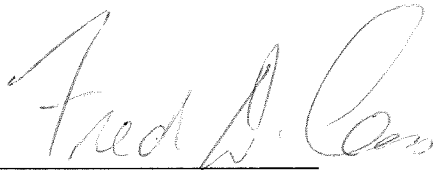
Courier Address: Brookfield Place, Suite 1800
181 Bay Street
Toronto, ON, M5J 2T9

Telephone: 416 865-7742
Fax: 416-863-1515
E-mail: fcass@airdberlis.com

Filed: January 19, 2016
EB-2015-0275
Exhibit A
Tab 1
Schedule 1
Page 6 of 6

DATED at Toronto, Ontario, this 19th of January, 2016.

INDEPENDENT ELECTRICITY SYSTEM OPERATOR

A handwritten signature in cursive script, appearing to read "Fred D. Cass", is written over a horizontal line.

by its counsel in this proceeding
Fred D. Cass

**INDEPENDENT ELECTRICITY SYSTEM OPERATOR
2016 REVENUE REQUIREMENT SUBMISSION (EB-2015-0275)
EXHIBIT LIST**

Exhibit	Tab	Schedule	<u>Description</u>
A – ADMINISTRATION			
A	1	1	Submission
A	1	2	Exhibit List
A	2	1	IESO's Letter to the Minister Requesting Approval of the 2016-2018 Business Plan – November 16, 2015
A	2	2	2016-2018 Business Plan
A	2	3	Minister's Letter Approving the IESO 2016-2018 Business Plan – December 9, 2015
A	3	1	2014 IESO Annual Report
A	3	2	IESO 2014 Audited Financial Statements
A	3	3	OPA 2014 Audited Financial Statements
B – REVENUE REQUIREMENT, FEES AND DEFERRAL AND VARIANCE ACCOUNTS			
B	1	1	2016 Revenue Requirement and Usage Fee Methodology
			<u>Attachment 1</u> - Elenchus Report: Cost Allocation and Rate Design for the 2016 Fees of the IESO <u>Attachment 2</u> - Elenchus -IESO 2015 Cost Allocation Model (detail to Appendix A of the Elenchus Report – provided electronically in xls only)
B	2	1	2016 Registration Fees and Deferral and Variance Accounts
B	3	1	Treatment of IESO & OPA Merger Costs and Operating Reserves



1600 - 120 Adelaide Street West
Toronto, ON M5H 1T1
t 416 506 2800

www.ieso.ca

November 16, 2015

The Honourable Bob Chiarelli
Minister of Energy
900 Bay Street
Hearst Block, 4th Floor
Toronto, ON M7A 2E1

Dear Minister Chiarelli:

Re: IESO Proposed 2016-2018 Business Plan

I am pleased to file with you the proposed three-year Business Plan for the newly merged Independent Electricity System Operator (IESO). Under the *Electricity Act, 1998*, the IESO is required to submit its business plan to you for approval prior to making our application to the Ontario Energy Board (OEB) for next year's proposed expenditures, fees and revenue requirements.

The Business Plan proposed for the period 2016 to 2018 reflects our success to date in bringing together the functions of the IESO and Ontario Power Authority to better meet Ontario's electricity needs. For 2015 and over the 2016 – 2018 plan we have also achieved our target to reduce our annual budget by more than five million dollars, while also offsetting labour contract increases. By the third year of the plan we anticipate a \$10 million reduction from the combined budgets of the merged organizations.

Reflecting these savings, for 2016 the plan proposes a 9% reduction in the usage fee charged to all customers, and to hold that fee level with no increase through 2017 and 2018.

The Business Plan is built on three strategic themes: Providing Public Value; Building Corporate Resilience; and Respecting and Valuing Our Stakeholders. We have established goals for identifying and creating public value such as efficient system and market operations and cost-effective conservation, as well as working with stakeholders and government to inform public discussion of issues and opportunities in the electricity sector. At the same time, we maintain our commitment to ensuring that the IESO has the employee resources and skills, technologies, and financial and organizational capabilities to achieve the public value outcomes on which we are focused. Achieving these goals will only be possible if we continue to build on the organization's commitment to its stakeholder engagement processes.

Bruce B. Campbell
President and CEO
bruce.campbell@ieso.ca
t 416 506 2829

November 16, 2015

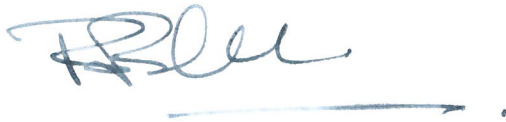
-2-

The IESO has a proven record in managing costs and reducing financial impacts on customers - and as a not-for-profit agency, revenues that are not committed are passed back to customers. While we recognize the need to continue to reduce costs wherever possible, our experience has demonstrated that a small investment by the IESO can result in significant savings across the sector, savings that flow to Ontario electricity customers. We want to ensure the organization remains capable of finding such opportunities going forward, retaining the experienced intellectual capital required to manage the complex demands of our business.

And finally, in preparing this Plan for your review we have also been aware of the ongoing development of Ontario's cap-and-trade program and other government initiatives. These represent one of the major sources of uncertainty in the plan, depending on implementation choices and the role of the IESO.

Please do not hesitate to contact me should you wish to discuss any aspect of the IESO's proposed 2016-2018 Business Plan.

Yours Sincerely,

A handwritten signature in blue ink, appearing to read "B. Campbell", with a horizontal line drawn underneath it.

Bruce B. Campbell

Attach.

c: Serge Imbrogno, Deputy Minister of Energy
Andrew Teliszewsky, Chief of Staff, Minister's Office
Tim O'Neill, Chair, IESO

Business Plan 2016-2018

Independent Electricity
System Operator

November 16, 2015

Contents

Introduction	1
Strategic Themes	3
Business Unit Functions	3
Financial Overview	9
Appendix 1: Corporate Performance Measures (CPMs)	13
Appendix 2: Key 2015 Risks	14
Appendix 3: IESO Capital Projects	15

Introduction

With the merger of the Independent Electricity System Operator (IESO) and the Ontario Power Authority (OPA), the accountabilities of the new IESO extend across the Ontario electricity sector. The new organization will be challenged to support ongoing change in the sector – the scope, complexity and pace of change over the next 10 to 15 years is expected to exceed that experienced during the period when Ontario was eliminating coal from its supply mix. At the same time, within its expanded accountabilities, the IESO maintains responsibility for the reliable operation of the province's bulk electricity system in real time and, through its planning, conservation, market and procurement responsibilities, ensures reliability is maintained into the future.

The merger has driven savings including a workforce reduced by 35 employees, real estate savings and the elimination of one Board of Directors. These and other efficiencies have resulted in a decrease in annual costs of more than \$5 million. The IESO's 2016-2018 business planning efforts build on these efficiencies and achieve annual savings of more than \$10 million by 2018.

The merger synergies, along with additional savings, will be maintained throughout the three-year business planning period and will result in a nine-percent reduction in the usage fee charged to all consumers based on a revenue requirement of \$182.1 million in 2016. Recognizing the pressures to manage cost impacts of its operations, the plan also proposes to maintain the lower 2016 fee through 2017 and 2018 – a significant challenge given the scope and complexity of the business.

Throughout 2015, the IESO has been focused on integrating the two organizations, merging information technology, financial and business systems and processes, and consolidating staff in new work units and locations. While a significant amount of merger-related work has been completed, a number of activities are still underway – one particularly important area being the mapping of employees into consistent job classifications.

Transition work will continue into 2016, including the establishment of an enhanced IESO website, which will become a key source of information and data for program and market participants, as well as for stakeholders and electricity consumers, addressing both real-time and future needs. This consolidated website will serve both large and small customers across the province, providing the information needed to better access programs, manage costs and guide the behaviours needed to promote a reliable and efficient electricity system.

The IESO's conservation responsibilities are also in transition. The IESO is now implementing the province's Conservation First Framework, which calls for seven terawatt-hours (TWh) of energy savings by the end of 2020, with funding of \$2.2 billion to be administered by the IESO over the program's six-year term. The framework shifts more responsibility for delivery to the

local distribution companies (LDCs), which have been provided budgets from the IESO to meet their assigned conservation targets. The IESO has now signed Energy Conservation Agreements (ECAs) with every LDC and has reviewed and conditionally approved all but one of the associated Conservation and Demand Management (CDM) plans that outline how those targets will be achieved. Under these arrangements, the IESO will be responsible for the administration of the framework and managing the ECAs, ensuring compliance with the plans, settlement of payments, and program and plan cost-effectiveness. Some LDCs are not expected to begin operating under the new framework until late 2015 or early 2016, and work to close out the 2011-14 conservation framework is overlapping with the start up of the new framework.

For the industrial sector, the IESO is responsible for the implementation and management of the \$500-million Industrial Accelerator Program, targeting 1.7 TWh of savings over the same six-year time period as the Conservation First Framework.

The IESO faces continuing change in the electricity sector. Smart grids, new connections, monitoring, storage and automation tools are both driving change and increasing the complexity of operations, while enabling consumers at all levels to take greater control of their energy requirements. These developments, including Ontario's investment in renewable energy, embedded generation and conservation, are in turn requiring the IESO to continuously re-examine and, where necessary, refocus its operating, planning and resource development functions and programs.

At the same time, demand for electricity continues to remain flat, reflecting the impact of conservation and the increase in embedded generation, along with general economic conditions.

Ontario's climate-change strategy and the proposed cap-and-trade market have the potential to place new, unanticipated demands on the IESO. Depending on the implementation choices, the role of the IESO and the impact on the sector could be substantial. The IESO will continue to monitor government initiatives, as these are a source of uncertainty in this plan.

Strategic Themes

The IESO has adopted three strategic themes that provide context for its business planning. These themes are:

- Providing Public Value
- Building Corporate Resilience
- Respecting and Valuing Our Stakeholders

The Providing Public Value theme establishes goals within the IESO mandate, identifying and creating public value such as efficient system and market operations and cost-effective conservation, as well as working with stakeholders and government to inform public discussion of issues and opportunities in the electricity sector.

The Building Corporate Resilience theme is about operational and administrative flexibility and adaptability – ensuring that the IESO has the employee resources and skills, technologies, and financial and organizational capabilities to achieve the public value outcomes on which it is focused.

The Respect and Value Our Stakeholders theme is about earning stakeholder and government support and building on the organization's commitment to its stakeholder engagement processes.

Maintaining reliability – both today and tomorrow – is a key public value for the IESO. Achieving that priority extends into functions across the entire IESO – planning for future conditions, procurement of necessary resources, strong working relationships across the sector and excellence in real-time operations are all critical to successfully meeting the IESO's reliability commitment.

Business Unit Functions

The following highlights the IESO's focus and deliverables over the business planning period.

Operations

The changing supply mix, the required integration of major initiatives from North American reliability authorities and the advancement of new technologies will require changes in tools, practices and methodologies for Operations staff – an ongoing need that the IESO will address through the continued investment in the Operations business unit framework.

The IESO's Operations function manages real-time operations, balancing the supply of and demand for electricity, directing the flow of electricity across the province's transmission lines,

connecting generators that produce power, transmitters that send it across the province, local utilities that deliver it to people's homes and businesses, and industrial companies that use it in large quantities.

The outlook for the reliability of Ontario's electricity system is expected to remain positive for the 2016-2018 period given the investments to date in transmission, generation resources and conservation initiatives. However, these investments have resulted in a control room and a support system that is very different than it was a decade ago. And the control room a decade from now will also be significantly different than that of today, given the continued transformation of the power system.

Similar to past initiatives, such as Online Limits and Renewable Integration, there is a need to evolve the working environment to sustain the expected level of performance while preparing to meet the challenges of tomorrow. To address this, a series of linked but separate initiatives, both process and tool enhancements, are being developed to address areas of concern. These initiatives will be implemented in the 2016-2018 business planning period.

The demographics of the workforce also need to be addressed. With approximately 15 percent of Operations staff eligible for retirement by the end of 2018, knowledge transfer through operational training and development as well as succession planning will be a heightened priority in the Operations area.

Planning

Planning is a core responsibility of the IESO. Over the course of the business planning period, the IESO will be working with the provincial government to develop the next long-term plan for Ontario's electricity sector. In addition to ensuring a reliable power system, this plan will need to strike an appropriate balance between cost and environmental impact and accommodate a range of possible futures.

Inclusive of stakeholder input, the IESO will provide an integrated overall picture of demand, conservation, supply and transmission for the province with a focus on immediate required actions. Special attention will be placed on emerging technologies and their potential to impact the electricity sector.

The IESO's responsibilities with respect to long-term planning will become formalized as a result of [*Bill 135, the Energy Statute Amendment Act*](#). If passed, this legislation will replace the current Integrated Power System Planning framework and codify the Long-Term Energy Plan (LTEP) as the new planning document. As part of the new framework, the IESO will be

responsible for the development of a technical report that will kick-off the LTEP consultations, and for an implementation plan post-LTEP.

Consistent with government policy guidance and Ontario Energy Board oversight, regional planning has become a new priority for the IESO. The province has been divided into 21 electricity planning regions, and the IESO will work with LDCs, municipal representatives, stakeholders, First Nations, Métis and others to develop integrated regional resource plans for each region. The regional plans take a long-term perspective, examining possibilities to meet future local electricity needs through conservation, generation, transmission and innovative solutions. This process supports community growth and values and should result in plans that will align better with other local planning initiatives.

Market and Resource Development

With a healthy supply margin anticipated over the business planning period, the IESO continues to work to further enhance the use of market-based mechanisms to address rapidly changing electricity conditions and to procure needed resources in a transparent and competitive manner. Demand response pilots have been contracted and a demand response auction is set to be held at the end of 2015, mechanisms that will encourage further participation in the market from the demand side.

The IESO will also look to improve the real-time wholesale market through a variety of key initiatives focusing on the day-ahead market, the scheduling and commitment of generation units, and the pricing methodology (currently a two-schedule system).

While the IESO will explore ways to further develop the market, the IESO's Contract Management Group continues to manage more than 23,000 contracts that account for over 23,000 MW of generation. These include contracts for 20,300 microFIT (representing 180 MW) and 3,060 FIT (representing 4,500 MW) projects. The majority of those contracts are in operation with 1,500 (or 4,200 MW) under development. Renewable energy projects account for 48 percent of contracted capacity (25 percent wind, 11 percent hydro, 10 percent solar, 2 percent bio-energy), with natural gas at 39 percent and nuclear at 13 percent.

These contracts represent \$36 billion of private investment into Ontario's electricity sector over the past decade – ongoing management of these contracts is the responsibility of the IESO.

Conservation

As noted above, the IESO has been directed by the Minister of Energy to implement a new Conservation First Framework focused on achieving 7 TWh of energy savings by the end of 2020 within a budget of \$2.2 billion.

The IESO has signed Energy Conservation Agreements with all 70-plus LDCs in Ontario and has been reviewing and approving the LDC CDM plans resulting from those agreements, plans that detail how the specific LDC targets will be achieved over the six-year period. These reviews will be ongoing over the business planning period as the LDC plans evolve.

The IESO provides program design and delivery support for LDCs and is also responsible for the evaluation, measurement and verification of all conservation programs and activities to validate the achievement of the 7 TWh target. The IESO is also developing centralized information tools to support the fiduciary reporting responsibilities of both the LDCs and the IESO.

Innovation in the marketplace will be key to the success of the Conservation First Framework, with LDCs relying on the development of new programs to help achieve their conservation targets. The IESO is supporting this need through the administration and operation of both a \$70 million LDC Innovation Fund and a \$9.5 million annual Conservation Fund.

The IESO has also been tasked with achieving 1.7 TWh of energy savings from large industrial transmission-connected customers within a cost of \$500 million.

Information Technology

A significant portion of the Information Technology's (IT) resources are dedicated to supporting the ongoing and daily needs of the IESO and its customers, including the 24x7 support to help maintain the reliable operation of the IESO-controlled grid and the IESO-administered markets.

While 2016 remains a year of transition for merger-related initiatives, IT support will also be required to both launch significant new business initiatives and to support those business initiatives already underway. This is in addition to providing support for the ongoing daily operation of the business. Although a significant number of merger-related projects will be completed in 2015, a number of them will continue into 2016, the most significant of which is the consolidation of the current multiple websites using different technologies into two websites (IESO and **saveONenergy**). Another example relates to the selection of a single solution for planning and forecasting.

The year 2016 will also see the completion of the IESO's initiative to be compliant with the new North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) version 5 rules that come into effect on April 1, 2016.

In addition, 2016 will see the completion of some significant projects (e.g., upgrade of the Energy Management System and Market Information Management System, and the systems to

support demand response) and the continuation of other significant initiatives (e.g., Market Information System and the Conservation Demand Management Information System).

Corporate Services

In 2016, the IESO will begin to realize the benefits of system and process integration resulting from the transition to one set of financial systems (e.g., payroll, financial accounting and reporting, and procurement) occurring in 2015. Further system and process enhancements will be undertaken in 2016, including migration to a single set of financial planning and budgeting tools. In settlements, a strategy will be developed to reduce reliance on end-user computing tools, and tools will be upgraded to leverage the benefits of greater automation.

Pension changes are being implemented to drive affordability and sustainability. Initiatives aimed at maximizing the value of people management processes (e.g., implementation of a single Human Resource Information System and talent management system) will also be completed.

Emphasis will also be placed on the unification of the IESO's culture, with several foundational activities occurring in 2015. A cultural assessment has been completed for the organization, with a project to engage employees to contribute to identifying and embedding values and behavioural norms that support the IESO's vision, mission and business strategy.

Stakeholder Engagement

The IESO engaged stakeholders in the development of the 2016-2018 Business Plan primarily through consultations with the newly formed Stakeholder Advisory Committee (SAC). Stakeholder engagement is integral to the IESO's decision-making process, and the SAC has an important role to provide the IESO with input and feedback on proposed decisions or changes that affect all stakeholders. Committees established prior to the merger of the OPA and IESO also provided timely policy level advice to the IESO Board of Directors and executive on material matters relating to each organization's mandate.

Earlier this year, the IESO Board appointed a new SAC to continue to provide advice on behalf of both the overall electricity sector and their constituencies with respect to the mandate of the new IESO, as outlined in the Committee's new Terms of Reference:

- The existing IESO-administered markets and the future evolution of the markets
- The planning of the power system
- The design, delivery, funding and evaluation of conservation programs and demand response

- The procurement of generation resources and the ongoing management of these contracts
- Other matters relating to IESO's mandate and matters of concern to stakeholders
- Matters concerning reliability standards, such as those set out by the Northeast Power Coordinating Council (NPCC) or the North American Electric Reliability Corporation (NERC), as they continue to be developed in their established processes.

IESO Stakeholder Advisory Committee Members

Five Constituencies	Committee Member
Generators of electricity	<ul style="list-style-type: none"> - David Butters, APPrO - Jared Donald, Conergy Canada - Valerie Helbronner, Torys - James Scongack, Bruce Power
Consumers of electricity	<ul style="list-style-type: none"> - Julie Girvan, Consumers Council of Canada - Mark Schembri, Loblaw - Adam White, AMPCO
Distributors and transmitters	<ul style="list-style-type: none"> - Brian Bentz, Powerstream (Chair) - Rob Mace, Thunder Bay Hydro - Todd Wilcox, North Bay Hydro - Darlene Bradley, Hydro One (transmitter)
Related businesses/services	<ul style="list-style-type: none"> - Steve Baker, Union Gas - Jack Burkom, Brookfield Energy Marketing - Paul Shervill, Rodan Energy
Ontario communities	<ul style="list-style-type: none"> - John Beaucage, Counsel Public Affairs - Geoff Lupton, City of Hamilton - Ersilia Serafini, Summerhill
IESO Member	<ul style="list-style-type: none"> - Terry Young

Financial Overview

The IESO's financial strategy supports the organization's commitment to delivering public value through the integrated management of Ontario's electricity system.

A key priority for the IESO is to effectively manage its costs, which are passed on to Ontario ratepayers. The merger of the IESO and the OPA has produced long-term savings resulting from a workforce reduction of 35 employees, including five fewer senior executives, and the move to a single Board of Directors. These savings are partially offset by one-time costs to be recovered over the immediate and near future, such as combining and rationalizing the underlying IT infrastructure and business processes and systems (e.g., procurement, payroll and financial systems).

Moving into the 2016 plan, the IESO will have absorbed workforce reductions totalling 60 positions over the prior two years.

In 2015, the IESO is managing its ongoing day-to-day responsibilities within a budget of \$184.6 million and anticipates a rebate to ratepayers due to higher than expected export volumes. In 2016, the IESO's proposed revenue requirement will continue to reflect \$5.3 million in synergies, with additional reductions in staffing and other spending, while also supporting key projects aimed to drive future efficiencies.

Over the 2016-2018 planning cycle, the IESO will maintain its focus on core operations, including planning, conservation, contract management, procurement, and market and systems operations. In 2016, the IESO will also undertake key projects to drive further efficiencies and realize value in future years. These projects include:

- Completing the transition to the Conservation First Framework
- Investing in the Operations business unit framework
- Implementing the demand response and other market-related procurements and reforms
- Establishing an enhanced, consolidated IESO website

While maintaining current operations and undertaking key projects as noted above, the IESO plans to reduce its costs through reductions in staff and other spending – achieving a nine percent lower usage fee of \$1.13/MWh in 2016 – as compared to the 2015 combined usage fee of \$1.24/MWh. This includes absorbing the higher costs associated with both the recent Society of Energy Professionals arbitration award and the settlement with the Power Workers Union.

In 2017 and 2018, the IESO is planning to deliver further reductions in operating expenditures and resources as a result of various projects initiated in 2016. Operating expenditures compared to 2016 are decreased by two percent by the end of the planning cycle.

The following table outlines the operating revenues and costs over the business planning cycle.

Pro Forma Statement of Operations
For the Year Ended December 31
(in Millions of Canadian Dollars)

Budget (\$ Millions)	2015	2016	2017	2018
Revenues*	185.1	182.1	181.8	180.2
Costs				
Operating Costs	164.5	163.9	163.8	162.3
Amortization	18.7	17.5	17.3	17.2
Interest	1.4	0.7	0.7	0.7
Total Costs	184.6	182.1	181.8	180.2

* Originally budgeted revenue figures for 2015. Actuals will be updated to reflect higher than budgeted 2015 export volumes.

A further breakdown by expenditure category is provided in the table below.

2016 Financial Review

Budget (\$ Millions)	2015	2016	2017	2018
Core Operating Expenses				
Compensation & Benefits	108.9	110.3	109.6	108.1
Professional & Consulting Fees	22.1	20.1	20.1	20.1
Operating & Administration	33.5	33.5	34.1	34.1
Amortization	18.7	17.5	17.3	17.2
Interest	1.4	0.7	0.7	0.7
Total Expenses	184.6	182.1	181.8	180.2

A modest decrease of 3.4 percent in 2016 capital spending is projected compared to the 2015 budget. This is primarily due to projects with higher capital spending reaching completion in 2015 as compared to new capital projects planned in 2016. A summary of capital spending and associated project descriptions is included in Appendix 3.

Planned Projects (\$ Millions)	2015	2016	2017	2018
Total Capital Projects	29.4	28.4	23.4	22.2

The IESO regularly reviews the priorities amongst its proposed capital initiatives. Therefore, the business planning process establishes approval of an appropriate capital envelope for the 2016-2018 planning period, with capital commitments approved individually on an ongoing basis. This practice is consistent with prior years.

Staffing

Budgeted staffing levels in 2016 decline compared to 2015, maintaining the merger synergies with additional reductions to absorb the impacts of the Society of Energy Professionals arbitration award, the settlement with the Power Workers Union.

Further declines are planned for in 2017 and 2018 as a result of business enhancement efficiencies initiated in 2016. In total, a two-percent reduction in the staffing budget is anticipated to occur over the planning period.

Staffing Budget	2015	2016	2017	2018
Core FTE	694	688	684	680
Smart Metering, Enforcement & Education	36	36	36	36
Total FTEs	730	724	720	716

Fee Proposal

As a result of the merger, the IESO is currently collecting two fees (IESO \$0.803/MWh; OPA \$0.438/MWh), which are charged to different customer bases. The predecessor IESO fee is charged to a combination of energy withdrawals, embedded generation and exports, while the OPA fee is based solely on energy withdrawals. For 2016 and future years, the IESO is proposing to charge one fee on the same basis that the predecessor IESO fee is currently charged. The IESO gained approval to charge its fee to embedded generation in 2014 as it is a

fairer method of allocation and is consistent with the original intent that the IESO fee should be charged to all Ontario load, rather than just a portion. The same basis applies to the proposed 2016 IESO fee. In considering this matter, an independent consultant was hired to examine the existing OPA and IESO usage fees and to examine options for recovering the revenue requirement of the IESO in 2016 and beyond. The consultant's conclusions support charging a single fee to all customers, recognizing energy withdrawals, embedded generation and exports. The support for charging the fee to exports is based on the consultant's cost allocation and rate design study, while support for charging the fee to embedded generation is based on the same rationale accepted previously in obtaining approval to charge the fee to embedded generation.

Appendix 1: Corporate Performance Measures (CPMs)

The IESO has an established performance management program. Central to this program are effective corporate performance measures (CPMs) that assess the organization's performance against established corporate strategic themes and objectives.

CPMs for 2016 were developed collaboratively with the input of each business unit and key subject matter experts to effectively gauge progress on the IESO's strategic themes of Providing Public Value, Building Corporate Resilience, and Respecting and Valuing Our Stakeholders, as well as the six underlying strategic objectives identified for the IESO. The proposed targets are intended to be results-oriented, externally focused, measureable, specific and achievable.

The IESO identified eight targets focused on reliability, market effectiveness, operational capabilities, reputation and relationships. The targets have been shared with stakeholders and intervenors, and the IESO has incorporated any relevant feedback.

#	Corporate Performance Measure
1	The IESO is 100% compliant with NERC high violation risk factor requirements that are within the IESO's control
2	Conservation portfolio is delivered within 4¢/kWh while achieving energy savings from LDCs (800 GWh) and from direct-connect customer programs (524 GWh)
3	Up to 900 MW of renewable supply resources are procured in 2016, as directed
4	A Demand Response (DR) auction is implemented that maintains DR capacity at current levels and at competitive market prices while facilitating larger numbers and types of participation
5	Key recommendations arising from provincial and regional plans are initiated and progressing according to their timelines
6	Stakeholders and local communities are surveyed and are satisfied with the engagement process in 2016 (baseline results established later in 2015)
7	Priority projects are completed on time and budget and meet their business objectives
8	Deliverables are executed within approved budget and headcount while meeting synergy targets and a reduced combined fee

Appendix 2: Key 2015 Risks

The IESO has developed a robust risk framework to identify and mitigate risks to the business. To support the framework, a corporate risk team – with representation from all business units – is in place. Risk reporting is provided to the Audit Committee of IESO's Board of Directors on a quarterly basis.

The IESO assessed the risks to the business and has identified key risks in the areas of corporate resiliency, people, and stakeholder engagement and management. Corporate resiliency risk ensures the protection of the organization's assets from cyber security threats, ensures the IESO continues to adapt its current business operating model and efficiently integrates new entrants and technologies to keep pace with the breadth and pace of change of Ontario's evolving energy environment to continue to maintain grid reliability. People risk focuses on ensuring that the pace of organizational integration does not lead to the ineffective execution of the IESO's strategy. Lastly, stakeholder engagement risk ensures the support of government, stakeholders, customers and Aboriginal communities through effective consultation and engagement, allowing the IESO to effectively pursue its key initiatives. Mitigation plans have been defined and are in place for each of the risks, and a process has been put in place to monitor and report on the progress of these plans.

#	Risk
1	Insufficient support from key stakeholders and Aboriginal communities impacts the IESO's ability to effectively pursue key initiatives
2	The breadth and pace of change of Ontario's evolving energy environment challenges the IESO's ability to maintain grid reliability and efficiently integrate new entrants and technologies into the operation of the grid
3	Slow rate of progress in workforce integration leads to ineffective execution of the IESO's strategy
4	A significant IESO cyber security event occurs

Appendix 3: IESO Capital Projects

Summary of 2016 – 2018 Capital Spending

Projects (\$ Millions)	2015 Budget	2016 Plan	2017 Plan	2018 Plan
Revenue Metering System Upgrade	2.1			
Energy Management System (EMS) Refresh	2.7	4.7		
Market Information Management (MIM) Refresh	1.8	0.4		
Registration Automation	0.7	0.3		
Outage Management replacement and redesign	0.8	0.8		
NERC Critical Infrastructure Protection projects	2.5	1.0		
Market Information System (MIS) Refresh	2.2	2.5	1.7	
HRIS Implementation	1.1			
Demand Response Auction	1.0	2.5		
Infrastructure refresh (building services, software licenses & computer hardware)	1.8	2.6	3.2	2.7
Enterprise Cyber Security Management Refresh		0.5	1.0	
Enterprise Cybersecurity Enhancement		1.0		
Operations Readiness Initiative		1.0	2.5	2.5
MACD Enforcement Support Tool			1.0	
Operating Security Limit Technical Refresh			2.0	
Settlements Replacement			1.0	2.0
Dispatch Data Management			2.0	
Capacity Auction			1.0	2.0
Oracle Archetype Expansion and Oracle batch			1.0	0.4
Load Balancers Refresh				0.8
FIT, microFIT and CRM platform upgrades				0.7
Total Capital Projects (\$1M & above)	16.7	17.3	16.4	11.1
Other Capital Projects	12.7	11.1	7.0	11.1
Total Capital Projects	29.4	28.4	23.4	22.2

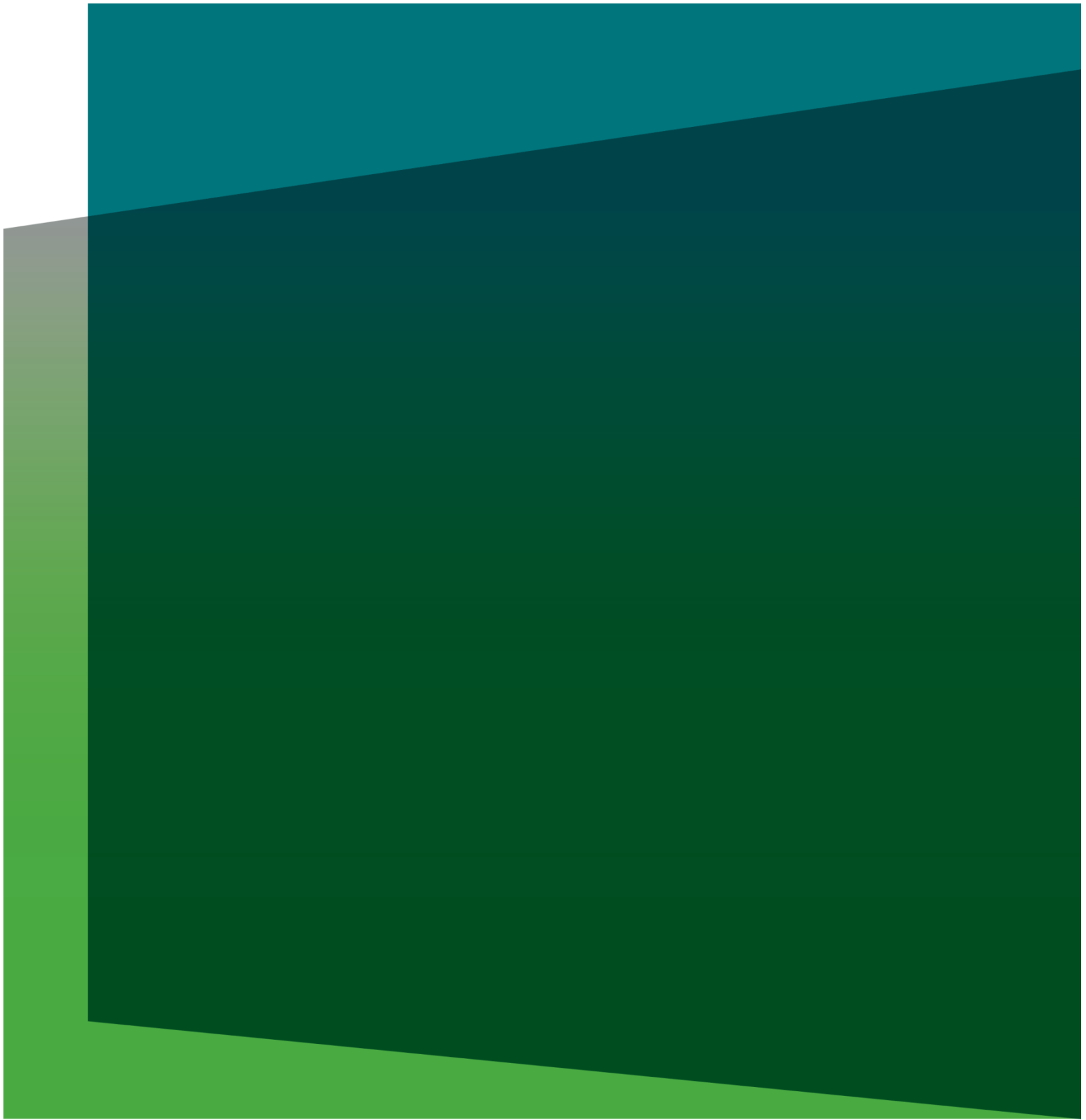
Capital Project Descriptions

2016 - 2018 Capital Plan Details	
Projects	Description
Energy Management System (EMS) Refresh	The EMS upgrade project involves the migration to the most recent ABB EMS product available and the replacement of the existing production and testing hardware across all primary and backup environments. The primary goal of the project is to transition daily power system operations to a robust and modern EMS platform that is expected to last until 2020. This project will be completed in 2016.
Market Information Management (MIM) Refresh	The MIM system provides interfaces for Market Participants to submit their dispatch data, stores market results and makes the data available for downstream processing in the day-ahead, real-time and settlement timeframes. The MIM System has reached its end of life cycle; the technology has not been upgraded since market opening and the ability to maintain required service levels is becoming more challenging.
Registration Automation	The Registration Automation will replace the IESO paper forms based solution for registering participants with an electronic forms solution. Market Participant registration can be broken down into four individual activities or components: enrolment in the various IESO programs; granting and revoking of various access privileges; registration of meters; and registration of facilities. The final components of this program will be completed in 2016. This project includes a complete review of the registration processes and the introduction of a Business Process Management solution to implement the new registration processes.
Outage Management replacement and redesign	The primary focus of this project is to replace our current Integrated Outage Management System (IOMS) – a system that is used by a high volume of Operations staff each day to facilitate the submission, assessment and approval of nearly 20,000 outage requests from over two hundred market participants per year. IOMS is responsible for integrating all market participant outage requests into the IESO-administered market (IAM) which makes it critical to the reliable operation of the IESO-controlled grid (ICG).
NERC Critical Infrastructure Protection projects	Effective April 1, 2016 NERC has introduced new standards with respect to the protection of critical cyber assets (NERC CIP v5). The IESO has established a multi-faceted program including physical, architectural and process improvements to support compliance with these new standards.
Market Information System (MIS) Refresh	The MIS, which calculates the Market Clearing Price for settlement purposes, is used by the IESO to meet its primary obligations to determine dispatch schedules in both real-time and pre-dispatch timeframes, while satisfying operating reserve requirements and respecting transmission and security limits. This project which will last throughout the majority of the business planning timeframe, will update both the application and the underlying supporting infrastructure.
Demand Response Auction	A competitive, priced-based demand response auction, open to load participants, will be designed and developed during 2015 to secure resources. In addition, demand response pilots will be launched this year to test the capability of demand resources to follow load in real time and commit ahead of time to reduce their consumption when needed. Developing demand-based resources will add to the diversity of resources participating in the market, driving innovation and increasing flexibility.

Capital Descriptions Continued

2016 - 2018 Capital Plan Details

Projects	Description
Infrastructure refresh (building services, software licenses & computer hardware)	To procure Racks and Enclosures to expand the IESO's blade server rack and enclosure infrastructure which will facilitate the requirements of emerging projects. This project also includes miscellaneous building services and software license renewals.
Enterprise Cyber Security Management Refresh & Enhancements	This project will include enhancements to cybersecurity analytical capabilities, procurement of new technology to address advanced malware and sourcing of additional cybersecurity intelligence. This project also includes a refresh of cybersecurity technologies.
Firewall Upgrades	This project will refresh all existing firewalls to mitigate the risk of cyber related events and ensure security of the IESO's networks.
Operations Readiness Initiative	A holistic review of all the processes and tools in Market and System Operations with the intent to sustain the necessary services to meet reliability standards with the efficient use of resources.
MACD Enforcement Support Tool	Implement an enhanced, IT-supported information solution to help MACD effectively and reliably conduct its enforcement activities in Ontario.
Operating Security Limit Technical Refresh	This project is related to the Market Information System Refresh and the management of limits would influence the outcomes of this project. This project includes some changes to the library needs as well improvements in limit activations.
Settlements Replacement	The existing settlements system is an internally developed calculation engine of charge types to settle the electricity market. The IESO plans to review and replace this system with a standard software application generally used in the North American market place.
Dispatch Data Management	This project will refresh of the Dispatch Data Management System to sustain the level of services to meet reliability standards.
Capacity Auction	A competitive priced-based capacity auction, leveraging on the completed DR auction to procure capacity for multiyear commitments. This project is intended to secure resources to meet incremental capacity needs in future years.
Oracle Archetype Expansion and Oracle batch	The Oracle Exadata appliance is the IESO's enterprise Oracle database server. This project will add both disk and CPU capacity to support additional applications and further database growth of existing applications.
Load Balancers Refresh	This project will refresh all the load balancers in the IESO networks to ensure efficient network operations.
FIT, microFIT and CRM platform upgrades	A replacement/replatforming of the existing FIT and microFIT system based on program requirements and business needs and an upgrade the existing CRM platform to the latest version of the Microsoft Dynamics CRM platform.



Ministry of Energy

Office of the Minister

4th Floor, Hearst Block
900 Bay Street
Toronto ON M7A 2E1
Tel.: 416-327-6758
Fax: 416-327-6754

Ministère de l'Énergie

Bureau du ministre

4^e étage, édifice Hearst
900, rue Bay
Toronto ON M7A 2E1
Tél. : 416 327-6758
Téléc. : 416 327-6754



DEC - 9 2015

MC-2015-2666

Mr. Tim O'Neill
Chair
Independent Electricity System Operator
1600-120 Adelaide Street West
Toronto ON M5H 1T1

Dear Mr. O'Neill:

Thank you for submitting the Independent Electricity System Operator's (IESO) proposed 2016-2018 Business Plan on November 16, 2015 for my review.

As a new organization after the merger, a key priority for the IESO is to effectively manage its costs which are passed on to ratepayers, while leveraging the combined expertise of the former IESO and OPA organizations to deliver on its mandate. I am pleased to see that the IESO is well underway in meeting its synergy savings target in 2015. It is also important that synergy savings be sustained in future years. The IESO should report synergy savings' achievement, including budget variances, on a periodic basis to the Ministry.

Our Ministry's review indicates the IESO's business plan is built on clear goals supporting the strategic themes of providing public value, building corporate resilience, and respecting and valuing stakeholders. The current performance targets in the business plan provide a solid baseline. I am satisfied that the revised business plan shows the IESO is making good progress toward achieving these savings objectives.

Thank you for the work the new IESO has accomplished to date. I recognize that transition work will continue for the IESO in 2015-2016 while maintaining a focus on core operations, including planning, conservation, contract management, procurement, and market and systems operations. As you are aware, Bill 135, the Energy Statute Amendment Act, would solidify the important role of the IESO in the province's long-term energy planning. In the business planning period, there are also a number of important projects the IESO will be engaged in to further drive efficiency and realize value:

- Completing the transition to the Conservation First Framework;
- Implementing demand response and other market related procurements and reforms;
- Investing in the operations business unit framework; and
- Establishing an enhanced, consolidated IESO website.

.../cont'd

I am pleased that the IESO's operating and financial plan will support its core business and government's policy priorities. This letter constitutes my approval of the IESO's 2016-2018 business plan in accordance with my authority under subsection 24.(2) of the *Electricity Act, 1998*.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bob Chiarelli', with a long horizontal flourish extending to the right.

Bob Chiarelli
Minister

c: Andrew Teliszewsky, Chief of Staff, Ministry of Energy
Bruce Campbell, CEO, IESO
Serge Imbrogno, Deputy Minister of Energy
Michael Reid, ADM, Strategic, Network and Agency Policy, Ministry of Energy

Seizing Opportunities for Ontario's Power System

2014 ANNUAL REPORT |



Independent Electricity System Operator

2014 financial statements for the Independent Electricity System Operator and for the Ontario Power Authority are available in separate reports or online at ieso.ca.

Cover image: Ottawa

Joint Message from Bruce Campbell and Jim Hinds



Jim Hinds (left) and
Bruce Campbell

On January 1, 2015, the Independent Electricity System Operator (IESO) and the Ontario Power Authority (OPA) came together to create one organization combining the mandates of both. The new IESO manages reliability of the province-wide power system, ensuring that real-time electricity needs are met, while also planning and securing energy for the future. We co-ordinate province-wide conservation efforts and put conservation first in planning the electricity system.

By streamlining the support functions within the two organizations, the new IESO is delivering operational efficiencies and reducing costs, and better integrating the planning outlook with operational experience. We have a great foundation from the two predecessor organizations to provide increased value for Ontario and its electricity consumers.

Our expanded scope allows us to coordinate market and resource development, exploring market-based options where efficiency and reliability can be enhanced. We will continue to oversee provincial conservation programs, procure new renewable and other generation, and operate the grid reliably and the market efficiently. And we will do so while supporting innovation along the way.

The scope of the IESO's activities now extends right across Ontario's electricity sector. As we aim to shape a more competitive and efficient electricity system, we will be engaging with a broad range of stakeholders to ensure we deliver solutions that best meet the needs of residential electricity consumers, business and industry, municipalities, and Métis and First Nations communities across the province. We are well positioned to engage with you on key energy issues and develop solutions with you to address them.

Our new organization looks forward to working with you to seize this year's opportunities.

Bruce Campbell
President and Chief Executive Officer
Independent Electricity System Operator

Jim Hinds
Chairman of the Board
Independent Electricity System Operator

Conservation

Working with its partners, the IESO helps guide the province's electricity conservation efforts by developing and supporting programs that foster a culture of conservation, build market capability and promote innovation.

Through **saveONenergy** programs, residential, business, institutional, industrial, low-income and Aboriginal customers throughout the province can better manage their electricity use. Using these incentives, Ontario consumers have saved electricity and reduced costs. Their efforts have contributed to significant province-wide electricity savings and helped transform Ontario's electricity sector.

Providing customers with real-time energy-saving data and educational tools to help them better manage their overall energy use will equip them to save even more. All Ontarians benefit from conservation by keeping costs in check and reducing the environmental impact from generating additional electricity. For every dollar invested in conservation, two dollars are saved in avoided generation.

Between 2006 and 2013, Ontarians have conserved 8.7 terawatt-hours (TWh) of electricity, enough to power the cities of Mississauga and Oshawa in 2013.

Through Ontario's new six-year Conservation First Framework, customers across Ontario will soon see new, innovative and cost-effective electricity conservation programs offered to homes, businesses and industries. The new framework is designed for local distribution companies to achieve 7 TWh between 2015 and 2020 and will give them greater flexibility to deliver conservation programs that meet local needs, while strengthening regional collaboration and benefiting both customers and the provincial grid. In addition, the IESO will work with large industrial customers to achieve 1.7 TWh between 2015 and 2020.

The IESO consults regularly with stakeholders on its conservation-related initiatives, particularly with local distribution companies, with whom the Conservation First Framework was developed.

A key success factor is to support the efforts of local utilities through conservation marketing to encourage customers to participate in the **saveONenergy** conservation programs and to promote further investment in energy-saving initiatives to industries and businesses.



ONTARIANS MAKE ENERGY-WISE DECISIONS

Each individual's actions and choices have an impact on Ontario's power system. For instance, LED light bulbs use between 75 and 90 percent less energy than traditional incandescent light bulbs and are typically rated to last 20 to 25 times longer. As more people make the switch to LEDs, Ontarians not only save on their monthly bills, they also help reduce peak demand. That is why the IESO focuses on educating consumers about energy efficiency and provides incentives to help promote a culture of conservation.

The **saveONenergy COUPON** program is just one of these incentives that empower consumers to make the switch. Through coupon programs, Ontarians have saved enough electricity to power the City of North Bay for an entire year.

The Tomken Twin Arena in Mississauga completed an LED lighting retrofit in 2013 through a **saveONenergy** program.

Operations and Supply

The IESO control centre maintains grid reliability in real time, balancing the supply and demand for electricity on a second-by-second basis. The electricity market ensures the efficient use of generation and other resources to meet consumers' energy needs, efficiently scheduling and dispatching resources at the lowest possible cost to the market and providing valuable price signals to both generators and consumers.

The IESO also has plans in place to ensure an adequate supply of electricity is available to meet future demand for energy. Contracts are in place with a range of suppliers – from grid-scale generators to homeowners or farmers with small-scale projects. New renewable generation as well as combined heat and power projects are contracted to ensure future energy needs, using negotiations as well as competitive and standard offer programs. With nuclear accounting for more than 60 percent of the province's electricity needs in 2014, securing long-term nuclear energy is another critical factor for Ontario's supply mix.

In addition, new market mechanisms can help provide for incremental supply needs. A capacity market for resources to meet short- and medium-term needs could complement long-term planning and procurement, offering greater flexibility to adjust to changing system needs. Demand response can also play an increasingly prominent role in helping to balance the system while providing a revenue stream to participants.

The increased uptake of variable generation sources, the changing characteristics of the demand side of the market and the significant variability in system conditions over short periods of time all require increased flexibility in Ontario's power system. Recent investments in demand forecasting capabilities, outage management protocols and operator training simulations will increase Ontario's ability to react to this changing grid environment. Generators and other sector stakeholders are consulted extensively on any changes that might affect how they operate.

Working with its provincial partners and neighbours, the IESO also oversees emergency preparedness activities for Ontario's power system, monitoring threats and vulnerabilities on a continuous basis.



THE COMMAND CENTRE FOR ONTARIO'S ELECTRICITY SYSTEM NEVER SLEEPS

Keeping the lights on means there is no break for the IESO control room. Running 24 hours a day, 365 days a year, the control room is staffed with highly trained and experienced operators to ensure the smooth operation of the bulk electricity system and market. Leading them is the Shift Superintendent, who makes critical, real-time decisions about Ontario's bulk electricity grid that not even the President and CEO can overrule.

Using state-of-the-art tools and live data streams that light up the giant digital wall-board display, control room operators are prepared to manage any grid emergency with speed and efficiency.

Planning

Good planning ensures a dependable, sustainable electricity system – for today and into the future. Forecasts and assessments of Ontario’s current, short- and long-term electricity demand are the key drivers for determining what options can provide an adequate, reliable and integrated power system. The IESO will identify needed investments in generation, conservation and transmission by planning for a range of possible future scenarios.

In planning the electricity system, conservation is the first resource considered. It is the cleanest and most cost-effective energy resource.

In addition to province-wide planning, each region of the province is closely examined to ensure the regions themselves have adequate supply and electricity infrastructure. Regional plans also enable communities to put conservation first as well as provide local input on other cost-effective solutions such as new supply, transmission and distribution options.

In 2013, a regional planning process was formalized by the Ontario Energy Board and is now being implemented by the IESO, working closely with transmitters and local utilities. Ontario has been divided into 21 areas for this purpose, with each area being studied at least every five years to ensure system adequacy and reliability.

Extending Ontario’s transmission system to remote First Nation communities in Northwest Ontario is an economic opportunity for up to 21 of 25 remote communities that are currently not connected to Ontario’s electricity grid. The IESO is committed to helping connect these 21 communities to the grid and also to working with the remaining four remote communities on options that will displace the diesel generation they currently use.

Stakeholder engagement is an integral part of planning the power system. By consulting with the electricity sector, industry associations, municipalities, Aboriginal communities, other stakeholders and interested groups, the IESO is able to receive a wide range of input that helps inform its planning efforts.



Photo: Nano Debassige

MERE WIND FARM THE FIRST WHOLLY OWNED FIRST NATIONS PROJECT IN ONTARIO

M'Chigeeng First Nation made history on June 15, 2012, when it brought into operation Ontario's first wind project wholly owned by a First Nation community. The four-megawatt Mother Earth Renewable Energy (MERE) wind farm, located on Manitoulin Island, is expected to generate about \$13,800,000 for the community over the course of its 20-year Feed-in-Tariff (FIT) contract.

It's just one of 418 FIT projects with First Nation and Métis communities, totalling 802 megawatts. These renewable energy projects represent the IESO's commitment to work with communities across Ontario to secure clean and reliable sources of power to meet Ontario's energy needs for the years ahead.

Innovation

Fostering innovation within the electricity system helps to put the province at the forefront of energy modernization. Ontario will benefit from new technologies such as smart grids, smart metering and storage, as well as new concepts in conservation.

Ontario has proven to be a North American leader in smart grid technology with more than 4.8 million smart meters rolled out since 2006. In addition, powerful monitoring and automation tools are increasing the ability of energy companies to respond to the changing daily environment, while empowering consumers and businesses to use energy more wisely and effectively. Recent improvements in dispatching capabilities and energy modeling software enable faster and more efficient responses, increasing the ability to control electricity delivery.

Ontario has made a significant investment in smart meters and in the IESO's central data repository for high-quality, consistent electricity consumption data. While currently being used by local utilities to support customer billing on time-of-use rates, this data set also offers significant potential value for designing conservation and demand response programs, system planning, policy development, academic research and to further support innovation in Ontario. The IESO, in consultation with industry, is working to capture the value of consumption data while ensuring privacy by design.

Finding ways to leverage markets further to build greater flexibility into the system will benefit the grid – whether in day-to-day operations or in helping to meet near-term capacity needs. Ontario already has experience with large consumers participating directly in the market

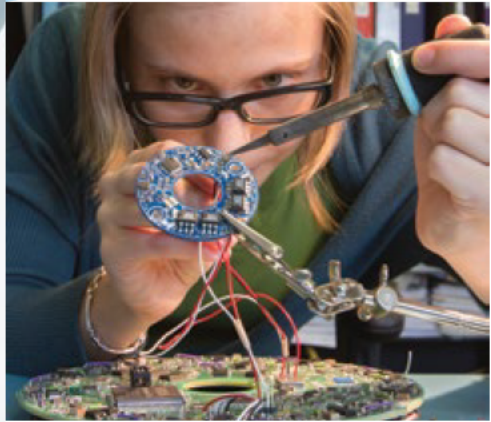
through demand response. With new technologies enabling consumers at all levels to take greater control of their energy use, the IESO, together with the industry, is examining ways to capture the value that consumers can provide and develop ways to compensate them.

Ontario has already begun to integrate emerging storage technologies into its electricity market. In 2013, two energy storage proponents were selected to provide alternative sources of regulation. New contracts were awarded to five companies, totaling 34 MW, in 2014 for ancillary services to support increased reliability and efficiency of the grid. Additional energy storage projects up to 16 MW will be procured in 2015 and will focus on facilities that can provide the best long-term benefit for the ratepayer while enabling suppliers to demonstrate their technologies.

The IESO's Conservation Fund supports the implementation of innovative energy-saving projects and technologies by contributing to their commercialization. In 2014, the fund committed more than \$8 million to 23 new projects. Since 2005, the fund has committed \$57 million in support to 207 projects. These new projects are contributing to overall energy savings, informing policies and programs and promoting awareness of innovative conservation activities.



This lithium battery system located in Strathroy, provides frequency regulation to the power system.



LEADING-EDGE CONSERVATION RESEARCH SUPPORTS ONTARIO BUSINESSES

Finding operational efficiencies is essential for any company's bottom line, but it requires some creative thinking and access to innovative ideas and technologies. That's why, since 2005, the Conservation Fund has supported inventive conservation projects, helping to turn great ideas into commercial products to help keep industry in Ontario competitive and sustainable, while also encouraging a culture of conservation.

One such project includes inMotive's mechatronic variable speed drive (MVSD), a device that adds gears to a standard electric motor used in industrial applications. Most motors are over-sized and run on a single speed to meet peak load conditions, which means they use more electricity than needed. With the MVSD (seen above), a smaller-sized motor can do the same job but more efficiently. This has been proven when the MVSD was tested under real-life working conditions at Walmart's distribution centre in Mississauga.

Independent Electricity System Operator


1600-120 Adelaide Street West
Toronto, Ontario M5H 1T1


Phone: 905.403.6900


Toll-free: 1.888.448.7777

E-mail: customer.relations@ieso.ca


ieso.ca


 [@IESO_Tweets](https://twitter.com/IESO_Tweets)


 facebook.com/OntarioIESO

 linkedin.com/company/ieso

saveonenergy.ca

 [@saveonenergyOnt](https://twitter.com/saveonenergyOnt)

 facebook.com/saveonenergyFORHOME

 linkedin.com/company/saveonenergy-ontario



ieso

Independent Electricity System Operator

Financial Statements

2014 ANNUAL REPORT |



Independent Electricity System Operator

1 Message from Bruce Campbell
and Tim O'Neill

2 Year in Review

4 Board of Directors

5 Executive Leadership Team

5 A Special Thanks to the
Stakeholder Advisory Committee

6 Management Report

7 Independent Auditors' Report

8 Statement of Financial Position

9 Statement of Operations and
Accumulated Deficit

10 Statement of Remeasurement
Gains and Losses

11 Statement of Change in Net Debt

12 Statement of Cash Flows

13 Notes to Financial Statements

28 Executive Compensation at
the IESO

Message From Bruce Campbell and Tim O'Neill

The Independent Electricity System Operator (IESO) begins every year with goals and expectations for the ensuing 12 months. Given the ongoing transformation of the electricity sector, we know there will be change – both planned and unplanned. In addition to achieving the planned goals and objectives, an extra challenge came halfway through 2014 when it was announced that the IESO would be merging with the Ontario Power Authority (OPA). Employees of both organizations worked collaboratively with their new colleagues toward a smooth merger transition on January 1, 2015.

As Ontario's Reliability Coordinator, we also deal with changes affecting system operations – from unplanned generator outages to extreme weather events. In 2014, for example, the cool summer months resulted in lower than normal demand, which contributed to surplus baseload generation conditions, and Ontario saw a peak demand in the winter for the first time in 10 years. The year began with sustained cold weather that caused consistently high demand and increased reliance on natural gas generation. The IESO worked with its stakeholders to overcome these challenges and put plans in place to improve coordination between the electricity and gas sectors for the winter of 2015.

In addition to maintaining reliability, the IESO worked to strengthen Ontario's electricity system going forward. For instance, a joint report between the IESO and OPA, *Review of Ontario's Interties*, studied the value of the interties and identified potential areas to enhance them, including more frequent intertie scheduling and expanded provision of ancillary services. This was followed by a capacity exchange Memorandum of Understanding with Quebec that will provide each province with insurance during their complementary seasonal peaks. In addition, the IESO procured 34 megawatts of energy storage services that will support increased reliability and efficiency of the grid.

These achievements would not have been possible without the commitment of IESO employees, to whom we extend our thanks for their dedication.

Looking ahead, the IESO will continue to work with its stakeholders to explore market development opportunities identified in 2014, including the development of demand response and capacity auctions. Stakeholder input will be critical as we move forward to finalize the design elements for these initiatives.

Whatever 2015 holds, we are confident that the recently merged organization will inherit the resiliency of both former organizations.



Bruce Campbell
President and CEO
Independent Electricity
System Operator



Tim O'Neill
Chairman of the Board
Independent Electricity
System Operator

Year in Review

A look back at 2014 shows the ever-changing nature of Ontario's electricity system: coal-fired electricity was completely eliminated; new energy storage technologies came online while additional storage services were procured; the value of the interties was enhanced; and Ontario became a winter peaking province for the first time in 10 years.

The Independent Electricity System Operator (IESO), in partnership with its stakeholders, led a variety of initiatives in 2014 to make Ontario's electricity system more reliable, efficient and cost-effective.

Maintaining Reliability

Ontarians were welcomed into 2014 by extreme cold temperatures and biting wind chill, which ultimately became a long, harsh winter. For Ontario's electricity system, this resulted in consistently high demand and increased reliance on natural gas. Operators in the IESO's control room worked with neighbouring jurisdictions to mitigate any challenges and risks, ensuring the province's lights stayed on.

Record low temperatures in the early months of the year contrasted with unusually cool summer months, which offered different challenges for the IESO. In particular, this led to periods of low demand and, subsequently, surplus baseload generation conditions. Wind dispatch was critical during this time as it helped avoid shutting down nuclear units on 18 different occasions throughout the year. Overall, only one nuclear shutdown was required in 2014, down from six the previous year.

Sharing Information

The sustained cold weather of early 2014 was not without its lessons. Natural gas reserves were strained as they were consistently relied upon to meet both electricity and home heating needs. The heightened sensitivity to supply conditions throughout North America revealed some gaps in how the gas and electricity industries communicate. This contributed to a broader IESO initiative, the Gas-Electric Review.

Throughout 2014, IESO staff met with gas generators, utilities, pipeline operators and the Ontario Energy Board to discuss ways to improve cross-sector communication and coordination. The IESO now monitors publicly available gas industry information and is continuing to work with gas pipeline and storage providers to improve communication for operational and planning needs. Enhanced communication protocols now in place between the IESO, gas generators and pipelines proved very beneficial this past winter.

The IESO made its own effort to improve communication with its stakeholders and the general public by launching a revamped website in February. The enhanced, interactive website enables Ontarians to learn more about how the power system and electricity markets work and to retrieve data on real-time electricity supply, demand and price. Easily accessible market data will become increasingly important as Ontario's electricity system continues to evolve. The website serves to demonstrate the IESO's commitment to transparency in system and market operations.

Integrating New Resources

Over 2014, the IESO integrated more than 1,900 megawatts of wind, solar, biofuel and hydro generation into the province's transmission and distribution systems. Increasing renewable generation contrasted with declining coal-fired generation and, in April, the Thunder Bay Generating Station burned its last supply of coal, marking the end of coal-fired electricity in Ontario.

New technologies also began contributing to the grid as storage facilities from NRStor and Renewable Energy Systems Canada (RES) became operational, the outcome of a 2012 procurement of regulation services. NRStor's two-megawatt flywheel and RES Canada's four-megawatt battery act to help match total generation on the system with total demand on a second-by-second basis. The two projects represent a major step forward by increasing the participation of alternative technologies in providing regulation service, a function traditionally provided by generators.

Supporting Innovation

The IESO issued a Request for Proposals in March to procure up to 35 megawatts of energy storage to explore how new technologies can provide flexibility in grid operations. The competitive procurement sought solutions capable of providing ancillary services—specifically, regulation or reactive support and voltage control services—and demonstrated the IESO's support for Ontario's burgeoning energy storage industry.

Five companies were selected representing a diverse range of technologies, including battery, thermal, hydrogen storage and flywheel. These successful applicants will build 12 projects across Ontario, providing valuable learnings about the future potential of energy storage in Ontario. Upon their commercial operation, these projects will support increased reliability and efficiency of the grid.

Market Development Initiatives

In addition to integrating new generation and procuring energy storage services, the IESO pursued opportunities to make Ontario's electricity market more competitive and efficient. Working with its stakeholders, the IESO introduced new market development initiatives to examine the potential benefits and design structure of auctions for capacity and demand response.

The province's Long-Term Energy Plan expects demand response to meet 10 percent of peak demand by 2025 under forecast conditions. Demand response auctions will provide a venue in which participants can compete and are expected to result in the most cost-effective solutions for Ontario's ratepayers. Capacity auctions are expected to achieve similar outcomes and are intended to meet Ontario's incremental capacity needs that are projected for the years ahead. The IESO will continue to work with stakeholders to bring these initiatives to the market.

Enhancing the Value of the Interties

Electricity imports and exports are part of the regular operation of Ontario's electricity market. In October, the IESO released a joint report with the Ontario Power Authority to study the value of Ontario's interties and examine opportunities to expand electricity imports. The report, entitled *Review of Ontario's Interties*, found that increased reliance on interties through firm imports would require investments in transmission infrastructure but that there are opportunities to enhance the benefits of existing interties.

Possible enhancements include more frequent intertie scheduling and expanded provision of ancillary services, such as operating reserve, through intertie transactions. These changes hold promise to make Ontario's operations more efficient. The IESO will work with stakeholders to consider these opportunities throughout 2015.

On November 21, shortly after the release of the interties report, the IESO signed a Memorandum of Understanding with Hydro-Quebec to enhance the use of the interties through a capacity exchange between Ontario and Quebec. This exchange will support the reliability of each province's electricity systems by taking advantage of their complementary seasonal peaks of electricity resources and needs. Discussions are ongoing and an agreement is expected by June.

Building on Our Accomplishments

As 2014 came to a close, the IESO prepared to merge with the Ontario Power Authority and, on January 1, 2015, these two organizations amalgamated. As a merged organization, the IESO has a more well-rounded and complete set of responsibilities. The scope of its operations ranges from planning 20 years ahead to operating the grid second-by-second. The result will be a more effective integration of the planning outlook with operational experience, with those insights being brought into procurement planning. IESO merger-related expenses in 2014 were \$5.3 million.

Moving forward, the new organization will build on the developments of 2014 and continue to provide public value for Ontario's ratepayers. Maintaining the reliability of the grid will continue to be a priority, as will pursuing opportunities to bend the cost curve for consumers. The IESO looks forward to working alongside its stakeholders on behalf of Ontario's ratepayers in 2015 and the years to come.

Board of Directors

Tim O'Neill

Chairman of the Board
Retired from BMO Financial Group, where he served as Executive Vice-President and Chief Economist; President of O'Neill Strategic Economics

William Museler

Chair, Audit Committee
Former President and Chief Executive Officer of the New York Independent System Operator

Tricia O'Malley

Former Chair of the Canadian Accounting Standards Board and the Ontario Securities Commission's Financial Disclosure Advisory Board

Angela Ferrante

Former Chief Operating Officer of the Ontario Energy Board; former Vice-President, Public Affairs at Ontario Power Generation

Murray Elston

Former Chair of the Electricity Distribution Panel; former President of the Canadian Nuclear Association; former Ontario Minister of Health

David Cassivi

Former Chair of ENWIN Utilities; former Windsor City Councillor

Helen Polatajko

Former Senior Vice-President and Chief Information Officer at CIBC Mellon

Margaret Kelch

Chair of the Conservation Committee, Nature Conservancy of Canada; former board member of the Electrical Safety Authority and Guelph Hydro Electric Systems Inc.

Rudy Riedl

Vice Chair, Chair, Human Resources and Governance Committee
Former President, Enbridge Consumers Gas

John Wiersma

Retired from Veridian Corporation, where he served as President and Chief Executive Officer, and Chair of the Board of Directors

Bruce Campbell

President and Chief Executive Officer, Independent Electricity System Operator

Executive Leadership Team

Tim O'Neill
Chairman of the Board

Bruce Campbell
President and Chief
Executive Officer

Doug Thomas
Vice-President,
Information and
Technology Services
and Chief Information
Officer

Kim Warren
Vice-President,
Operations and Chief
Operating Officer

Terry Young
Vice-President,
Corporate and Employee
Relations

Ted Leonard
Vice-President, Markets,
Chief Financial Officer
and Treasurer

John Rattray
General Counsel,
Secretary and Chief
Reliability Compliance
Officer

A Special Thanks to the Stakeholder Advisory Committee

The Stakeholder Advisory Committee (SAC) was established to advise the IESO's Board of Directors and management on policy issues related to the IESO's mandate. SAC membership is broadly reflective of stakeholder constituencies with a direct interest in IESO decisions.

The Stakeholder Advisory Committee was comprised of 14 people with significant expertise in Ontario's electricity sector:

Todd Wilcox
*Chair, Stakeholder
Advisory Committee*
Chief Operating Officer,
North Bay Hydro

Jack Burkom
Senior Vice-President,
Commercial
Development, Brookfield
Energy Marketing

David Butters
President and Chief
Executive Officer,
Association of Power
Producers of Ontario

Michelle Chislett
Managing Director,
Business Development,
SunEdison

Paul Ferguson
President,
Newmarket-Tay Power
Distribution Ltd.

Ted Leonard
Vice-President, Markets,
Chief Financial Officer
and Treasurer, IESO

Steven Hall
Consumer
Representative,
Stakeholder Advisory
Committee

Richard Horrobin
Vice-President, Power
Marketing and Chief
Information Officer,
Bruce Power

Tony Thoma
Dean, Engineering
Technology and
Media Studies,
Mohawk College

Mark Schembri
Vice-President,
Supermarket Systems
& Store Maintenance,
Loblaw Properties Ltd.

Ersilia Serafini
Chief Executive Officer,
Summerhill

Paul Shervill
Vice-President,
Strategic Initiatives,
Rodan Energy Solutions

Adam White
President, Association
of Major Power
Consumers of Ontario

Wayne Smith
Senior Vice-President,
Planning and
Operations, Hydro One

Management Report

Management's Responsibility for Financial Reporting

The accompanying financial statements of the Independent Electricity System Operator are the responsibility of management and have been prepared in accordance with Canadian public sector accounting standards. The significant accounting policies followed by the Independent Electricity System Operator are described in the Summary of Significant Accounting Policies contained in Note 2 in the financial statements. The preparation of financial statements necessarily involves the use of estimates based on management's judgment, particularly when transactions affecting the current accounting period cannot be finalized with certainty until future periods. The financial statements have been prepared within reasonable limits of materiality and in light of information available up to February 18, 2015.

Management maintained a system of internal controls designed to provide reasonable assurance that the assets were safeguarded and that reliable information was available on a timely basis. The system included formal policies and procedures and an organizational structure that provided for the appropriate delegation of authority and segregation of responsibilities.

These financial statements have been examined by KPMG LLP, a firm of independent external auditors appointed by the Board of Directors. The external auditors' responsibility is to express their opinion on whether the financial statements are fairly presented in accordance with generally accepted accounting principles in Canada. The Auditors' Report, which follows, outlines the scope of their examination and their opinion.

INDEPENDENT ELECTRICITY SYSTEM OPERATOR

On behalf of management,



Bruce Campbell
President, Chief Executive Officer
Toronto, Canada
February 18, 2015



Kimberly Marshall
Vice-President, Corporate Services and
Chief Financial Officer
Toronto, Canada
February 18, 2015

Independent Auditors' Report

To the Board of Directors of the Independent Electricity System Operator (IESO)

We have audited the accompanying financial statements of IESO, which comprise the statement of financial position as at December 31, 2014, the statements of operations and accumulated deficit, remeasurement gains and losses, change in net debt and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting 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 audit. We conducted our audit 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 our 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, we 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 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 IESO as at December 31, 2014, and its results of operations and the changes in its net debt and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.



Chartered Professional Accountants, Licensed Public Accountants

February 18, 2015

Waterloo, Canada

Statement of Financial Position

As at (in thousands of Canadian dollars)

December 31, 2014 December 31, 2013

	\$	\$
FINANCIAL ASSETS		
Cash and cash equivalents	11,886	9,569
Accounts receivable	17,813	17,592
Long-term investments (Note 3)	33,979	31,801
TOTAL FINANCIAL ASSETS	63,678	58,962
LIABILITIES		
Accounts payable and accrued liabilities (Note 4)	25,862	24,178
Accrued interest on debt	364	266
Rebates due to market participants (Note 5)	–	25,755
Debt (Note 6)	129,000	124,200
Accrued pension liability (Note 7)	36,943	35,139
Accrued liability for employee future benefits other than pension (Note 7)	79,914	74,069
TOTAL LIABILITIES	272,083	283,607
NET DEBT	(208,405)	(224,645)
NON-FINANCIAL ASSETS		
Net tangible capital assets (Note 8)	95,051	91,636
Prepaid expenses	5,468	4,455
TOTAL NON-FINANCIAL ASSETS	100,519	96,091
ACCUMULATED DEFICIT		
Accumulated deficit from operations (Note 5)	(114,248)	(132,698)
Accumulated remeasurement gains	6,362	4,144
ACCUMULATED DEFICIT	(107,886)	(128,554)

On behalf of the Board:



Jim Hinds
Chair
Toronto, Canada



Ron Jamieson
Director
Toronto, Canada

Statement of Operations and Accumulated Deficit

For the year ended December 31 (in thousands of Canadian dollars)	2014	2014	2013
	Budget \$	Actual \$	Actual \$
WHOLESALE MARKET OPERATIONS			
System fees	126,576	129,548	115,683
Other revenue (Note 9)	3,291	3,583	3,143
Interest and investment income	1,012	2,798	1,601
Wholesale market operation revenues	130,879	135,929	120,427
Wholesale market operation expenses (Note 10)	(127,601)	(128,364)	(118,422)
IESO-OPA amalgamation expenses (Note 10)	–	(5,305)	–
Wholesale market operations annual surplus	3,278	2,260	2,005
MARKET SANCTIONS AND PAYMENT ADJUSTMENTS			
Market sanctions and payment adjustments	–	2,687	3,191
Customer education and market enforcement expenses (Note 10)	(4,083)	(4,363)	(3,856)
Market sanctions and payment adjustments annual deficit	(4,083)	(1,676)	(665)
SMART METERING ENTITY			
Smart metering charge	45,207	45,735	30,144
Smart metering expenses (Note 10)	(33,327)	(27,869)	(26,531)
Smart metering entity annual surplus	11,880	17,866	3,613
ANNUAL SURPLUS	11,075	18,450	4,953
ACCUMULATED DEFICIT FROM OPERATIONS, BEGINNING OF PERIOD	(132,698)	(132,698)	(137,651)
ACCUMULATED DEFICIT FROM OPERATIONS, END OF PERIOD	(121,623)	(114,248)	(132,698)

Statement of Remeasurement Gains and Losses

For the year ended December 31 (in thousands of Canadian dollars)	2014	2013
	Actual \$	Actual \$
ACCUMULATED REMEASUREMENT GAINS, BEGINNING OF PERIOD	4,144	1,547
UNREALIZED GAINS ATTRIBUTABLE TO:		
Foreign exchange – other	591	178
Portfolio investments (Note 3)	2,622	2,454
AMOUNTS RECLASSIFIED TO THE STATEMENT OF OPERATIONS:		
Foreign exchange – other	(178)	(35)
Portfolio investments	(817)	–
NET REMEASUREMENT GAINS FOR THE PERIOD	2,218	2,597
ACCUMULATED REMEASUREMENT GAINS, END OF PERIOD	6,362	4,144

Statement of Change in Net Debt

For the year ended December 31 (in thousands of Canadian dollars)	2014	2014	2013
	Budget \$	Actual \$	Actual \$
ANNUAL SURPLUS	11,075	18,450	4,953
CHANGE IN NON-FINANCIAL ASSETS			
Acquisition of tangible capital assets	(23,955)	(22,930)	(22,196)
Amortization of tangible capital assets	21,558	19,515	18,167
Change in prepaid expenses	948	(1,013)	(767)
TOTAL CHANGE IN NON-FINANCIAL ASSETS	(1,449)	(4,428)	(4,796)
NET REMEASUREMENT GAINS FOR THE PERIOD	972	2,218	2,597
CHANGE IN NET DEBT	10,598	16,240	2,754
NET DEBT, BEGINNING OF PERIOD	(224,645)	(224,645)	(227,399)
NET DEBT, END OF PERIOD	(214,047)	(208,405)	(224,645)

Statement of Cash Flows

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

2014

2013

	\$	\$
OPERATING TRANSACTIONS		
Annual Surplus	18,450	4,953
Changes in non-cash items:		
Amortization	19,515	18,167
Pension expense	13,777	10,800
Other employee future benefits expense	8,166	6,907
Change in fair value of long-term investments	(1,100)	–
	40,358	35,874
Changes in non-cash balances related to operations:		
Change in accounts payable and accrued liabilities	1,934	(2,146)
Change in accounts receivable	(221)	(759)
Change in rebates due to market participants	(25,755)	12,648
Change in prepaid expenses	(1,013)	(767)
	(25,055)	8,976
Other:		
Contribution to pension fund	(11,973)	(17,261)
Payment of employee future benefits	(2,321)	(2,093)
	(14,294)	(19,354)
Cash provided by operating transactions	19,459	30,449
CAPITAL TRANSACTIONS		
Acquisition of tangible capital assets	(22,930)	(22,196)
Change in accounts payable & accrued liabilities	(152)	4,936
Cash applied to capital transactions	(23,082)	(17,260)
INVESTING TRANSACTIONS		
Change provided by/(applied to) long-term investments	727	(1,626)
Cash provided by/(applied to) investing transactions	727	(1,626)
FINANCING TRANSACTIONS		
Change in debt	4,800	(9,000)
Cash provided by/(applied to) financing transactions	4,800	(9,000)
INCREASE IN CASH AND CASH EQUIVALENTS	1,904	2,563
CASH AND CASH EQUIVALENTS – BEGINNING OF PERIOD	9,569	6,863
Change in unrealized foreign exchange – other for the period	413	143
CASH AND CASH EQUIVALENTS – END OF PERIOD	11,886	9,569

Notes to Financial Statements

1. NATURE OF OPERATIONS

a) Independent Electricity System Operator (IESO) is a not-for-profit, non-taxable corporation, created by statute effective on April 1, 1999 pursuant to Part II of the *Electricity Act, 1998*. As set out in the *Electricity Act, 1998*, the IESO operates pursuant to a licence granted by the Ontario Energy Board (OEB). The objects of the IESO as contained in the *Electricity Act, 1998* and amended, in the *Electricity Restructuring Act, 2004* and Ontario Regulation 452/06, are as follows:

- to exercise the powers and perform the duties assigned to the IESO under the *Electricity Restructuring Act, 2004*, the market rules and its licence;
- to enter into agreements with transmitters giving the IESO the authority to direct the operation of their transmission systems;
- to direct the operation and maintain the reliability of the IESO-controlled grid to promote the purposes of the *Electricity Restructuring Act, 2004*;
- to participate in the development, by any standards authority, of standards and criteria relating to the reliability of the transmission systems;
- to work with the responsible authorities outside Ontario to co-ordinate the IESO's activities with their activities;
- to collect and provide information to the Ontario Power Authority (OPA) and the public relating to the current and short-term electricity needs of Ontario and the adequacy and reliability of the integrated power system to meet those needs;
- to operate the IESO-administered markets to promote the purposes of the *Electricity Restructuring Act, 2004*;
- to plan, manage and implement the smart metering initiative or any aspect of the initiative;
- to oversee, administer and deliver the smart metering initiative or any aspect of the initiative; and
- to establish and enforce standards and criteria relating to the reliability of transmission systems.

b) The IESO was designated the Smart Metering Entity by Ontario Regulation 393/07 under the *Electricity Act, 1998* on March 28, 2007. The regulation came into effect on July 26, 2007.

The objects of the Smart Metering Entity (SME), as contained in the *Electricity Act, 1998*, are as follows:

- to plan and implement and, on an ongoing basis, oversee, administer and deliver any part of the smart metering initiative as required by regulation under this or any Act or directive made pursuant to sections 28.3 or 28.4 of the *Ontario Energy Board Act, 1998*, and, if so authorized, to have the exclusive authority to conduct these activities;
- to collect and manage and to facilitate the collection and management of information and data and to store the information and data related to the metering of consumers' consumption or use of electricity in Ontario, including data collected from distributors and, if so authorized, to have the exclusive authority to collect, manage and store the data;
- to establish, to own or lease and to operate one or more databases to facilitate collecting, managing, storing and retrieving smart metering data;

- to provide and promote non-discriminatory access, on appropriate terms and subject to any conditions in its licence relating to the protection of privacy, by distributors, retailers, the OPA and other persons,
 - i. to the information and data referred to above, and
 - ii. to the telecommunication system that permits the Smart Metering Entity to transfer data about the consumption or use of electricity to and from its databases, including access to its telecommunication equipment, systems and technology and associated equipment, systems and technologies
 - to own or to lease and to operate equipment, systems and technology, including telecommunication equipment, systems and technology that permit the Smart Metering Entity to transfer data about the consumption or use of electricity to and from its databases, including owning, leasing or operating such equipment, systems and technology and associated equipment, systems and technologies, directly or indirectly, including through one or more subsidiaries, if the Smart Metering Entity is a corporation;
 - to engage in such competitive procurement activities as are necessary to fulfill its objects or business activities;
 - to procure, as and when necessary, meters, metering equipment, systems and technology and any associated equipment, systems and technologies on behalf of distributors, as an agent or otherwise, directly or indirectly, including through one or more subsidiaries, if the Smart Metering Entity is a corporation;
 - to recover, through just and reasonable rates, the costs and an appropriate return approved by the Ontario Energy Board associated with the conduct of its activities; and
 - to undertake any other objects that are prescribed by associated regulation.
- c) The IESO is required to submit its proposed expenditures, revenue requirements, and fees for the coming year to the OEB for review and approval. The submission may be made only with the approval or deemed approval of the IESO business plan by the Minister of Energy (Minister).

d) Bill 14, *Building Opportunity and Securing Our Future Act (Budget Measures)*, 2014 received Royal Assent on July 24, 2014. Schedule 7 of the Bill amends the *Electricity Act, 1998* by amalgamating the IESO and the Ontario Power Authority (“OPA”) and by continuing them as the IESO. The transitional provision, dealing with corporate matters, provides, among other things, that the predecessor IESO and OPA cease to exist as entities separate from the IESO and all their rights, properties and assets become the rights, properties and assets of the IESO, as do all outstanding debts, liabilities and obligations of the predecessor IESO and OPA. Schedule 7 of Bill 14 came into force on January 1, 2015.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a) Basis of financial statement preparation

The accompanying financial statements have been prepared on a going concern basis and in accordance with Canadian public sector accounting standards and reflect the following significant accounting policies:

b) Revenue recognition

System fees earned by the IESO are based on approved rates for each megawatt of electricity withdrawn from the IESO-controlled grid (including scheduled exports) and embedded generation. System fees are recognized as revenue at the time the electricity is withdrawn. Rebates are recognized in the year in which the approved regulatory deferral account, before such rebates, exceeds regulated limits.

These financial statements do not include the financial transactions of market participants within the IESO-administered markets.

Other revenue represents amounts that accrue to the IESO relating to services the IESO performs and charges on a cost recovery basis, investment income on funds passing through market settlement accounts, as well as application fees. Such revenue is recognized as is earned.

Interest and investment income represents realized interest income and investment gains or losses on cash, cash equivalents, short-term investments and long-term investments.

Market sanctions represent funds received and payments disbursed related to penalties, damages, fines and payment adjustments arising from resolved settlement disputes.

c) Financial instruments

The IESO records cash and cash equivalents, investment portfolio, and foreign currency exchange forward contracts at fair value. The cumulative change in fair value of these financial instruments is recorded in accumulated surplus as remeasurement gains and losses and is included in the value of the respective financial instrument shown in the statement of financial position and the statement of remeasurement gains and losses. Upon disposition of the financial instruments, the cumulative remeasurement gains and losses are reclassified to the statement of operations and all other gains and losses associated with the disposition of the financial instrument are recorded in the statement of operations. Transaction costs are charged to operations as incurred.

Cash and cash equivalents comprise cash, term deposits and other short-term, highly-rated investments with original maturity dates of less than 90 days.

The IESO records accounts receivable, accounts payable and debt at amortized cost.

d) Tangible capital assets

Tangible capital assets are recorded at cost which includes all amounts directly attributable to the acquisition, construction, development or betterment of the asset. The IESO capitalizes applicable interest as part of the cost of tangible capital assets.

e) Assets under construction

Assets under construction generally relates to the costs of physical facilities, hardware and software, and includes costs paid to vendors, internal and external labour, consultants and interest related to funds borrowed to finance the project. Costs relating to assets under construction are transferred to tangible capital assets when the asset under construction is deemed to be ready for use.

f) Amortization

The capital cost of tangible capital assets in service is amortized on a straight-line basis over their estimated service lives.

The estimated service lives in years, from the date the assets were acquired, are:

Class	Estimated Average Service Life 2014	Estimated Average Service Life 2013
Facilities	38	38
Market systems and applications	4 to 12	4 to 10
Infrastructure and other assets	4 to 8	4 to 7
Meter data management/repository	10	10

Gains and losses on sales or premature retirements of tangible capital assets are charged to operations.

The estimated service lives of tangible capital assets are subject to periodic review. The effects of changes in the estimated lives are amortized on a prospective basis. The most recent review was completed in fiscal 2014.

g) Pension, other post-employment benefits and compensated absences

The IESO's post-employment benefit programs include pension, group life insurance, health care, long-term disability and workers compensation benefits.

The IESO accrues obligations under pension and other post-employment benefit (OPEB) plans and the related costs, net of plan assets. Pension and OPEB expenses and obligations are determined annually by independent actuaries using the projected benefit method and management's best estimate of expected return on plan assets, salary escalation, retirement ages of employees, mortality and expected health-care costs. The discount rate used to value liabilities is based on the expected rate of return on plan assets as at the measurement date of September 30.

The expected return on plan assets is based on management's long-term best estimate using a market-related value of plan assets. The market-related value of plan assets is determined using the average value of assets over three years as at the measurement date of September 30.

Pension and OPEB expenses are recorded during the year in which employees render services. Pension and OPEB expenses consist of current service costs, interest expense on liabilities, expected return on plan assets and the cost of plan amendments in the period. Actuarial gains/(losses) arise from, among other things, the difference between the actual rate of return on plan assets for a period and the expected long-term rate of return on plan assets for that period or from changes in actuarial assumptions used to determine the accrued benefit obligations. Actuarial gains/(losses) are amortized over the expected average remaining service life of the employees covered by the plan.

The expected average remaining service life of employees covered by the pension plans is 13 years (2013 – 13 years) and OPEB plans is 14 years (2013 – 14 years).

The IESO sick pay benefits accumulate but do not vest. The IESO accrues sick pay benefits based on the expectation of future utilization, and records the accrual within accounts payable and accrued liabilities.

h) Foreign currency exchange

Transactions denominated in foreign currencies are translated into Canadian dollars at the rate of exchange prevailing on the date of the transaction. Items on the statement of financial position denominated in foreign currency are translated to Canadian dollars at the rate of exchange as of the financial statements date. The cumulative unrealized foreign currency exchange gains and losses of items continuing to be recognized on the statement of financial position are recorded in accumulated deficit as remeasurement gains and losses and shown in the statement of financial position and the statement of remeasurement gains and losses. Upon settlement of the item denominated in a foreign currency, the cumulative remeasurement gains and losses are reclassified to the statement of operations and all other gains and losses associated with the disposition of the financial instrument are recorded in the statement of operations.

i) Use of estimates

The preparation of the financial statements in conformity with Canadian public sector accounting standards requires management to make estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities and the disclosure of contingent assets and liabilities as at the date of the financial statements. The IESO's accounts which involve a greater degree of uncertainty include the carrying values of tangible capital assets, rebates to market participants, accrued pension liability, and accrual for employee future benefits other than pensions. Actual results could differ from those estimates.

3. LONG-TERM INVESTMENTS

Long-term investments in a balanced portfolio of pooled funds are valued by the pooled funds manager based on published price quotations and amount to \$33,758 thousand (2013 – \$31,683 thousand). As at December 31, the market value allocation of these long-term investments was 59.7% equity securities and 40.3% debt securities (2013 – 65.0% and 35.0% respectively).

Balanced portfolio of pooled funds

As at December 31 (in thousands of Canadian dollars)	2014	2013
	\$	\$
Opening balance	31,683	27,721
Purchase/(sale) of investments	(830)	1,508
Change in fair value	2,905	2,454
Closing balance	33,758	31,683

In addition to the balanced portfolio of pooled funds, the IESO has a long-term deposit with Canada Revenue Agency in the amount of \$221 thousand (2013 – \$118 thousand) pertaining to the Retirement Compensation Arrangements Trust (Note 6).

4. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

As at December 31 (in thousands of Canadian dollars)	2014	2013
	\$	\$
Relating to operations	18,856	17,020
Relating to tangible capital assets	7,006	7,158
	25,862	24,178

5. REBATES DUE TO MARKET PARTICIPANTS AND ACCUMULATED DEFICIT

In 2014, the IESO recognized \$nil thousand in rebates due to market participants of system fees (2013 – \$12,648 thousand). As at December 31, 2014 rebates due to market participants were \$nil thousand (2013 – \$25,755 thousand).

Historically, the IESO's approved regulatory deferral account balance is maintained at a maximum of \$5.0 million. The 2014 approved regulatory deferral account balance will be established at the time of the 2015 rate case with the OEB, which is expected to be in the spring of 2015.

As at December 31, the components of the accumulated deficit were as follows:

Accumulated Deficit

As at December 31 (in thousands of Canadian dollars)	2014	2013
	\$	\$
Regulatory deferral account (a)	5,228	5,000
Accumulated market sanctions and payment adjustments (b)	(970)	706
Smart metering entity – accumulated deficit (c)	(60,879)	(78,745)
PSAB transition items (d)	(51,265)	(55,515)
Accumulated deficit – end of year	(107,886)	(128,554)

a) Approved Regulatory Deferral Account

As at December 31 (in thousands of Canadian dollars)	2014	2013
	\$	\$
Accumulated surplus – beginning of year	5,000	5,000
Revenues (before rebates due to market participants)	135,929	133,075
Rebates due to market participants	–	(12,648)
Wholesale market operation expenses	(128,364)	(118,422)
IESO – OPA amalgamation expenses	(5,305)	–
Change in accumulated remeasurement gains	2,218	2,597
Recovery of PSAB transition items	(4,250)	(4,602)
Accumulated surplus – end of year	5,228	5,000

b) Accumulated Market Sanctions and Payment Adjustments

As at December 31 (in thousands of Canadian dollars)	2014	2013
	\$	\$
Accumulated surplus – beginning of year	706	1,371
Market sanctions and payment adjustments	2,687	3,191
Customer education and market enforcement expenses	(4,363)	(3,856)
Accumulated surplus/(deficit) – end of year	(970)	706

c) Smart Metering Entity – Accumulated Deficit

As at December 31 (in thousands of Canadian dollars)	2014	2013
	\$	\$
Accumulated deficit – beginning of year	(78,745)	(82,358)
Smart metering charge	45,735	30,144
Smart metering expenses	(27,869)	(26,531)
Accumulated deficit – end of year	(60,879)	(78,745)

d) PSAB Transition Item – Accumulated Deficit

As at December 31 (in thousands of Canadian dollars)	2014	2013
	\$	\$
Accumulated deficit – beginning of year	(55,515)	(60,117)
Recovery of PSAB transition items	4,250	4,602
Accumulated deficit – end of year	(51,265)	(55,515)

Effective January 1, 2011, the IESO adopted Canadian public sector accounting standards (PSAB) with a transition date of January 1, 2010. The adoption of PSAB was accounted for by retroactive application with restatement of prior periods subject to the requirements in Section PS 2125, *First-time Adoption by Government Organizations*. The corresponding change to pension and other-post employment benefits resulted in previously unrecognized actuarial losses and past service costs of \$80,617 thousand at the date of transition being charged to the accumulated deficit.

The IESO includes a portion of the accumulated deficit resulting from the PSAB transition items in the annual proposed expenditures to the OEB for recovery through system fees.

6. DEBT

Note payable to Ontario Electricity Financial Corporation (OEFC)

In April 2014, the IESO entered into a three-year note payable with the OEFC. The note payable is unsecured, bears interest at a fixed rate of 2.046% per annum and is repayable in full on April 30, 2017. Interest accrues daily and is payable in arrears semi-annually in April and October of each year. As at December 31, 2014, the note payable to the OEFC was \$90.0 million (December 31, 2013 – \$78.2 million).

For the year ended December 31, 2014, the interest expense on the note payable was \$1,650 thousand (2013 – \$1,430 thousand).

Credit facility

The IESO has an unsecured credit facility agreement with the OEFC, which will make available to the IESO an amount up to \$95.0 million. Advances are payable at a variable interest rate equal to the Province of Ontario's cost of borrowing for a 30 day term plus 0.50% per annum, with draws, repayments and interest payments due monthly. The credit facility expires April 30, 2017. As at December 31, 2014, \$39.0 million was drawn on the credit facility (December 31, 2013 – \$46.0 million).

For the year ended December 31, 2014, the interest expense on the credit facility was \$664 thousand (2013 – \$790 thousand).

Retirement Compensation Arrangements Trust

In July 2013, the IESO established a Retirement Compensation Arrangements Trust (RCA) to provide security for the IESO's obligations under the terms of the supplemental employee retirement plan for its employees. As at December 31, 2014, the IESO has provided the RCA trustee with a bank letter of credit of \$23,370 thousand (2013 – \$26,831 thousand) the trustee can draw on if the IESO is in default under the terms of this plan.

7. POST-EMPLOYMENT BENEFIT PLANS

The IESO provides pension and other employee post-employment benefits, comprising group life insurance, long-term disability and group medical and dental plans, for the benefit of current and retired employees.

Pension plans

The IESO provides a contributory defined benefit, indexed, registered pension plan. In addition to the funded, registered, pension plan, the IESO provides certain non-registered defined benefit pensions through an unfunded, indexed, non-registered plan.

Other employee future benefits

The group life insurance, long-term disability and group medical and dental benefits are provided through unfunded, non-registered defined benefit plans.

Summary of accrued benefit obligations and plan assets

(in thousands of Canadian dollars)	2014 Pension Benefits	2013 Pension Benefits	2014 Other Benefits	2013 Other Benefits
	\$	\$	\$	\$
Accrued benefit obligation	452,466	443,562	69,427	82,848
Fair value of plan assets	455,229	390,934	–	–
Funded status as of measurement date	2,763	(52,628)	(69,427)	(82,848)
Employer contribution/other benefits payments after measurement date	207	4,647	586	570
Unrecognized actuarial (gain)/loss	(39,913)	12,842	(11,073)	8,209
Accrued liability recognized in the statement of financial position	(36,943)	(35,139)	(79,914)	(74,069)

Registered pension plan assets

As at the measurement date of September 30, the proportion of the fair value of registered pension plan assets held in each asset class was as follows:

	2014	2013
Canadian equity securities	20.6%	20.0%
Foreign equity securities	40.7%	44.0%
Canadian debt securities	37.9%	35.1%
Cash equivalents	1.1%	0.7%
Forward foreign exchange contracts	(0.3%)	0.2%
	100.0%	100.0%

Principal assumptions used to calculate benefit obligations at the end of the year are determined at that time and are as follows:

	2014 Pension Benefits	2013 Pension Benefits	2014 Other Benefits	2013 Other Benefits
Discount rate at the end of the period	6.15%	6.25%	6.15%	6.25%
Rate of compensation increase	3.75%	3.75%	3.75%	3.75%
Rate of indexing	2.25%	2.25%	2.25%	2.25%

The assumed prescription drug inflation was 8.50% for 2014 grading down 0.5% per year to 4.75% in 2029. Dental costs are assumed to increase by 4.25% per year.

Benefit costs and plan contributions for pension and other plans are summarized as follows:

(in thousands of Canadian dollars)	2014 Pension Benefits	2013 Pension Benefits	2014 Other Benefits	2013 Other Benefits
	\$	\$	\$	\$
Current service cost (employer)	7,707	6,750	2,339	2,053
Interest cost	27,787	26,383	5,241	4,713
Expected return on plan assets	(23,630)	(22,911)	–	–
Amortization of net actuarial loss	1,913	578	586	141
Benefit cost	13,777	10,800	8,166	6,907

(in thousands of Canadian dollars)	2014 Pension Benefits	2013 Pension Benefits	2014 Other Benefits	2013 Other Benefits
	\$	\$	\$	\$
Employer contribution/other benefit payments	11,973	17,261	2,321	2,093
Plan participants' contributions	3,772	3,476	–	–
Benefits paid	20,862	21,109	2,321	2,093

The most recent actuarial valuation of the registered pension plan for funding purposes was at January 1, 2014, and the date of the next required valuation is January 1, 2015.

Principal assumptions used to calculate benefit costs for the year are determined at the beginning of the period and are as follows:

	2014 Pension Benefits	2013 Pension Benefits	2014 Other Benefits	2013 Other Benefits
Discount rate at the beginning of the period	6.25%	6.50%	6.25%	6.50%
Rate of compensation increase	3.75%	4.00%	3.75%	4.00%
Rate of indexing	2.25%	2.50%	2.25%	2.50%

8. TANGIBLE CAPITAL ASSETS

Net tangible capital assets consist of the following:

Tangible Capital Assets

(in thousands of Canadian dollars)	As at December 31, 2013	Additions	Disposals	As at December 31, 2014
	\$	\$	\$	\$
Facilities	50,603	–	(102)	50,501
Market systems and applications	250,098	5,715	(766)	255,047
Infrastructure and other assets	57,409	6,188	(15,465)	48,132
Meter data management/repository	32,608	2,826	–	35,434
Total cost	390,718	14,729	(16,333)	389,114

Accumulated Amortization

(in thousands of Canadian dollars)	As at December 31, 2013	Amortization Expense	Disposals	As at December 31, 2014
	\$	\$	\$	\$
Facilities	(18,564)	(1,285)	102	(19,747)
Market systems and applications	(224,841)	(10,032)	766	(234,107)
Infrastructure and other assets	(49,886)	(3,656)	15,465	(38,077)
Meter data management/repository	(17,261)	(4,542)	–	(21,803)
Total accumulated amortization	(310,552)	(19,515)	16,333	(313,734)

Net Book Value

(in thousands of Canadian dollars)	As at December 31, 2013	As at December 31, 2014
	\$	\$
Facilities	32,039	30,754
Market systems and applications	25,257	20,940
Infrastructure and other assets	7,523	10,055
Meter data management/repository	15,347	13,631
Total net book value	80,166	75,380
Assets under construction	11,470	19,671
Net tangible capital assets	91,636	95,051

In 2014, the impact of adjustments to management's estimates of remaining asset service lives was a decrease in amortization expense of \$665 thousand (2013 – \$nil thousand).

Interest capitalized to assets under construction during 2014 was \$165 thousand (2013 – \$44 thousand).

9. OTHER REVENUE

In its administration of the IESO-administered markets, the IESO directs the investment of market funds in highly-rated short-term investments throughout the settlement cycle. The IESO is entitled to receive the investment interest and investment gains, net of investment losses earned on funds passing through the real-time market settlement accounts. The IESO is not entitled to the principal on real-time market investments.

The IESO recognized investment income earned in the market settlement accounts of \$1,724 thousand in 2014 (2013 – \$1,386 thousand).

The IESO recognizes revenue as it is earned relating to services the IESO performs and charges on a cost recovery basis. Cost recovery revenue in 2014 was \$1,834 thousand (2013 – \$1,742 thousand).

10. SEGMENT DISCLOSURES

Expenses by object for 2014 are comprised of the following:

(in thousands of Canadian dollars)	Wholesale Market Operations 2014	IESO – OPA Amalgamation 2014	Customer Education and Market Enforcement 2014	Smart Metering Entity 2014	Total 2014
	\$	\$	\$	\$	\$
Labour	84,573	2,755	2,592	2,909	92,829
Computer services, support and equipment	10,335	–	–	2,706	13,041
Contract services and consultants	6,386	847	1,677	16,169	25,079
Telecommunications	2,951	–	10	27	2,988
Other costs	7,772	1,703	84	198	9,757
Amortization	14,972	–	–	4,543	19,515
Interest expense and financing charges	1,375	–	–	1,317	2,692
Total expenses	128,364	5,305	4,363	27,869	165,901

Expenses by object for 2013 are comprised of the following:

(in thousands of Canadian dollars)	Wholesale Market Operations 2013	Customer Education and Market Enforcement 2013	Smart Metering Entity 2013	Total 2013
	\$	\$	\$	\$
Labour	76,165	2,591	2,634	81,390
Computer services, support and equipment	9,194	–	810	10,004
Contract services and consultants	7,309	1,244	17,650	26,203
Telecommunications	3,237	3	7	3,247
Other costs	7,274	18	33	7,325
Amortization	14,331	–	3,836	18,167
Interest expense and financing charges	912	–	1,561	2,473
Total expenses	118,422	3,856	26,531	148,809

11. CAPITAL DISCLOSURES

The IESO's primary objectives are to maintain and enhance the reliability of Ontario's power system, administer the wholesale electricity market, and serve the needs of market participants and stakeholders. In order to fulfill its mandate, the IESO receives fees from market participants (Note 1). The IESO has limited ability to accumulate a surplus from these fees.

The IESO submitted its proposed 2014 expenditures, revenue requirements, and fees to the OEB for review on November 4, 2013 after approval by the Minister. On May 22, 2014 the OEB approved the IESO's proposed expenditures, revenue requirements, and fees for 2014.

The IESO is also the SME and expects to fund its SME operating costs and capital investment in the meter data management/repository through fees from users of smart meters in Ontario. On March 28, 2013 the OEB approved that the Smart Metering Entity charge of \$0.788 per month be levied and collected by the Smart Metering Entity from all distributors for each of their residential and general service less than 50 kilowatt customers. This charge is intended to cover the costs of developing and operating the MDM/R to date and until October 31, 2018. The rate was effective May 1, 2013.

12. RELATED PARTY TRANSACTIONS

The Province of Ontario is a related party as it is the controlling entity of the IESO. The OEFC, OPA, OEB, Hydro One and Ontario Power Generation Inc. (OPG) are related parties of the IESO, through the common control of the Province of Ontario. Transactions between these parties and the IESO were as follows:

The IESO holds a note payable and an unsecured credit facility agreement with the OEFC (Note 6). Interest payments made by the IESO in 2014 for the note payable was \$1,545 thousand (2013 - \$1,511 thousand) and for the credit facility was \$671 thousand (2013 - \$789 thousand). As of December 31, 2014 the IESO had an accrued interest payable balance with the OEFC of \$364 thousand (2013 - \$266 thousand).

The IESO provides support to the OPA's Demand Response program. In 2014, the IESO invoiced the OPA \$74 thousand (2013 - \$137 thousand) for services associated with these programs. As of December 31, 2014 the IESO had a net receivable balance with the OPA of \$10 thousand (2013 - net payable balance due to invoice adjustments of \$42 thousand).

Under the *Ontario Energy Board Act, 1998*, the IESO incurs registration and licence fees. The total of the transactions with the OEB were \$604 thousand in 2014 (2013 - \$612 thousand).

The IESO performed connection assessments and approvals for Hydro One in 2014. In 2014, the IESO invoiced Hydro One \$437 thousand (2013 - \$504 thousand). The IESO procures short circuit studies and protection impact assessments as part of connection assessments and approvals and meter services on IESO owned interconnected revenue meters from Hydro One. In 2014, the IESO incurred costs of \$144 thousand (2013 - \$522 thousand) for these services. As of December 31, 2014 the IESO had a net receivable balance with Hydro One of \$121 thousand (2013 - \$296 thousand).

In 2014, the IESO performed connection assessment and approvals for OPG and administered telecommunication services to market participants to connect to the real time market systems. In 2014, OPG was invoiced \$54 thousand (2013 - \$102 thousand). As of December 31, 2014 the IESO had a net receivable balance with OPG of \$4 thousand (2013 - \$96 thousand).

13. FINANCIAL RISK MANAGEMENT

The IESO is exposed to financial risks in the normal course of its business operations, including market risks resulting from volatilities in equity, debt, and foreign currency exchange markets, as well as credit risk and liquidity risk. The nature of the financial risks and the IESO's strategy for managing these risks has not changed significantly from the prior year.

a) Market Risk

Market risk refers to the risk that the fair value or future cash flows of a financial instrument will fluctuate to cause changes in market prices. The IESO is exposed to three types of market risk: currency risk, interest rate risk and equity risk. The IESO monitors its exposure to market risk fluctuations and may use financial instruments to manage these risks as it considers appropriate. The IESO does not use derivative instruments for trading or speculative purposes.

i) Currency Risk

The IESO conducts certain transactions in US dollars, primarily related to vendors' payments, and maintains a US dollar denominated bank account. From time to time, the IESO may utilize forward purchase contracts to purchase US dollars for delivery at a specified date in the future at a fixed exchange rate. In addition, the IESO utilizes US dollar spot rate purchases in order to satisfy any current accounts. As at December 31, 2014, the IESO did not have any outstanding forward purchase contracts.

ii) Interest Rate Risk

The IESO is exposed to movements or changes in interest rates primarily through its short-term variable rate credit facility, cash equivalents' securities, and long-term investments. Long-term investments include investments in a pooled Canadian bond fund. The potential impact to the securities' value had the prevailing interest rates changed by 25 basis points, assuming a parallel shift in the yield curve, with all other variables held constant is estimated at \$0.5 million as at December 31, 2014 (2013 – \$0.4 million).

iii) Equity Risk

The IESO is exposed to changes in equity prices through its long-term investments. Long-term investments include investments in pooled equity funds. A 30% change in the valuation of equities as at December 31, 2014 would have resulted in a change for the year (before the impact of adjustments to the approved regulatory deferral account (Note 5) of approximately \$6.0 million (2013 – \$6.2 million). The fair values of all financial instruments measured at fair value are derived from quoted prices (unadjusted) in active markets for identical assets.

b) Credit Risk

Credit risk refers to the risk that one party to a financial instrument may cause a financial loss for the other party by failing to meet its obligations under the terms of the financial instrument. The IESO is exposed directly to credit risk related to cash equivalents' securities and accounts receivable, and indirectly through its exposure to the long-term investments in a Canadian bond pooled fund. The IESO manages credit risk associated with cash equivalents' securities through an approved management policy which limits investments to investment grade investments with counterparty-specific limits. The accounts receivable balance as at December 31, 2014 included no material items past due and substantially all of the balance was collected within 30 days from December 31, 2014. The long-term Canadian bond pooled fund is comprised of primarily investment grade securities.

c) Liquidity Risk

Liquidity risk refers to the risk that the IESO will encounter financial difficulty in meeting obligations associated with its financial liabilities when due. The IESO manages liquidity risk by forecasting cash flows to identify cash flows and financing requirements. Cash flows from operations, short-term investments, long-term investments, and maintaining appropriate credit facilities help to reduce liquidity risk. The IESO's long-term investments are normally able to be redeemed within three business days however; the investment manager of the pooled funds has the authority to require a redemption in-kind rather than cash and has the ability to suspend redemptions if deemed necessary.

14. COMMITMENTS AND CONTINGENCIES

Operating commitments

The obligations of the IESO with respect to non-cancellable operating leases over the next five years are as follows:

As at December 31 (thousands of Canadian dollars)

	\$
2015	2,290
2016	1,950
2017	1,644
2018	1,074
2019	–

The above figures include lease payments up to July 2017 which have also been included in the 2014 OPA-IESO amalgamation expense (\$1,700 thousand).

Contingencies

The IESO is subject to various claims, legal actions, and investigations that arise in the normal course of business. While the final outcome of such matters cannot be predicted with certainty, management believes that the resolution of such claims, actions and investigations will not have a material impact on the IESO's financial position or results of operations.

Executive Compensation at the IESO

Program Objectives

The IESO compensation program for executives was designed to attract, retain and motivate the calibre of executives required to support the achievement of the IESO's statutory mandate, business objectives and corporate vision. Accordingly, the compensation philosophy and programs were built on the following objectives:

- to focus executives on meeting the IESO's business objectives
- to attract qualified and talented staff needed to carry out the IESO's mandate
- to be able to retain valued staff
- to have the flexibility to reward results and demonstrated competencies, and
- to have compensation levels which are responsible and defensible to stakeholders and customers.

The philosophy underlying these objectives is that total compensation for executives should be sufficient, but not overly sufficient, to attract and retain the skills and competencies necessary to carry out the IESO's mandate.

Program Governance

The IESO Board establishes the compensation objectives for the following year's program. They delegate the responsibility to thoroughly review the compensation objectives, policies and programs to the Human Resources and Governance Committee of the Board (HRGC) which make recommendations to the full Board for approval.

The Board is composed of 10 independent, external Directors, appointed by the Minister of Energy, with broad experience in both industry and public sector organizations, plus the President and Chief Executive Officer. Their experience includes many years of dealing with human resource matters including the setting and implementation of compensation policies and programs.

In carrying out their mandate the Board members have access to management's analysis and recommendations as well as those of expert consultants in the compensation field. These programs are reviewed annually with regard to business needs, program objectives and design, industry compensation trends, internal compensation relativities, and external market relativities.

The Board also assesses risks associated with the establishment and implementation of compensation policies and programs. Annually the Board presides over and approves the IESO's Business Plan. An important component of this process is consideration of, and the implementation of mitigating actions, associated with enterprise risk management. This latter overarching process includes the assessment of all significant risks to the IESO, including risks associated with its compensation policies and programs.

In addition to the formal governance and oversight structure in place for compensation matters, the IESO discloses compensation levels annually for staff earning \$100,000 or more as part of its public sector salary disclosure. For the IESO, a further level of public review and assurance is provided through a statutorily required annual review of the IESO's expenditures, revenue requirements and fees. For 2014, the IESO's usage fee decreased to \$0.803 per megawatt-hour (MWh) from \$0.822 per MWh in 2013. The reduction was a result of a change in the method to calculate the fee. Information related to compensation matters, including executive/management compensation and market relativities, is subject to Ontario Energy Board review. A range of small and large consumers, assisted by their legal and professional advisors, are represented in these public proceedings.

Market Comparisons

The IESO reviews the competitiveness of the executive compensation levels in relation to a peer group of Canadian organizations and general industry companies every other year. The objective is to compare IESO executive compensation levels to those in the marketplace particularly in relation to the median of the market.

The IESO undertook a major review of the compensation competitiveness of its executive group in 2014. The peer group consisted of an equal number of private and public sector organizations that meet one or more of the following criteria:

- companies with similar operational and job complexity
- companies operating in the energy services industry (excluding oil & gas organizations) or other regulated industries
- consideration and preference for companies headquartered in Ontario to reflect local talent market.

Given the relationship between executive pay and company size, additional size criteria were applied for the executive peer group, reflecting companies with revenue between \$100 million and \$5 billion.

The following 28 organizations were used as executive comparators within the analysis:

Public Sector	Private Sector
1. Alberta Electric System Operator	1. ABB Canada
2. Alberta Energy Regulator	2. AltaLink Management
3. British Columbia Hydro and Power Authority	3. ATCO Group
4. Business Development Bank of Canada	4. Bell Aliant Regional Communications
5. Electrical Safety Authority	5. Bruce Power
6. Enmax Corporation	6. Capital Power Corporation
7. EPCOR Utilities	7. FortisAlberta
8. Hydro One	8. NAV Canada
9. Hydro Quebec	9. Siemens
10. Manitoba Hydro Electric	10. SNC-Lavalin Group
11. Ontario Power Authority	11. The Equitable Trust
12. Ontario Power Generation	12. TMX Group Limited
13. SaskPower	13. TransAlta Corporation
14. Toronto Hydro Electric Systems	14. Vancouver International Airport Authority

The job matching was independently conducted by Towers Watson and the following executive positions were covered by this review:

- President & CEO
- VP, Markets, CFO & Treasurer
- VP, Operations & COO
- VP, Corporate & Employee Relations
- VP, Information and Technology Services and CIO
- General Counsel

IESO executive positions were matched to benchmark roles in Towers Watson's general industry executive compensation survey. With respect to the President & CEO and VP Markets, CFO & Treasurer, Towers provided secondary "level" matches in addition to unique benchmark role matches, given the size of companies in the comparator group and the strong correlation between company size and pay for these roles.

Market data was gathered for various components of compensation including fixed compensation and total cash compensation with emphasis on total remuneration, which includes the sum of fixed and variable compensation, benefits and pension.

The results of the review showed that the average total remuneration positioning was around the 25th percentile based on primary benchmarks. Based on secondary benchmarks, the average positioning moved closer towards the median, falling in between the 25th and 50th percentiles.

Program Description

The IESO program includes fixed and variable compensation, core and flex benefit plans, and pension provisions. IESO human resources staff participates in and reviews results from various compensation surveys and monitors economic trends such as gross domestic product trends, inflation and unemployment rates that impact on compensation, as well as monitoring internal compensation relativities. Based on this data and the IESO business priorities, human resources staff develops recommendations on compensation programs. External specialized compensation, benefit and pension consultants are utilized to ensure accurate, representative market compensation data is obtained, that current industry compensation trends are being utilized, as well as to provide insight and recommended adjustments to current programs.

Program Description – Fixed Compensation

Within the IESO broad salary ranges, individuals are assessed as developmental, mature or expert in their position relative to an established competency model. This model consists of behavioural competencies, such as customer focus, drive for results, teamwork, leadership, effective communication and strategic business sense. Assessments are based upon demonstrated competency. Each individual is awarded a fixed compensation level within their band based upon their assessed competency.

Program Description – Variable Compensation

To promote a results orientation in the executive team, the variable pay plan is a significant component of the total compensation of executives. The IESO Board annually establishes a robust set of performance measures that are evaluated each year, and these results carry a 70 percent weight within each executive's variable compensation award. The remaining 30 percent results from the assessment of predetermined measures/targets established for each individual executive.

The IESO Board assesses the corporate performance results and the CEO's individual performance results. Under the plan, having assessed the results against target, the Board has the ability to use some discretion in determining the final performance rating; however, in the past, apart from one occasion, the Board has relied upon the directly assessed results to award variable compensation.

The variable compensation awards for the CEO and Vice-Presidents for achieving the targets are respectively at 65 percent and 50 percent of fixed compensation. The plan provides for awards above or below these target amounts depending on the performance results achieved. To address retention, 50 percent of the earned variable compensation is deferred and paid out over the subsequent two-year period, with accrued but unpaid amounts forfeited in the event of termination with cause or voluntary resignation.

Program Description – Group Benefits

The group benefit plan provides a core level of health and dental benefits, life insurance, disability coverage and vacation, which can be adjusted by individual executives through a flexible component within the plan. The flexible element provides executives the option of adjusting their benefits to meet their individual/family needs including vacation above core amounts, levels of life insurance, health coverage and other components.

Program Description – Pension Plan

A defined benefit pension plan provides annual retirement income calculated as two percent of fixed compensation and one-half percent of variable compensation paid during the highest paid 36 consecutive months of service multiplied by years of service, to a maximum of 35 years. The pension formula is integrated with the Canada Pension Plan (CPP) to provide a level income stream before and after age 65, when the IESO pension is reduced to reflect benefits from CPP. The plan also has early retirement provisions as well as commuted value, pension deferral and reciprocal transfer options.

The plan provides a maximum benefit of 70 percent of highest paid, pre-retirement earnings. As the Canada Revenue Agency limits the amount of pension payable from a registered plan, the IESO has a secured supplemental employee retirement plan (SERP) to provide required pension income to meet the commitments of the plan above that payable from the registered plan.

The plan also provides several options including member's life only or joint and survivor pensions, as well as pre-retirement death benefits to provide benefits to surviving spouses or beneficiaries.

Performance Measures & Impact on Compensation

The IESO annually establishes corporate performance measures relating to its business priorities during the business planning process. These are approved, monitored and assessed by the IESO Board of Directors each year. Individual performance measures supporting one or more corporate performance measures are also developed for each executive.

As outlined above the corporate results achieved each year impact on each executive's variable pay. The following chart highlights each of the business perspectives where performance measures are established and provides a brief description of the performance objectives that were approved by the IESO Board for 2014. For each of these performance objectives specific measures and targets are defined.

Strategic Priorities	Performance Objectives
Deliver Grid Reliability and Market Effectiveness	The IESO-controlled grid provides reliable electricity service today and tomorrow
	The IESO's actions support reliable operation and oversight of the IESO-controlled grid and markets
	The IESO acknowledges and executes action to advance the electricity marketplace
Sector Leadership	Stakeholders have confidence and trust with the IESO's administration of the electricity market
	The IESO is a leader in the electricity sector and able to contribute to important policy decisions
	IESO's technical expertise is acknowledged and respected
Provide For Today and Tomorrow	The IESO's change initiatives meet the needs of customers today and in the future
	The IESO's human resources are capable of meeting the needs of customers today and in the future
	The IESO's financial resources are used effectively and efficiently to meet the needs of customers today and in the future
	The Smart Metering Entity operates the Meter Data Management and Repository (MDM/R) to meet the needs of customers today and tomorrow

A rating scale ranging from partially meeting expectations to exceeding expectations is used to assess the results for both corporate and individual performance objectives as well as to calculate the associated variable pay amount. According to this scale corporate results and individual results may be rated from zero to 1.5 times the target variable amount (the table below outlines the ratings in detail). A payout factor is then determined and applied to the target variable pay amount for each executive.

Performance Rating	Corporate	Individual
Partially meeting expectations	0.0 – 0.7	0.0 – 0.7
Meets expectations	0.8 – 1.2	0.8 – 1.1
Exceeds expectations	1.3 – 1.5	1.2 – 1.5

For 2014 the IESO Board assessed the corporate results as meeting expectations with a rating of 1.05. This was based on the corporate performance on three priorities – deliver grid reliability and market effectiveness, sector leadership and provide for today and tomorrow, each assessed as meeting expectations. In addition to the corporate measures, each executive also had an individual set of measures and targets for the year which aligned with the corporate performance objectives and IESO's business priorities and these were similarly assessed. The Board assessed the results of the CEO's performance and the CEO assessed the performance of the Vice-Presidents, which were also reviewed with the Board.

Other Considerations

Compensation decisions may at times be impacted by market factors – such as the recruitment of an executive with specialized skills/competencies or possessing unique talents within the industry. To this end, individual incumbent arrangements are sometimes established relating to terms of employment and the possibility of future termination.

Effective January 1, 2015, Mr. Campbell was appointed CEO of the new Independent Electricity System Operator as the Ontario government amalgamated the former Ontario Power Authority (“OPA”) and the former IESO. His new employment agreement outlines terms and conditions for a 30 month period of employment ending on June 30, 2017, with a potential renewal at least six months prior to the end of the term. Mr. Campbell’s employment agreement also provides up to 24 months of severance for termination without cause.

Mr. Thomas was appointed as Vice-President, Information and Technology Services and Chief Information Officer, on March 1, 2014.

Compensation Restraints

The IESO executive compensation has been significantly impacted by the compensation restraint legislation in Ontario since 2010. *The Broader Public Sector Accountability Act (BPSAA)* imposes a general freeze on designated executives’ salary, variable pay, benefits and perquisites subject to very limited exceptions.

On December 11, 2014, Bill 8, *Public Sector and MPP Accountability and Transparency Act, 2014* was passed. Bill 8 is designed to control and constrain executive compensation within the broader public sector in Ontario by establishing compensation frameworks that will provide for and limit the elements of compensation and payments that may be provided to designated executives including salaries, salary ranges, benefits, and perquisites, discretionary and non-discretionary payments.

Alignment of the Executive Compensation Plan with the Structure Established for the New CEO

With the appointment on January 1, 2015, of Mr. Campbell as the CEO of the merged organization, the IESO aligned the compensation plan for its Vice-Presidents with the structure established for the new CEO. Accordingly, in both cases, the variable pay component was set at 10 percent. Also, in December, the IESO paid out all outstanding deferred incentive amounts earned in 2014 and prior years with the exception of the President and CEO, whose 2014 earned incentive is scheduled to be paid in 2017.

The figures reported as 2014 remuneration in the 2014 Public Sector Salary Disclosure for the executives will be higher than previous years, as they will include the accelerated payments of all outstanding amounts including the variable pay earned in 2014.

Executive Compensation and Pension Statements

The first table below details the annual compensation for the year ended December 31, 2014, for the executives listed. The information provided in the Summary Compensation Table differs from the information published under the *Public Sector Salary Disclosure Act (Ontario)* for the indicated period due to the timing of payment of variable pay. Disclosures under the *Public Sector Salary Disclosure Act* are limited to amounts listed on T4 taxation forms for each year (i.e., includes variable pay paid out in 2014) whereas information in the summary compensation table is based on the year for which the variable pay was earned.

The **second table** below outlines pension plan participation and benefits for each of the Executive Officers listed. Specifically detailed are:

- total years of credited service in the pension plan
- the increase in the compensatory value of the pension (due to increased service and pensionable earnings, if applicable) during 2014
- the increase in the non-compensatory value of pension (due to a decrease in the pension discount rate) during 2014
- the estimated annual pension payable at age 65 based upon the executive's service and pensionable earnings as of December 31, 2014
- the estimated annual pension with service credits projected to age 65 using actual pensionable earnings as of December 31, 2014.

Various factors have an impact on the pension calculations displayed in Table 2. Should interest or discount rates vary significantly from one year to the next, there will be volatility in year-over-year pension amounts reported.

Use of Consultants

During 2014 the services of Aon Hewitt were used for the development of pension data and updates on disclosure requirement. Aon Hewitt also provided pension and benefit actuarial support to the IESO during 2014 as well as pension and benefit consulting services. These services were obtained through competitive bidding processes.

2014 Summary Compensation Table

Name & Position	Salary	Variable Pay	Other Annual Compensation ¹	Total Cash Compensation	Amounts Reported Under Public Sector Salary Disclosure ²
Bruce Campbell President & CEO	\$345,000	\$248,918 ³	\$ 7,524	\$601,442	\$694,468
Ted Leonard VP Markets, CFO & Treasurer	\$209,062	\$111,326	\$14,612	\$335,000	\$518,566
Kim Warren VP Operations & COO	\$228,094	\$123,855	\$11,071	\$363,020	\$577,000
Terry Young VP Corporate & Employee Relations	\$219,384	\$119,125	\$17,439	\$355,948	\$552,729
Doug Thomas⁴ VP Information & Technology Services & CIO	\$219,170	\$105,037	\$ 3,918	\$328,125	\$419,040

1. Represents remaining flex credits paid out at year end as taxable income.

2. Represents higher than usual earnings due to the payment in December 2014 of the variable pay earned in 2014 in addition to the payment of all outstanding deferred variable compensation amount earned in prior years.

3. 2014 earned variable compensation to be paid in 2017.

4. Appointed to Vice President, Information & Technology Services & CIO on March 1, 2014.

2014 Pension Benefits Table

Name & Position	Number of Years Credited Service	Increased Pension Value During 2014		Annual Benefits Payable Upon Retirement	
		Compensatory Amount During Year	Non Compensatory Amount During Year	At Year-End (2014) ¹	At Age 65 ²
		\$	\$	\$	\$
Bruce Campbell³ President & CEO	28.417	\$214,000	\$381,000	\$214,000	\$214,000 ⁴
Ted Leonard VP Markets, CFO & Treasurer	18.750	\$ (54,000)	\$106,000	\$ 86,000	\$161,000
Kim Warren VP Operations & COO	35.000	\$ 84,000	\$ 76,000	\$179,000	\$179,000
Terry Young VP Corporate & Employee Relations	31.667	\$ 10,000	\$ 50,000	\$155,000	\$171,000
Doug Thomas VP Information & Technology Services & CIO	16.250	\$176,000	\$ 99,000	\$ 71,000	\$106,000

1. Payable at age 65 assuming no increase in pensionable earnings & service beyond year-end 2014.

2. Payable at age 65 assuming no increase in pensionable earnings beyond year-end 2014 and credited service continues until age 65.

3. Mr. Campbell was promoted to CEO on May 1, 2013.

4. Mr. Campbell's accrued pension payable at the valuation date is shown, as he is over age 65.

Independent Electricity System Operator

1600-120 Adelaide Street West
Toronto, Ontario M5H 1T1

Phone: 905.403.6900

Toll-free: 1.888.448.7777

E-mail: customer.relations@ieso.ca

ieso.ca

 [@IESO_Tweets](https://twitter.com/IESO_Tweets)

 facebook.com/OntarioIESO

 linkedin.com/company/ieso

saveonenergy.ca

 [@saveonenergyOnt](https://twitter.com/saveonenergyOnt)

 facebook.com/saveonenergyFORHOME

 linkedin.com/company/saveonenergy-ontario

Financial Statements

2014 ANNUAL REPORT |

1	Message from the Chair and CEO
2	Year in Review
4	Board of Directors
4	Corporate Officers
5	A Special Thanks to the Stakeholder Advisory Committee
6	Management Report
7	Independent Auditors' Report
8	Statement of Financial Position
9	Statement of Operations
10	Statement of Changes in Net Assets
11	Statement of Cash Flows
12	Notes to Financial Statements
23	2014 Executive Compensation Disclosure

Message from the Chair and CEO

In the past decade since the OPA was formed on January 1, 2005, we have seen a remarkable transformation of Ontario's electricity system as it has become cleaner, smarter and more reliable. The OPA's conservation, supply procurement and long-term planning initiatives have played a significant role in this advancement. These were carried out under the direction of the Ontario government and developed and implemented through extensive collaboration with our industry partners and stakeholders. Ontario's conservation, renewable energy, smart meter and supply mix initiatives have led North America. Many jurisdictions are undertaking initiatives in these areas, but only Ontario is doing them all at the same time. The OPA has supervised the expenditure of over \$37 billion on our electricity system, enabling us to meet demand and to replace the aging coal fleet with new forms of energy production.

We thank all OPA employees and contractors over the years for their hard work and strong performance under pressure. We would also like to thank our predecessor Chairs, Peter Jones and John Beck, our fellow Board Directors and our first CEO, Jan Carr, for their leadership.

The OPA merged with the Independent Electricity System Operator (IESO) on January 1, 2015. The new organization was created to ensure a better and stronger future for Ontario's electricity supply. Its responsibilities include all those of the former two entities; merging them into a single entity is expected to increase operational efficiencies and contain costs. It will bring short-, medium- and long-term planning functions together. It will simplify the electricity sector for industry and consumers. And it will better align the OPA's contract incentives with the IESO's market operations to benefit ratepayers, while guarding the integrity of commercial contracts with electricity producers.

The OPA has played a significant role in the transformation under way in Ontario's electricity system over the past decade. Many of the seeds we have sown over the years are just starting to bear fruit. The work we have done has truly changed the landscape of Ontario's electricity system – in planning, in conservation and in procurement. Through our efforts, we have made our system cleaner, more sustainable and more reliable for years to come. With more robust planning than ever, an enshrined culture of conservation, innovative commercial arrangements and the talent of two great incoming organizations, the “new IESO” is poised for success.



Colin Andersen
Chief Executive Officer
Ontario Power Authority



Jim Hinds
Chair
Ontario Power Authority

Year in Review

New Conservation Framework 2015-2020

The OPA received direction from the Minister of Energy in the spring of 2014 to implement a new six-year Conservation First Framework. It is intended to achieve a total reduction in electricity consumption of 7 terawatt-hours (TWh) by 2020. Further savings from the Industrial Accelerator Program will contribute an additional 1.7 TWh within the same timeframe, to achieve a total province-wide target of 8.7 TWh in electricity savings.

Following extensive engagement with stakeholders around Ontario, the new framework was developed and took effect on January 1, 2015. By the end of 2014, nearly all 75 local distribution companies (LDCs) across Ontario had signed energy conservation agreements with the OPA, and LDCs had started to develop their six-year conservation plans. All necessary program extensions were put in place to provide a bridge to the new framework.

Conserving Electricity is Our First Supply Resource

The OPA, together with its LDC partners, created a suite of incentive programs to help residential, business, institutional, industrial, low-income and Aboriginal customers manage their energy use and to help meet the province's ambitious conservation targets, among the most aggressive in North America.

Between 2006 and 2013, Ontarians conserved 8.7 TWh of electricity, enough to power the cities of Mississauga and Oshawa in 2013.

Conservation and Innovation

The Conservation Fund marked its tenth anniversary in 2014. From its modest start of \$100,000 to support five projects in 2005, the fund continues to connect innovation to market development. It now supports projects across all sectors that influence end uses, decision-making, energy-management practices and innovation in market development. In 2014, the fund awarded \$8 million to support 23 new projects.

Since 2005, the Conservation Fund has committed \$57 million in support to 207 projects. Recent funding priorities have been for energy storage, social benchmarking and LDC-initiated programs.

Procuring a Clean, Reliable and Cost-Effective Supply of Electricity

A major milestone was reached in 2014 when Ontario eliminated coal-fired generation. This is the single largest climate-change initiative in North America. The province's electricity sector's carbon footprint is estimated to have been reduced by 75 percent from 2005 levels.

About 7,600 megawatts (MW) of new natural gas and 7,300 MW of new renewable energy capacity from solar, wind, hydroelectricity and biogas has been brought online since 2005 through a variety of programs. These include the Feed-in Tariff (FIT) and microFIT programs for commercial and residential-scale renewable energy projects, North America's first and most comprehensive FIT program, as well as standard offer programs for hydroelectric power and combined heat and power projects. In 2014, the OPA also worked to develop a process to procure new large renewable energy projects. These initiatives are supported by funding programs that are designed to help Aboriginal communities, municipalities, public sector entities and co-ops participate in Ontario's renewable energy sector.

At the end of 2014, the OPA was managing contracts from diverse sources, including nuclear, representing about two-thirds of Ontario's electricity system.

Long-Term and Regional Planning for Ontario

Planning for the long term and regional plans remained at the forefront of the OPA's work in 2014. Long-range system planning efforts have supported the implementation of the Ministry of Energy's Long-Term Energy Plan (LTEP), released in December 2013. In early 2014, the OPA developed a series of modules that provide a detailed breakdown of the information underpinning the LTEP. These modules along with OPA quarterly updates are available online with the Ontario Energy Report at www.ontarioenergyreport.ca.

In 2014, the OPA also continued the implementation of all 18 recommendations contained in the joint IESO-OPA report on regional planning and large energy infrastructure siting.

Stakeholder engagement has been evolving in regional planning as consumers become more engaged in all aspects of the process. There are now opportunities for municipalities, First Nation and Métis communities to better integrate electricity planning with other local plans; resources are also available to assist with this effort.

The OPA continued to work toward connecting remote communities and reducing their reliance on diesel to meet their electricity needs. As a result of the OPA's continuing engagement efforts, an updated draft remote community connection plan report was released in August 2014. Transmission connection of 21 of the 25 remote communities would result in savings of about \$1 billion over 40 years. The OPA also worked with the four remaining communities that are not currently economic to connect to begin to find alternative solutions.

In October, the OPA released a joint intertie study with the IESO, exploring the feasibility of firm imports from Quebec and Manitoba and their impact on Ontario electricity consumers. It concludes that significant reliance on interties through firm imports would require increased investments in transmission infrastructure, but that there are opportunities to enhance the benefits of existing interties that warrant Ontario's consideration.

Building on this report, the governments of Ontario and Quebec announced in late November an agreement that will see the two provinces strategically exchange electricity capacity. Together the OPA and IESO negotiated the agreement with Hydro-Quebec, and work continues to explore further opportunities.

Providing Value to the Ratepayer

The organization continued to reduce its costs over the past year. The OPA received 18 directives in 2014, bringing the total number of directives issued to the OPA since 2005 to 91. The number of contracts under management increased in 2014 to 23,224, representing 22,859 MW. Despite these increases, OPA expenses in 2014 were four percent lower than in 2013. Operating expenses were \$57.7 million, excluding \$5.6 million in 2014 merger-related costs, down from \$60.2 million in 2013.

Board of Directors

James D. Hinds

Chair

Retired from TD Securities Inc., where he was a Managing Director; Newcrest Capital Inc. and CIBC Wood Gundy Inc.

Cynthia Chaplin

ICD.D, *Director*

Former Vice-Chair of the Ontario Energy Board

Michael Costello

Director and Chair,

Audit Committee

Retired from BC Hydro and BC Transmission Corporation (President and CEO); Director, InTransit BC, Health Benefit Trust and Conifex Timber

Susanna Han

Director

Chief Financial Officer of Urbancorp

Adèle M. Hurley

Director

President, Hurley & Associates Inc.; Director, Program on Water Issues, Munk School of Global Affairs, University of Toronto

Ronald L. Jamieson

Director and Chair,

Human Resources Committee

Retired from BMO Financial Group, where he was Senior Vice-President, Aboriginal Banking; Director, Nuclear Waste Management Organization and Denendeh Investments Inc.; Chairman, Canadian Council for Aboriginal Business, Appointed to the Order of Ontario, January 2014

Bruce Lourie

Director

President of Ivey Foundation; Director of the Consultative Group on Biological Diversity (San Francisco)

Lyn McLeod

Director and Vice Chair

Former Chair of the Ontario Health Quality Council; former Ontario representative on the Health Council of Canada; founding Chancellor of the University of Ontario Institute of Technology; past Chair of the Board of Confederation College in Thunder Bay, Appointed to the Order of Ontario, January 2014

Deborah Whale

Director

Vice-President, Clovermead Farms; Vice-Chair of Ontario Farm Products Marketing Commission

Colin Andersen

Director

Chief Executive Officer, Ontario Power Authority

Corporate Officers

James D. Hinds

Chair

Colin Andersen

Chief Executive Officer

JoAnne Butler

Vice-President, Electricity Resources

Kristin Jenkins

Vice-President, Corporate Communications

Michael Lyle

General Counsel, Vice-President, Legal, Aboriginal and Regulatory Affairs, and Corporate Secretary

Kimberly Marshall

Vice-President, Business Strategies and Solutions

Andrew Pride

Vice-President, Conservation

Amir Shalaby

Vice-President, Power System Planning

A Special Thanks to the Stakeholder Advisory Committee

The OPA established the Stakeholder Advisory Committee in late 2013 to advise its Board of Directors and management on policy issues related to the OPA's mandate. By providing a forum to receive advice and recommendations from a diverse range of interests, the committee was able to build on existing OPA consultation and engagement initiatives, including the Advisory Council on Conservation and the Aboriginal Energy Working Group.

The Stakeholder Advisory Committee was comprised of 17 people with significant expertise in Ontario's electricity sector:

Brian Bentz
*Chair, Stakeholder
Advisory Committee*
Chief Executive Officer,
PowerStream

Steve Baker
President, Union Gas
Limited

John Beaucage
Member, OPA
Aboriginal Energy
Working Group;
Principal, Counsel
Public Affairs

Bryce Conrad
President and Chief
Executive Officer,
Hydro Ottawa

Laura Cooke
Vice-President,
Corporate Relations,
Hydro One Networks
Inc.

Jared Donald
President, Conergy
Canada

Julie Girvan
Independent,
Consultant/Consumer
Advocate

Valerie Helbronner
Partner, Torys LLP

Tim Gray
Executive Director,
Environmental Defence

Kristin Jenkins
Vice-President,
Corporate
Communications, OPA

Geoff Lupton
Director, Energy, Fleet
and Traffic, City of
Hamilton

Brenda Marshall
Vice-President,
Marketing, TransAlta

Rob Mace
President and Chief
Executive Officer,
Thunder Bay
Hydro Electricity
Distribution Inc.

Ian Rowlands
Member, OPA
Advisory Committee
on Conservation;
Professor, Environment
and Resource Studies,
University of Waterloo

James Scongack
Vice-President,
Corporate Affairs,
Bruce Power

David Timm
Vice-President, Sussex
Strategy Group

Adam White
President, Association
of Major Power
Consumers

Management Report

Management's Responsibility for Financial Reporting

The accompanying financial statements of the Ontario Power Authority are the responsibility of management and have been prepared in accordance with Canadian Public Sector Accounting Standards. The significant accounting policies followed by the Ontario Power Authority are described in Note 2 of the financial statements. The preparation of financial statements involves transactions affecting the current period which cannot be finalized with certainty until future periods. Estimates and assumptions are based on historical experience and current conditions believed to be reasonable.

Management is responsible for establishing and maintaining a system of internal controls over financial reporting. The system of internal controls we have established is designed to provide reasonable assurance over safeguarding of assets and the reliability of financial reporting and preparation of financial statements. The system includes formal policies and procedures and an organizational structure that provided for the appropriate delegation of authority and segregation of responsibilities.

These financial statements have been examined by KPMG LLP, a firm of independent external auditors appointed by the Board of Directors. The external auditors' responsibility is to express their opinion on whether the financial statements are fairly presented in accordance with the accounting standards used by management. The Auditors' Report, which follows, outlines the scope of their examination and their opinion.

ONTARIO POWER AUTHORITY

On behalf of management,



Bruce Campbell
President, Chief Executive Officer
Toronto, Canada
February 18, 2015



Kimberly Marshall
Vice-President, Corporate Services and
Chief Financial Officer
Toronto, Canada
February 18, 2015



KPMG LLP
Yonge Corporate Centre
4100 Yonge Street Suite 200
Toronto ON M2P 2H3
Canada

Telephone (416) 228-7000
Fax (416) 228-7123
Internet www.kpmg.ca

INDEPENDENT AUDITORS' REPORT

To the Board of Directors of the Ontario Power Authority

We have audited the accompanying financial statements of the Ontario Power Authority, which comprise the statement of financial position as at December 31, 2014, the statements of operations, changes in net assets and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting 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 audit. We conducted our audit 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 our 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, we 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 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 Ontario Power Authority as at December 31, 2014, and its results of operations, its changes in net assets and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Chartered Professional Accountants, Licensed Public Accountants

February 18, 2015
Toronto, Canada

KPMG LLP is a Canadian limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. KPMG Canada provides services to KPMG LLP.

Statement of Financial Position

(in thousands of dollars)

As at December 31, 2014, with comparative figures for 2013

	2014	2013
	\$	\$
ASSETS		
Current Assets:		
Cash and cash equivalents	138,812	76,140
Accounts receivable (Notes 3 and 15)	539,485	438,183
Prepaid expenses	702	359
	678,999	514,682
Capital assets (Note 4)	4,498	4,463
TOTAL ASSETS	683,497	519,145
LIABILITIES AND NET ASSETS		
Current Liabilities:		
Accounts payable and accrued liabilities (Note 5)	479,808	362,031
Contract deposits (Note 6)	16,978	23,239
Other current liabilities	81	593
	496,867	385,863
Deferred rent inducement, net (Note 7)	114	258
Other financial liabilities (Note 8)	181,927	99,237
Net assets:		
Internally restricted Conservation and Technology Funds (Note 9)	–	9,534
Invested in capital assets	4,498	4,463
Accumulated operating surplus (Note 10)	91	19,790
	4,589	33,787
Commitments (Note 7)		
Contingencies and guarantees (Note 16)		
TOTAL LIABILITIES AND NET ASSETS	683,497	519,145

See accompanying notes to financial statements

Statement of Operations

(in thousands of dollars)

Year ended December 31, 2014, with comparative figures for 2013

	2014	2013
	\$	\$
REVENUE		
Fees (Note 15)	60,206	75,934
Registration fees	2,671	1,720
Other income	18	794
	62,895	78,448
EXPENSES		
Compensation and benefits (Note 13)	32,154	33,544
Professional fees	13,649	12,453
Conservation and Technology Funds expenses (Note 9)	350	405
General operating costs (Note 12)	9,966	10,943
Amortization of capital assets	1,610	2,841
	57,729	60,186
Excess of revenue over expenses before amalgamation expenses	5,166	18,262
IESO-OPA amalgamation expenses (Note 11)	5,578	—
EXCESS (DEFICIENCY) OF REVENUE OVER EXPENSES	(412)	18,262

See accompanying notes to financial statements

Statement of Changes in Net Assets

(in thousands of dollars)					
Year ended December 31, 2014, with comparative figures for 2013	Invested in Capital Assets	Internally Restricted (see Note 9)	Accumulated Operating Surplus	2014 Total Net Assets	2013 Total Net Assets
	\$	\$	\$	\$	\$
Balance, beginning of the year	4,463	9,534	19,790	33,787	15,525
Excess (deficiency) of revenue over expenses	(1,610)	–	1,198	(412)	18,262
Conservation and Technology Funds expenses (Note 9)	–	(350)	350	–	–
Transfer of Fund balance (Note 9)	–	(9,184)	9,184	–	–
Purchase of capital assets	1,645	–	(1,645)	–	–
Return of accumulated surplus (Note 10)	–	–	(28,786)	(28,786)	–
BALANCE, END OF THE YEAR	4,498	–	91	4,589	33,787

See accompanying notes to financial statements

Statement of Cash Flows

(in thousands of dollars)

Year ended December 31, 2014, with comparative figures for 2013

	2014	2013
	\$	\$
CASH FLOWS FROM OPERATING ACTIVITIES		
Excess (deficiency) of revenue over expenses	(412)	18,262
Items not involving cash:		
Amortization of capital assets	1,610	2,841
Amortization of deferred rent inducement	(144)	(145)
Change in non-cash operating items (Note 14)	9,871	(9,580)
	10,925	11,378
CASH FLOWS FROM FINANCING ACTIVITIES		
Increase/(decrease) in other liabilities	(512)	488
Decrease in operating loan	–	(60,000)
Increase/(decrease) in other financial liabilities	82,690	(190,681)
	82,178	(250,193)
CASH FLOWS FROM CAPITAL ACTIVITIES		
Purchase of capital assets	(1,645)	(676)
Return of accumulated surplus (Note 10)	(28,786)	–
	(30,431)	(676)
Increase/(decrease) in cash and cash equivalents	62,672	(239,491)
Cash and cash equivalents, beginning of year	76,140	315,631
CASH AND CASH EQUIVALENTS, END OF YEAR	138,812	76,140

See accompanying notes to financial statements

Notes to Financial Statements

1. NATURE OF OPERATIONS

The *Electricity Restructuring Act, 2004*, established the Ontario Power Authority (OPA) as a non-share corporation on December 20, 2004. The OPA is an independent non-profit, non-taxable corporation. The OPA is not a Crown agent and recovers its costs through fees approved by the Ontario Energy Board (OEB) and through charges to the electricity market through the global adjustment mechanism. In accordance with this act, the OPA's main objectives are:

- to forecast electricity demand and the adequacy and reliability of electricity resources for Ontario for the medium and long term
- to conduct independent planning for electricity generation, demand management, conservation and transmission, and develop integrated power system plans for Ontario
- to engage in activities in support of the goal of ensuring adequate, reliable and secure electricity supply and resources in Ontario
- to engage in activities to facilitate the diversification of sources of electricity supply by promoting the use of cleaner energy sources and technologies, including alternative energy sources and renewable energy sources
- to establish system-wide goals for electricity to be produced from alternative energy sources and renewable energy sources
- to engage in activities that promote electricity conservation and the efficient use of electricity
- to assist the OEB by facilitating stability in rates for certain types of customers
- to collect and provide to the public and the OEB information relating to medium and long-term electricity needs of Ontario and the adequacy and reliability of the integrated power system to meet those needs.

Bill 14, *Building Opportunity and Securing Our Future Act (Budget Measures)*, 2014 received Royal Assent on July 24, 2014. Schedule 7 of the Bill amends the *Electricity Act, 1998* by amalgamating the Independent Electricity System Operator (IESO) and the OPA and by continuing them as the IESO. The transitional provision, dealing with corporate matters, provides, among other things, that the predecessor IESO and OPA cease to exist as entities separate from the IESO and all their rights, properties and assets become the rights, properties and assets of the IESO, as do all outstanding debts, liabilities and obligations of the predecessor IESO and OPA. Schedule 7 of Bill 14 came into force on January 1, 2015.

The OPA's ability, through its successor, to continue as a going concern is dependent upon its ability to obtain financing to support operations and other factors as stated above.

The OPA and its successor's creditworthiness is attested to by the following:

- the ability of the OPA to meet its obligations is provided for in legislation
- the OPA's minimal counterparty risk, given that its principal counterparty is the IESO, a creation of the province and a strong counterparty.

Due to the OPA's primary objectives, the OPA plans for revenues to fund expenses. Any variances that occur are addressed in the following year's Revenue Requirement Submission. As at November 6, 2014, the Ontario Energy Board formally approved the OPA's Revenue Requirement Submission.

2. SIGNIFICANT ACCOUNTING POLICIES

a) Basis of presentation:

The financial statements have been prepared in accordance with Canadian Public Sector Accounting Standards including Section PS 4200, *Government Not-for-Profit Organizations (Standards)*.

b) Revenue recognition:

Fees earned by the OPA are based on OEB-approved rates for electricity withdrawn from the IESO-controlled grid by electricity consumers of Ontario. Such revenue is recognized in the year in which it is earned.

Amounts received in the current year that relate to services and programs to be approved and/or provided in future periods are deferred until they are approved and/or provided.

c) Cash and cash equivalents:

Cash and cash equivalents are comprised of bank deposit balances, term deposits and other short-term investments with original maturity dates of up to 90 days.

d) Capital assets:

Capital assets are recorded at cost and are amortized on a straight-line basis over their estimated service lives, as follows:

Assets	Estimated Average Service Life
Furniture and equipment	10 years
Computer hardware	4 years
Computer software	3 to 5 years
Audio-visual equipment	10 years
Telephone system	5 years
Leasehold improvements	Term of lease

e) Employee pension benefits:

The OPA provides pension benefits to its full-time employees through participation in the Public Service Pension Plan, which is a multi-employer defined benefit pension plan. This plan is accounted for as a defined contribution plan, as the OPA did not have sufficient information to apply defined benefit plan accounting to this pension plan.

The OPA is not responsible for the cost of employee post-retirement, non-pension benefits. These costs are the responsibility of the Ontario Pension Board.

f) Financial instruments:

Financial instruments are recorded at fair value on initial recognition. Unrealized changes in fair value are recognized in the statement of remeasurement gains and losses until they are realized, when they are transferred to the statement of operations.

All financial assets are assessed for impairment on an annual basis. When a decline is determined to be other than temporary, the amount of the loss is reported in the statement of operations and any unrealized gain is adjusted through the statement of remeasurement gains and losses.

When the asset is sold, the unrealized gains and losses previously recognized in the statement of remeasurement gains and losses are reversed and recognized in the statement of operations.

Long-term debt is recorded at cost.

The Standards require an organization to classify fair value measurements using a fair value hierarchy, which includes three levels of information that may be used to measure fair value:

- Level 1 – Unadjusted quoted market prices in active markets for identical assets or liabilities
- Level 2 – Observable or corroborated inputs, other than level 1, such as quoted prices for similar assets or liabilities in inactive markets or market data for substantially the full term of the assets or liabilities
- Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities.

g) Measurement uncertainty:

Uncertainty in determining the amount at which an item is recognized in the financial statements is known as measurement uncertainty. Such uncertainty exists when it is reasonably possible that there could be a material variance between the recognized amount and another reasonably possible amount, as there is whenever estimates are used. Measurements of uncertainty in these financial statements exist in the valuation of the power purchase contracts and the estimated defeasance date for the OPA's obligations. Estimates are based on the best information available at the time of preparation of the financial statements and are updated annually to reflect new information as it becomes available.

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the year. Actual results could differ from those estimates.

3. ACCOUNTS RECEIVABLE

(in thousands of dollars)

As at December 31, 2014, with comparative figures for 2013

	2014	2013
	\$	\$
Market contracts:		
Generation contracts	457,741	393,848
Conservation contracts	80,582	43,947
Renewable energy contracts	377	179
	538,700	437,974
Other	–	209
HST receivable	785	–
	539,485	438,183

4. CAPITAL ASSETS

(in thousands of dollars)

As at December 31, 2014,
with comparative figures for 2013

	Cost	Accumulated Amortization	2014 Net Book Value	2013 Net Book Value
	\$		\$	\$
Furniture and equipment	3,384	2,506	878	1,193
Computer hardware	4,873	4,663	210	327
Computer software	9,442	7,179	2,263	1,325
Audio-visual equipment	237	197	40	64
Telephone system	382	369	13	44
Leasehold improvements	5,219	4,125	1,094	1,510
	23,537	19,039	4,498	4,463

5. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

(in thousands of dollars)

As at December 31, 2014, with comparative figures for 2013

	2014	2013
	\$	\$
Accrued contract settlements	398,809	310,590
Other accrued liabilities	80,999	49,774
HST payable	–	1,667
	479,808	362,031

6. CONTRACT DEPOSITS

Program deposits:

The OPA receives performance security in the form of deposit amounts received from suppliers of renewable energy under the Feed-In Tariff (FIT) Program and demand response. For suppliers engaged in a contract that involves the construction of a new supply facility, the deposits are larger during the construction phase and are reduced once a project commences commercial operations. Deposits related to the FIT Program are submitted to the OPA with the supplier application and can be returned if one of the following occurs: (a) the supplier withdraws its application from the program; (b) the supplier obtains a contract with the OPA; or (c) the supplier's application is rejected by the OPA.

The deposits are classified as current liabilities as they can be replaced by a letter of credit by the supplier on request.

7. DEFERRED RENT INDUCEMENT AND OPERATING LEASE COMMITMENTS

The OPA has entered into various long-term lease commitments for office space, which include lease inducements. Deferred rent inducement represents the benefit of operating lease inducements amortized on a straight-line basis over the term of the lease. The OPA obtained an allowance for leasehold improvements of \$1,430. As at December 31, 2014, the deferred rent inducement, net of amortization, was \$114 (December 31, 2013 – \$258).

The OPA reports an average rental cost for premises over the term of the lease agreement and amortizes the benefit of the lease inducements over the same period. As at December 31, 2014, the accrued liability was \$55 (December 31, 2013 – \$125).

Lease commitments including the deferred rent inducement and lease inducement are set to terminate by October 2015. The minimum annual payments remaining under the operating lease are as follows:

(in thousands of dollars)
As at December 31, 2014

	\$
LEASE COMMITMENTS	
2015	1,294
	1,294

The OPA's successor is currently negotiating a new lease agreement to extend the current lease. This will adjust the commitment in the following years to an amount that is yet to be determined.

8. OTHER FINANCIAL LIABILITIES

Other financial liabilities and deferrals arise as a result of the *Electricity Act, 1998* and the regulations under the act and are reflected by the balances in the Regulated Price Plan (RPP), retailer contract settlement deferral accounts, government procurement deferral account and the global adjustment account. In the absence of rate-regulated accounting, these amounts would have flowed through the statement of operations when incurred.

While prices for RPP consumers are set every six months by the OEB based on a forecast of the cost of power over the next year, it is likely that there will be a difference between the actual and forecasted cost of supplying electricity to all RPP consumers. When the hourly Ontario energy price (HOEP) is greater than the RPP, the OPA pays the excess amount and records a financial asset as the electricity market funds paid are receivable from the market. When the HOEP is less than the RPP, the OPA receives the difference and records a financial liability as the funds received will be returned to the market. The OPA tracks this variance in the RPP variance account.

(in thousands of dollars)

Year ended December 31, 2014, with comparative figures for 2013

	2014	2013
	\$	\$
Total RPP variance before interest	190,624	109,770
Interest earned	(8,697)	(10,533)
	181,927	99,237

Global adjustment account:

The OPA has a legislated responsibility to record the transactions flowing through the global adjustment mechanism. The global adjustment and settlement accounts have been created for this purpose. The nature of the global adjustment transactions results in a zero balance in the account on a monthly basis. The information and explanation below provide transparency for the transactions flowing through the global adjustment mechanism.

The global adjustment and settlement accounts record charges that flow between the OPA and the IESO-administered market. The account flows include the amounts paid and received for: the Demand Response 2 and Demand Response 3 programs, non-utility generation, the regulated nuclear generation balancing amount and the regulated hydro electric generation balancing amount. These accounts are settled simultaneously by the IESO. The account also records the amounts paid and received for OPA contracts (standard offer, generation and conservation/demand management, FIT Program and hydroelectric contract initiatives) that the OPA settles on a monthly basis with the IESO.

This account also includes charges related to OEB-approved non-OPA conservation programs. These programs are administered by local energy distribution companies and charges related to them flow directly between the IESO and these companies.

(in thousands of dollars)

Year ended December 31, 2014, with comparative figures for 2013

	2014	2013
	\$	\$
Demand Response 2	14,290	14,928
Demand Response 3	44,279	42,806
Non-utility generation	763,787	1,132,615
Nuclear	1,236,313	1,492,901
Hydro	156,043	260,051
OPA contracts	4,818,454	4,784,048
Global adjustment balancing amount	(7,033,166)	(7,727,349)
	–	–

9. INTERNALLY RESTRICTED CONSERVATION AND TECHNOLOGY FUNDS

The OPA established the Conservation Fund to support electricity conservation projects. The Technology Development Fund was established to aid the development of promising new technologies to improve electricity supply or conservation. The projects are tracked based on the year of the award and expensed in the year the liability is incurred. The expenditures for projects awarded after January 2011 are recovered through the Global Adjustment Mechanism. All projects awarded funds pre-January 2011 are complete as of December 31, 2014, and any excess funds have been released from internally restricted funds to accumulated operating surplus.

(in thousands of dollars)

Year ended December 31, 2014,
with comparative figures for 2013

	Restricted Fund	Total Expensed	Transferred to Accumulated Operating Surplus	Balance 2014	Balance 2013
	\$	\$	\$	\$	\$
2005 – 2008 Conservation Fund	8,600	8,009	(591)	–	591
2009 Conservation Fund	3,000	2,546	(454)	–	454
2010 Conservation Fund	5,000	190	(4,810)	–	4,814
2005 – 2008 Technology Development Fund	3,500	2,916	(584)	–	584
2009 Technology Development Fund	1,500	1,500	–	–	85
2010 Technology Development Fund	4,500	1,755	(2,745)	–	3,006
	26,100	16,916	(9,184)	–	9,534

10. ACCUMULATED OPERATING SURPLUS

As per OPA's 2014 Revenue Requirement Submission approved by the OEB, it was determined that a balance in the Regulatory Forecast Variance Deferral account will be maintained at a maximum of \$5 million. To maintain this balance, \$28,786 was returned to the market in 2014.

11. IESO-OPA AMALGAMATION EXPENSES

As described in note 1, Bill 14 was amended to amalgamate the OPA and the IESO and came into force January 1st, 2015. The 2014 expenses related to this amalgamation were of a non-recurring and non-operating nature and were as follows:

(in thousands of dollars)		
Year ended December 31, 2014, with comparative figures for 2013	2014	2013
	\$	\$
Compensation and benefits	4,989	—
Professional fees	589	—
	5,578	—

12. GENERAL OPERATING COSTS

(in thousands of dollars)		
Year ended December 31, 2014, with comparative figures for 2013	2014	2013
	\$	\$
General program costs	3,238	4,956
Premises	3,352	3,742
Information technology	2,722	1,537
Office and administration	654	686
Interest expense	—	22
	9,966	10,943

13. PENSION PLAN

The OPA makes contributions to the Public Service Pension Plan, a multi-employer plan, on behalf of staff. The plan is a contributory defined pension plan, which specifies the amount of the retirement benefit to be received by the employees based on the length of service and rates of pay.

Contribution rates by employers are made at a rate of approximately eight percent of earnings. As at December 31, 2014, the OPA paid or accrued contributions totaling \$1,996 (December 31, 2013 – \$2,001) during the year.

14. CHANGE IN NON-CASH OPERATING ITEMS

(in thousands of dollars)

Year ended December 31, 2014, with comparative figures for 2013

	2014	2013
	\$	\$
Decrease/(increase) in accounts receivable	(101,302)	108,780
Decrease/(increase) in prepaid expenses	(343)	205
Increase/(decrease) in accounts payable and accrued liabilities	117,777	(112,808)
Decrease in contract deposits	(6,261)	(5,757)
	9,871	(9,580)

15. RELATED PARTY TRANSACTIONS

The Province of Ontario is a related party as it is the controlling entity of the OPA. The OEB, Hydro One, the IESO, OPG, the Ontario Financing Authority (OFA) and the Ministry of Energy are related parties of the OPA, through the common control of the Province of Ontario. Transactions between these parties and the OPA were as follows:

Under the *Ontario Energy Board Act, 1998*, the OPA incurs registration and license fees. Consistent with other registrants, in 2014 the OPA was allocated a portion of the operating costs of the OEB. The total of the OPA's transactions with the OEB were \$1,038 in 2014 (2013 – \$1,025).

The OPA procures conservation and demand management from Hydro One. The procurement costs include payments for electricity conservation, program operating costs and management fees. In 2014, the OPA procured \$29,935 in conservation demand management (2013 – \$30,214) from Hydro One and its wholly owned subsidiaries. At December 31, 2014, the OPA had a net payable to Hydro One of \$8,167 (December 31, 2013 – \$2,198).

The OPA receives its fee revenue from the IESO. The fee revenue is approved by the OEB and is collected each month by the IESO from ratepayers through a usage rate applied to Ontario domestic electricity consumption. Fee revenue for 2014 was \$60,206 (2013 – \$75,934). In addition, the OPA and the IESO have agreements set up for the settlement of amounts paid and received for the global adjustment account, RPP on behalf of various market participants (see Note 8). At December 31, 2014, the OPA had a net receivable of \$457,741 (December 31, 2013 – \$393,848). The OPA also incurred \$98 in 2014 (2013 – \$123) for professional services.

The OPA has available a revolving operating facility in the amount of \$975,000, provided by the OFA to fund its general operating expenses and to support the RPP variance account. The line of credit was renewed in 2013 for a three-year term from January 1, 2014, to December 31, 2016, with an interest rate of 1.17 percent. On December 31, 2014, the OPA has a \$0 (December 31, 2013 – \$0) outstanding balance to the OFA. In 2014, the OPA incurred \$0 (2013 – \$0) in interest expenses for the loan.

These transactions are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

16. CONTINGENCIES AND GUARANTEES

Contingencies:

In the normal course of its operations, the OPA becomes involved in various legally binding agreements. Some of these agreements contain potential liabilities that may become actual liabilities when one or more future events occur or fail to occur. To the extent that a future event becomes likely to occur or fails to occur, and a reasonable estimate of the loss can be made, an estimated liability will be accrued and the expense recorded on the OPA's financial statements. As at December 31, 2014, in the opinion of management, no such liabilities exist.

Contract conditions related to the construction of a new clean energy facility stipulate that the OPA is contingently liable to repay upgrade costs, up to a maximum of \$1,000, as incurred by the energy supplier. While none of these costs have been incurred to date, the OPA is liable to cover such costs over a 20-year period ending in 2025. As at December 31, 2014, management is not aware of any information to suggest that these upgrade costs will be incurred by the supplier.

Guarantees:

The OPA enters into contracts with suppliers of electricity as part of its normal business operations. In some cases, these contracts require the OPA to support obligations with these entities. In 2012, the OPA entered into a letter of credit amounting to \$1,349 in support of a contracted obligation. As at December 31, 2014, no amounts have been drawn on the balance.

17. FAIR VALUE OF FINANCIAL ASSETS AND FINANCIAL LIABILITIES

The carrying amounts for cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate their fair values because of the short-term maturity of these instruments.

The fair values of other financial assets and other financial liabilities are not provided because this would not give additional useful information, as they would be offset and/or would not be practical to determine.

18. FINANCIAL RISK MANAGEMENT

The OPA is exposed to financial risks in the normal course of its business operations, including market risks resulting from credit risk, liquidity risk and interest rate risk. The nature of the financial risks and the OPA's strategy for managing these risks has not changed significantly from the prior year.

a) Credit risk:

Credit risk refers to the risk that one party to a financial instrument may cause a financial loss for the other party by failing to meet its obligations under the terms of the financial instrument. The OPA is exposed directly to credit risk related to accounts receivable and bank deposits held at the chartered bank. Direct exposure to credit risk is limited to the carrying amount presented for these assets on the statement of financial position. Accounts receivable as of December 31, 2014, included no material items past due.

b) Liquidity risk:

Liquidity risk refers to the risk that the OPA will encounter financial difficulty in meeting obligations associated with its financial liabilities. The OPA manages liquidity risk by forecasting cash flows to identify financing requirements. Cash flows from operations and maintaining appropriate credit facilities reduce liquidity risk.

c) Interest rate risk:

The OPA's operating loan has a variable interest rate based on the Province of Ontario's cost of funds for borrowing, with a similar term as determined by the OFA plus a margin. As a result, the OPA would be exposed to interest rate risk due to fluctuations in the Province of Ontario's cost of funds for borrowing with a similar term rate.

2014 Executive Compensation Disclosure

Program Objectives

The OPA executive compensation program was an integrated program for all executive staff. It was designed to attract, retain and motivate the calibre of executives required to support the achievement of the OPA's statutory mandate, corporate vision and business objectives. Accordingly, the compensation philosophy and program had the following objectives:

- to focus executives on meeting the OPA's business objectives
- to attract qualified and talented executive staff needed to carry out the OPA's mandate
- to retain valued executive staff
- to provide flexibility to differentiate total compensation for specific executives based on individual results and demonstrated competencies
- to establish compensation levels that are responsible and defensible to stakeholders.

The philosophy underlying these objectives was that the total compensation for executive management should be sufficient, but not more than required, to attract the skills and competencies needed to carry out the OPA's mandate.

Program Governance

The Board of Directors established the objectives for the compensation program. It delegated to the Human Resources Committee of the Board of Directors the responsibility to review thoroughly the compensation objectives, policies and programs and make recommendations concerning them to the full Board of Directors for approval. In carrying out their mandate, members of the Board of Directors had access to management's perspectives as well as those of expert consultants in the compensation field. The program was reviewed at least annually in terms of business needs, program objectives and design, industry compensation trends, internal compensation relativities and external market relativities.

In addition to the formal governance and oversight structure in place for compensation matters, the OPA annually disclosed compensation levels for staff earning above \$100,000 as part of its public sector salary disclosure under the *Public Sector Salary Disclosure Act (Ontario)*. For the OPA, a further level of public review and assurance was provided through a statutorily required annual fee review by the OEB. Compensation matters, including management compensation and market relativities, were addressed during this review. A broad range of stakeholder groups, assisted by their legal and professional advisors, were represented in these public proceedings. The OPA was also responsive to various requests for information by the Ministry of Energy in relation to compensation matters. These include enquiries with respect to the Agency Review Panel's 2007 review and report on senior management compensation for agencies in Ontario's electricity sector.

Executive Compensation Statement

Compensation decisions may at times be affected by market factors, such as the recruitment of an executive with specialized skills and competencies or possessing unique talents in the industry. These decisions were also influenced by social, economic, legal and political factors, such as prevailing financial and employment conditions, government fiscal considerations, legislation governing compensation and societal perceptions of public sector compensation.

For the seventh consecutive year (i.e., 2008 – 2014), the OPA's Board of Directors approved a freeze on the salary structure for executives. In freezing the executive's salary structure for 2014, the OPA's Board took into consideration many of the above social, economic and legal factors, including compliance with the 2012 amendments to the *Broader Public Sector Accountability Act, 2010*.

Table 1 sets out the annual compensation for the year ended December 31, 2014, for the listed executive officers. The total cash compensation information provided below matches the information published under the *Public Sector Salary Disclosure Act (Ontario)* for the indicated period.

Table 1: Summary of Executive Compensation¹

Name, Position Title	Year	Salary Paid	Taxable Benefits	Amounts Reported Under <i>Public Sector Salary Disclosure Act</i> ²
Colin Andersen Chief Executive Officer	2014	\$601,942 ³	\$1,073	\$603,015
	2013	\$573,027	\$1,064	\$574,091
	2012	\$573,027	\$ 900	\$573,927
Kimberly Marshall Vice-President, Business Strategies and Solutions (CFO)	2014	\$255,172	\$ 977	\$256,149
	2013	\$255,172	\$ 969	\$256,141
	2012	\$255,172	\$ 820	\$255,992
Amir Shalaby Vice-President, Power System Planning	2014	\$450,803	\$ 948	\$451,751
	2013	\$449,329	\$1,064	\$450,394
	2012	\$449,541	\$ 900	\$450,441
Andrew Pride Vice-President, Conservation	2014	\$316,970	\$1,073	\$318,043
	2013	\$316,970	\$1,064	\$318,035
	2012	\$316,970	\$ 900	\$317,870
JoAnne Butler Vice-President, Electricity Resources	2014	\$371,925	\$1,073	\$372,998
	2013	\$371,925	\$1,064	\$372,989
	2012	\$371,925	\$ 900	\$372,825

1. Executives are listed in the following order: Chief executive officer, chief financial officer, then in alphabetical order by first name.

2. Total T4 income, including taxable benefits.

3. Mr. Andersen's employment with the OPA was terminated on December 31, 2014. As such, he received a one-time only payment in the amount of \$28,915.28 for accrued and unused 2014 vacation entitlement pursuant to his contract of employment.

Independent Electricity System Operator

1600-120 Adelaide Street West
Toronto, Ontario M5H 1T1


Phone: 905.403.6900

Toll-free: 1.888.448.7777

E-mail: customer.relations@ieso.ca


ieso.ca


 [@IESO_Tweets](https://twitter.com/IESO_Tweets)


 facebook.com/OntarioIESO

 linkedin.com/company/ieso

saveonenergy.ca

 [@saveonenergyOnt](https://twitter.com/saveonenergyOnt)

 facebook.com/saveonenergyFORHOME

 linkedin.com/company/saveonenergy-ontario

2016 REVENUE REQUIREMENT AND USAGE FEE METHODOLOGY

Methodology for Calculating the IESO's 2016 Usage Fee

This section of the evidence explains how the IESO's proposed usage fee for 2016 has been derived. The IESO's usage fee is calculated by subtracting forecast revenues from its operating costs to achieve a net revenue requirement of \$181.1 million. The net revenue requirement is divided by the Ontario electricity forecast volumes of 138.7 TWh, less line losses of 3.1 TWh, plus electricity exports of 17.9 TWh and embedded generation of 6.6 TWh. The resulting usage fee is charged on a per MWh basis.

2016 Net Revenue Requirement

The first step required to calculate the IESO's 2016 usage fee is to determine the net revenue required. A summary of the net revenue requirement is provided in Table 1.

Table 1: IESO's 2016 Revenue Requirement (\$ millions)

Revenue Requirement Calculation for IESO Usage Fee	
(\$ million)	2016
Operating costs	182.1
Less: Registration fees Revenues	-1.0
2016 Net Revenue Requirement	181.1

Operating Costs

The IESO's proposed 2016 operating costs of \$182.1 million are described in the 2016-2018 Business Plan, which was approved by the Minister of Energy on December 9, 2015, and is included in this application as Exhibit A-2-2.

1 *IESO Revenue Adjustments*

2 The OEB approved the following fees for the former OPA and IESO in their 2014 revenue
3 requirement submissions in addition to their usage fees:

- 4 • Registration fees of up to \$10,000 per proposal for electricity supply and capacity
5 procurements, including conservation and load management,
- 6 • The Feed-in-Tariff ("FIT") program application fee,
- 7 • The Large Renewable Procurement qualification submission fee, and
- 8 • The application fee of \$1,000 per application for market participants.

9 *RFDA*

10 For 2014, the OPA did not forecast revenues generated by the FIT program application fee,
11 the Large Renewable Procurement qualification submission fee, or any other registration
12 fee, and did not include these fees in the OPA's 2014 usage fee calculation. Instead, the
13 OPA requested, and the Board approved, the establishment of the Registration Fee Deferral
14 Account ("RFDA") to record and track revenues from completed procurement processes.
15 For 2016, however, the IESO has provided a forecast of the revenues generated by the FIT
16 fee and the Large Renewable Procurement qualification submission fee. The IESO has
17 forecast revenues of \$1 million, which have been subtracted from the IESO's proposed
18 operating costs to achieve a 2016 net revenue requirement of \$181.1 million. For 2016, the
19 IESO is not requesting approval of the continuation of the RFDA.

20 The IESO's OEB-approved fee structure includes the application fee of \$1,000 per
21 application to become a Market Participant, which has been in effect and unchanged since
22 market opening. The 2016 revenues generated by the IESO application fee are expected to
23 be negligible. Any amounts collected have historically been included in revenues and the
24 IESO does not propose to alter this arrangement in its current application.

Charge Determinant

The second step in calculating the IESO's 2016 usage fee is to estimate the charge determinant. The charge determinant is the total forecast Allocated Quantity of Energy Withdrawn ("AQEW") plus Scheduled Quantity of Energy Withdrawn ("SQEW") (i.e., exports), plus generation embedded in local distribution networks, less transmission line losses.

As a result of the merger, the IESO is currently collecting two fees – one for the former IESO (\$0.803/MWh), and one for the former OPA (\$0.439/MWh). Both fees are currently charged on different bases – the IESO fee is recovered on a gross load basis over both export and domestic customers, whereas the OPA fee is recovered on a net load basis from domestic customers.

One IESO Usage Fee

The IESO proposes moving to a single IESO usage fee to be charged to all market participants based on energy withdrawn from the IESO-controlled grid (including scheduled exports) and embedded generation effective January 1, 2016.

The IESO is proposing to change its fee structure to include energy volumes equal to the output for generation embedded in local distribution networks in the one fee it is proposing. Currently, those volumes are not included in the determination of the OPA fee because the fee is based on withdrawals net of embedded generation. The IESO fee is charged on a gross load basis was approved by the Board in the IESO's 2014 fee application (EB-2013-0381). This change will treat customers more equitably by charging them the same effective IESO fee irrespective of the proportion of embedded generation within their local distribution company ("LDC") service territory. The change in methodology is

1 revenue neutral for both the IESO and LDCs, and, there should be minimal or no
2 implementation costs for LDC's as the IESO usage fee is currently being charged in this
3 manner.

4 The IESO does not operate the market to serve single customers or only export or domestic
5 customers; rather, the IESO operates the market to benefit all market participants without
6 discretion. In taking a holistic view of its operations, the IESO believes that as both
7 domestic and export classes of customers benefit from the work that the IESO carries out,
8 both should pay for the work performed by the IESO. Specifically, the *Electricity Act, 1998*,
9 as amended, includes a variety of objects for the IESO that benefit both domestic and
10 export customers, including:

- 11 • directing the operation and maintaining the reliability of the IESO-controlled grid
- 12 • participating in the development of standards, and enforcing criteria and standards
13 relating to the reliability of the integrated power system
- 14 • working with the responsible authorities outside of Ontario to co-ordinate the
15 IESO's activities
- 16 • operating the IESO-administered markets
- 17 • collecting and making public information relating to the short-term, medium-term
18 and long-term electricity needs of the province

19 Given that the work to fulfill and meet the objects benefits both domestic and export
20 customers and that these objects permeate the entire organization and the work that it
21 performs, it does not make sense to separate out specific functions within the IESO for the
22 purposes of allocating costs. Ultimately all work performed by the IESO to meet its objects
23 is a fundamental part of the organization- the IESO does not operate to serve single
24 customers or only export or domestic customers; rather, the IESO operates to benefit all
25 sector participants without discretion. To parse the work of the IESO or to attempt to

1 separate the costs or benefits of the IESO's operations is difficult now and will be
2 increasingly difficult and decreasingly practical in the future.

3 *Background*

4 In the OPA's 2011 Revenue Requirement Submission to the Board, EB-2010-0279, the OPA
5 requested to expand the base of customers it recovered its usage fee from to include export
6 customers, similar to the methodology of the former IESO. In its decision issued on July 8,
7 2011 the Board rejected the proposal for multiple reasons, including that the OPA was not
8 comparable to the IESO and that the proposal was not supported by empirical evidence.
9 The merging of the IESO and OPA on January 1, 2015 has made the work of the two
10 organizations less separable, as described above, and the IESO believes that the proposal to
11 move to one fee for the organization, recovered from both domestic and export volumes on
12 a gross load basis, should be accepted on its own merits. The IESO, however,
13 acknowledges the lack of empirical evidence was noted in a previous Board decision, and
14 has hired Elenchus, the same entity hired by intervenors to examine the OPA's proposal in
15 its 2011 Revenue Requirement Submission, to prepare a cost allocation study on this
16 proposal. Please see Exhibit B-1-1, Attachment 1, for the Elenchus Report: "Cost Allocation
17 and Rate Design for the 2016 IESO Usage Fee". As shown in the Elenchus cost allocation
18 report, charging one IESO fee has been determined to be reasonable and fair. This
19 approach was also presented to the IESO Stakeholder Advisory committee at both the
20 March 5 and August 13 meetings.

21 The IESO believes that as a result of the Legislatively-mandated merger and resulting scope
22 of work for the IESO, as well as the evidentiary support provided in the Elenchus report, its
23 proposal to charge one fee to all customers is fair and reasonable. The IESO therefore

proposes to calculate the charge determinant using the total energy volumes as shown in the section below.

Table 2: Charge Determinant Calculation for 2016 IESO Usage Fee

(TWh)	2016
18 Mth Outlook demand Forecast	138.7
Less Transmission Line Losses	3.1
Add Exports	17.9
Add Embedded Generation	6.6
Total Energy Volumes (gross TWh)	160.1

Usage Fee Calculation

The third step in determining the IESO's usage fee is the rate calculation. The 2016 revenue requirement is divided by forecast energy volumes to determine the usage fee of \$1.13/MWh. Please see Table 3 below for this calculation. The proposed single usage fee is of \$1.13/MWh is 9% lower as compared to the combined current OPA + IESO usage fees charged to Ontario demand, not including embedded generation, of \$1.24/MWh.

Table 3: IESO's 2016 Usage Fee Calculation

Year	2016 Net Revenue Requirement (\$ million)	/	Total Energy Volumes (gross TWh)	=	Usage Fee (\$/MWh)
2016	181.1		160.1		1.13

Implementation of the 2016 Usage Fee

As a result of the January 1, 2015 merger, the IESO is currently collecting two approved fees which were made interim effective January 1, 2016: the former IESO fee of \$0.803/MWh and the former OPA fee of \$0.439/MWh. The IESO proposes to continue to charge both the IESO and OPA interim usage fees to the same pools of market participants the Board

1 approved them to be charged to in the Decisions on the IESO's and OPA's 2014 Fee
2 Applications until the end of the month in which Board approval is received for the 2016
3 usage fee. The IESO then proposes to charge (or rebate to) market participants the
4 difference between the 2016 IESO usage fee approved by the Board and the interim usage
5 fee(s) they paid, if any, based on their proportionate quantity of energy withdrawn, which
6 may include scheduled exports and embedded generation, in 2016. Any such charges (or
7 rebates) will be provided in the next billing cycle following the month in which Board
8 approval is received.

9 **The IESO's Operating Reserve**

10 Both the OPA and IESO were granted approval in prior Board decisions (OPA - EB-2013-
11 0326 and IESO EB-2013-0381 respectively) to retain \$5 million as operating reserve. As
12 Legislation merged the OPA and IESO effective January 1, 2015, the approvals granted to
13 the former OPA and the former IESO have moved to the IESO resulting in it currently
14 having \$10 million in Board approved operating reserves.

15 As the scope and complexity of the IESO's mandate continues to expand, the IESO
16 recognizes the potential for additional unplanned work activities that may be material in
17 scope and are beyond the control of management and are described below under Risks. In
18 response to this potential volatility in spending driven by changes in the volume of
19 activities and the external environment, the IESO seeks approval to continue to retain an
20 operating reserve of \$10 million. The operating reserve will be retained in the Forecast
21 Variance Deferral Account ("FVDA").

22 The \$10 million operating reserve proposed is approximately 5% of the IESO's proposed
23 2016 annual revenue requirement. The IESO's and OPA's approved 2014 \$5 million

operating reserve represented approximately 4% of the IESO's 2014 Board approved revenue requirement of \$129.9 million, and 8.3% of the OPA's 2014 Board approved revenue requirement of \$60.3 million.

Risks

The IESO faces risks in both its revenues and operating expenses. The IESO's expenses and revenues are forecast based on both the experience of IESO staff and the best information available when the Business Plan is being composed. The Business Plan was constructed over a matter of months, and the 2016-2018 Business Plan was submitted to the Minister on September 1, 2015. The IESO strives to reduce uncertainty in the inputs in order to make the resulting Business Plan as robust as possible. However, all forecasts are inherently uncertain: they take the best information available at the time and attempt to predict the future. At the time of business planning, some of the potential risks the IESO faces in a given year may be anticipated but not quantifiable, while others are simply not known at the time of business planning.

For example, since the Business Plan was prepared in the latter half of 2015, a number of risks have been identified. Some of these risks have already crystallized into contingencies that will affect the IESO's budget as follows:

- The NERC and NPCC membership invoices, which the IESO is required to pay, have increased roughly 2.8% from \$3,330,947 in 2014 to \$3,425,020 (all in \$US) for 2015. The 2.8% increase does not include the change in foreign exchange.
- The OEB's January 1, 2016 cost assessment of \$500,726 was an increase of \$108,927 from the October 1, 2015 invoice of \$391,799 - an increase of nearly 28% that the IESO could not predict prior to receiving the invoice in January, 2016. Based on an understanding that the OEB has been examining their current cost assessment model and an assumption that the IESO's cost assessment was likely to decrease, the IESO had actually reduced its expected payment amounts for 2016. A cost assessment reduction seemed reasonable given that the merged IESO is now only required to

1 file one fee application rather than two, and that the proposed legislative changes
2 under Bill 135 related to the long-term planning process will reduce the work
3 burden the IESO imposes on the Board. Any increase in OEB cost assessments will
4 therefore be doubly impactful for the IESO – not only is it an increase over previous
5 years, but it is also an increase over the amount reasonably assumed for 2016.

- 6 • The contract recently entered into with Bruce Power will require extensive oversight
7 from the IESO for multiple years. While the IESO recognized managing this
8 contract would require resources and would add long-term costs to the IESO's
9 operations, these costs could not reasonably be budgeted until the IESO had
10 finalized the contractual details. The IESO currently expects that at least 3
11 incremental full-time employees will be required to manage the IESO's significant
12 oversight responsibilities under this contract.

13 In addition, there are other identified risks whose impacts are not yet known such as:

- 14 • The US-Canada exchange rate, which has and will potentially further impact the
15 IESO's operating expenses, through invoices billed in US dollars.
- 16 • Increased regulatory requirements, including the Board's recently proposed 10 year
17 record retention policy which may require additional and unplanned for
18 administrative staff to administer.
- 19 • The impact of Ontario's cap and trade policy, which could impact the IESO's
20 activities and therefore resourcing.
- 21 • The impact of Bill 135, which has been tabled but not enacted, on IESO resource
22 requirements particularly around the requirement for the IESO to lead transmission
23 procurements.
- 24 • The potential impacts of fulfilling new directives from the Minister and managing
25 the work associated with new contracts, whether for new supply, conservation or
26 the import and export of power.
- 27 • Fluctuations in total demand as compared to the IESO's forecast, which impacts the
28 revenue recovered through the IESO usage fee.



34 King Street East, Suite 600
Toronto, Ontario, M5C 2X8
elenchus.ca

Cost Allocation and Rate Design for the 2016 IESO Usage Fee

Evidence of John Todd
President, Elenchus Research Associates, Inc.

Prepared for IESO
15 January 2016

Page Intentionally Blank

Table of Contents

Table of Contents	1
1 Overview	1
2 Background	3
2.1 The Current OPA Usage Fee	3
2.2 The Current IESO Usage Fee	4
2.3 Integrating the Former OPA and IESO Usage Fees	5
3 Charging the New IESO Fee Based on Gross Load.....	6
4 Charging the New IESO Fee to Export Customers.....	8
4.1 A Single Standard Usage Fee for Domestic and Export Customers	8
4.2 Two Customer Classes with a Differentiated Usage Fee	8
4.3 Analysis of the Standard Vs Differentiate Fee Options	9
5 Overview of the IESO Cost Allocation Model.....	11
5.1 Functional-Categorization	12
5.1.1 CEO (Office, NERC Membership, Audit)	13
5.1.2 Market and System Operations	13
5.1.3 Market and Resource Development	16
5.1.4 Conservation and Corporate Relations	19
5.1.5 Information and Technology Services.....	21
5.1.6 Planning, Law, and Aboriginal Relations.....	22
5.1.7 Corporate Services	24
5.1.8 Market Assessment and Compliance Division	27
5.1.9 Other (Amortization, Interest, Uncleared Salary)	27
5.2 Allocation.....	28
5.2.1 Primary Allocators.....	30
5.2.2 Composite Allocators.....	30
5.3 Cost Allocation Results	31
6 Conclusions and Recommendations	32
Appendix A: Allocation Detail Worksheet	1
Appendix B: Asset Allocation Test	3

Page Intentionally Blank

1 1 OVERVIEW

2 The Ontario Power Authority (“OPA”) was merged with the Independent Electricity
3 System Operator (“IESO”) effective January 1, 2015. An issue to be considered as a
4 result of the merger is the development of the usage fee that will be adopted for
5 recovering the revenue requirement of the new IESO.

6 The IESO has retained Elenchus Research Associates, Inc. (“Elenchus”) to review the
7 design of the existing OPA and IESO usage fees which were designed to recover the
8 revenue requirements of the separate organizations and to examine options for
9 recovering the revenue requirement of the new IESO.

10 Both entities previously recovered their OEB regulated revenue requirements primarily
11 through usage fees that were charged on an energy (i.e., per MWh) basis. Although the
12 same billing factor was used by the two agencies, the usage fees differ in two important
13 respects.

- 14 • The existing IESO usage fee is charged on a gross load basis (i.e., including load
15 served by generation that is embedded in the Ontario distribution system),
16 whereas the OPA usage fee is charged on the basis of net load.
- 17 • The existing IESO usage fee is charged to both domestic and export customers,
18 whereas the existing OPA usage fee is charged only to domestic customers.¹

19 Section 2 of this evidence reviews the relevant Ontario Energy Board (“OEB”) decisions,
20 highlighting the basis of the differences in the design of the existing usage fees.

21 Section 3 discusses the gross versus net billing issue and recommends that the new
22 IESO fee should be billed on the basis of gross load. The reasoning that supported the
23 change from net to gross billing for the former IESO usage fee in EB-2013-0381 is
24 equally applicable to the portion of the new IESO revenue requirement that corresponds

¹ The terms domestic and export customers are generally used to refer to what might be described more accurately as domestic and export energy volumes. Some market participants are billed for both domestic and export volumes and are, in effect, both domestic and export customers of the IESO. Elenchus has retained this terminology for consistency with the terminology of past proceedings.

1 to costs that were previously included in the OPA revenue requirement. The OPA may
2 well have adopted the IESO's approach and re-established consistency between the
3 usage fees of the two agencies if they had not been merged.

4 It is therefore recommended that the 2016 IESO usage fee be billed on the basis of
5 AQEW + SQEW + EG as defined in section 3.

6 Section 4 discusses two options for addressing the difference between the two usage
7 fees in terms of their applicability to export customers. The options are:

- 8 1. treat all customers as a single class with a common usage fee; or
- 9 2. define two customer classes (domestic and export) that would pay different
10 usage fees.

11 The key considerations in assessing these options are the principles of administrative
12 simplicity and equity, where equity is indicated by the level of the actual or implicit
13 revenue-to-cost ratios of the classes under each option.

14 With respect to the justification for differentiating the usage fee that is applied to
15 domestic and export customers, it is noted that the revenue to cost ratios for the
16 separate classes if a single usage fee is adopted would be 98.5% and 114.3% for the
17 domestic and export classes, respectively. Using a revenue-to-cost ratio range of 80%
18 to 120%, which is the Board-approved range for the rates of most distribution customer
19 classes, it can be concluded that the uniform rate would be deemed to be equitable for
20 both classes of customers. Rates within a Board approved range are not considered to
21 be either under-collecting or over-collecting the causal costs related to a customer
22 class, given the degree of uncertainty inherent in cost allocation and the degree of
23 judgment required to accommodate other ratemaking principles.

24 Section 5 provides an overview of the cost allocation model that has been developed by
25 Elenchus as a basis for determining the causal costs associated with domestic and
26 export customers.

27 Section 6 contains the report's conclusions and recommendations.

2 BACKGROUND

2.1 THE CURRENT OPA USAGE FEE

The OPA's last approved usage fee of \$0.439/MWh has been in effect since January 1, 2014. It was approved by the OEB in Decision and Order EB-2013-0326 dated November 6, 2014.² The 2014 usage fee was reduced from the usage fee of \$0.551/MWh which had been in effect since January 1, 2010.³ The OPA's usage fee continues to be collected on the basis of the net energy withdrawals, which excludes embedded generation.

The OPA usage fee is not charged to export customers. In its 2011 fees application, EB-2010-0279, the OPA sought OEB approval to recover its usage fees from export customers in addition to Ontario customers. This proposal was not accepted by the OEB. The OEB's reasons for not approving this change were set out in its July 8, 2011 Decision and Order. The reasons indicated that further analysis and consultation would be required to support a usage fee that would be appropriate for export customers.

Board Findings

The Board will not approve the OPA's proposal to recover the 2011 usage fee from export customers for a number of reasons.

First, the Board is of the view that the mandate of the OPA is not comparable to that of the IESO. Even the most cursory examination of the relevant sections of the Electricity Act is illustrative of the distinct nature of the two organizations. Section 5(1)(e) of the Electricity Act, which sets out the objects of the IESO, clearly states that the IESO is to work with the responsible authorities outside Ontario to co-ordinate the IESO's activities with their activities. In contrast, section 25.2(1) which is the section of the Electricity Act that describes the objects of the OPA, expresses the OPA's fundamental responsibilities as being "for Ontario" and "in Ontario".

Second, the Board is not convinced that, in executing its objectives pursuant to the Electricity Act that the OPA creates benefits for export customers in the manner asserted by the parties supporting the extension of the fee to exporters. In particular, by engaging in power system planning that meets the reliability and self-sufficiency goals of the government of Ontario, the OPA's activities have the

² The OEB also approved in Decision and Order EB-2013-0326 the OPA's proposal to hold its other fees, for registrations and applications, constant.

³ The OPA's 2010 usage fee was approved in Decision and Order EB-2009-0347 dated April 27, 2010.

consequence of creating potential export capability. It does not necessarily follow that this “unintended” consequence is a benefit for which exporters should pay. The Board is also reticent to create the linkage that necessarily follows this argument, which is because exporters “pay for this benefit” the OPA is obligated to engage in system planning in a manner that ensures export capability exists.

Third, the Board agrees with the submissions of parties that the proposed fee has not been supported by empirical evidence. The OPA proposal rests primarily on the IESO example, and a rather cursory benefits analysis. The extension of fees to market participants should generally be conducted on a firm empirical and principled basis. There is no such basis in the evidence before the Board. In this case, if the OPA intends to reintroduce this approach in this or a future expenditure and revenue requirement and fees case, it should be prepared to demonstrate a coherent rationale, quite possibly based on an allocation study, as suggested by Mr. Todd from Elenchus.

Finally, the Board notes that the OPA did not undertake any meaningful or substantive consultation with stakeholders regarding this proposal. Should the OPA choose to re-introduce this approach now or in the future, the Board expects the OPA to have engaged the stakeholder community in a relevant and substantive manner and will require that evidence of this consultation be filed in conjunction with the associated revenue requirement and fees application.⁴

As the OEB’s Decision and Order notes⁵, the proposed change would have made the OPA’s cost recovery consistent with the IESO’s cost recovery which was, and continues to be, from domestic and export customers.

2.2 THE CURRENT IESO USAGE FEE

The IESO’s 2014 usage fee of \$0.803/MWh has been in effect since January 1, 2014. It was approved by the OEB in Decision and Order EB-2013-0381 dated May 22, 2014.⁶ The 2014 usage fee was a reduction from the interim usage fee of \$0.822/MWh for 2012 and 2013 which was made firm by Decision and Order EB-2013-0381.⁷ The IESO’s usage fee is charged to both domestic and export customers.

⁴ Ontario Energy Board, Decision and Order, EB-2010-0279, pages 16-17.

⁵ Ibid, page 15.

⁶ The OEB also approved in Decision and Order EB-2013-0381 the continuation of the IESO’s \$1000 application fee.

⁷ The OPA’s 2010 usage fee was approved in Decision and Order EB-2009-0347 dated April 27, 2010.

In its 2014 fees application, the OEB also approved the IESO's proposal to calculate its fee based on total energy withdrawals, including an amount equal to the output from embedded generation. In its Decision and Order, the OEB noted that:

Currently, distributors collect IESO usage fees from all of their customers based on their total loads but then only remit to the IESO based on the distributor net load which is reduced by embedded generation. The amount of embedded generation is expected to continue to increase in materiality. The IESO submits that the proposed change in methodology more fairly reflects the changing nature of the grid, including the need for the IESO to establish and maintain visibility of embedded generation and to forecast its impact on bulk system requirements.⁸

In contrast, as noted above, the OPA's usage fee continues to be collected on the basis of the net energy withdrawals, excluding the output from embedded generation.

2.3 INTEGRATING THE FORMER OPA AND IESO USAGE FEES

In light of the merger of the IESO and the OPA, it is appropriate to consider merging the two usage fees into a single fee schedule. Given the differences between the two usage fees identified above, it is necessary to address the appropriate approach to dealing with the identified differences. Specifically, in this report consideration is given to whether the OPA portion of the new IESO fee should be:

- charged on the basis of net load or on the basis of gross load which would facilitate the adoption of a single usage fee for the new IESO, and
- charged to export customers in whole or in part, and if in part, how the usage fee differential for domestic and export customers should be determined.

It is evident that a fully integrated IESO usage fee would avoid complexity. However, it is also evident that a fully integrated usage fee would shift responsibility for the IESO costs among market participants and end use customers. The key consideration is whether a fully integrated usage fee would result in equitable treatment among the various types of customers that benefit from the role served by the restructured IESO in the Ontario electricity market.

These issues are examined in the next two sections.

⁸ Ontario Energy Board, Decision and Order, EB-2013-0381, page 3.

3 CHARGING THE NEW IESO FEE BASED ON GROSS LOAD

The rationale for collecting the former IESO usage fee on the basis of total energy withdrawals, including an amount equal to the output from embedded generation, was presented in my evidence that was included in the material filed by the IESO in support of its 2014 fees application.⁹ The essence of the rationale appears in the Conclusion and Recommendation section of that evidence.

5. Conclusion and Recommendation

It is recommended that the billing determinant for the IESO fee be changed from net to gross billing. The gross billing approach would be implemented by using as the charge determinant for AQEW+SQEW plus the embedded generation reported by distributors to the IESO on a monthly basis.

The recommended approach would be more equitable in that all customers would then pay the same effective rate for the IESO administration fee, regardless of the proportion of embedded generation within the service territory of their distributor. While the dollar value of the existing inequity is relatively small, the cost of correcting the inequity is immaterial; hence, cost is not an impediment to adopting the change.

The proposed change in the billing determinant is independent of the changes in the IESO's revenue requirement and volume forecast; hence it is revenue neutral for both electricity consumers and LDCs. From the perspective of the IESO, the impact of the proposed change in the billing determinant is that there will be a lower charge that is applied to a larger volume with the total revenue being unchanged. From the LDCs perspective, they will recover from customers only the amount remitted for the IESO Administration Fee; hence, the variances between the amount paid to the IESO and the amount collected from customers will be reduced. As a result, the amounts flowing into account 1580 (RVSA_{WMS}) related to an over-collection of the fee will be reduced.

The only stakeholders financially impacted by the proposed change will be the end-use customers who will all pay the same effective kWh-based fee if the change is implemented, rather than paying an effective rate that is affected by the amount of embedded generation in their LDC's service area. The average effective fee paid by customers will not change, although customers served by LDCs with above average embedded generation as a percentage of load will experience a slight increase in the effective fee they pay since they currently pay less than the average fee, while those served by LDCs with comparatively less embedded generation will pay a slightly lower effective rate, since they are currently paying an above average effective rate.

⁹ [EB-2013-0381, Exhibit B, Tab 4, Schedule 1](#) (Review of IESO Fees Billing Determinant, Evidence of John Todd, October 2013)

1 In my opinion, the rationale for including embedded generation in the charge
2 determinant for the IESO's 2015 usage fees applies equally to both the former OPA
3 component of the new IESO charge and the former IESO component. In particular:

- 4 • charging on the basis of net load is a historical anomaly in both cases, with the
5 original implementation having taken place at a time when there was very little
6 embedded generation;
- 7 • at the time charging on the basis of net load was introduced, neither the IESO
8 nor the OPA had access to reliable information on embedded generation;
- 9 • the inconsistency between the basis on which distributors collect the usage fees
10 from customers (gross load) and the payment to the IESO prior to 2014 and to
11 the OPA since its inception (net load) is the same in both cases; and
- 12 • the impact of a change for the OPA portion of the usage fee would be essentially
13 the same as the impacts previously identified in the case of the IESO.

14 Furthermore, for the newly merged entity, it will be administratively simpler as well as
15 more understandable to all affected parties if the billing determinant used for the entire
16 new IESO usage fee is consistent.

17 The most appropriate approach to developing the IESO usage fee for 2016 would be to
18 charge it on the basis of a single charge determinant. That is, the 2016 net revenue
19 requirement for the IESO would be recovered by charging all domestic and export
20 customers (i.e., market participants) a fee based on a charge determinant defined as
21 $AQEW + SQEW + EG$, where:

- 22 • AQEW is the allocated quantity of energy withdrawn from the IESO-controlled
23 grid;
- 24 • SQEW is the scheduled quantity of exports withdrawn from the IESO-controlled
25 grid; and
- 26 • EG is the embedded generation reported by distributors to the IESO on a
27 monthly basis.

4 CHARGING THE NEW IESO FEE TO EXPORT CUSTOMERS

Two rate design options for the 2016 IESO usage fee would be consistent with past OEB decisions on the OPA and IESO fees.

Option #1: One standard fee to be charged to all domestic and export customers

Option #2: Separate usage fees for domestic and export customers that reflect differences in their allocated costs

4.1 A SINGLE STANDARD USAGE FEE FOR DOMESTIC AND EXPORT CUSTOMERS

In light of the concerns raised previously with respect to charging the OPA fee to export customers, it is evident that implementing a single standard IESO fee for domestic and export customers would be inequitable if it resulted in a level of cost recovery from export customers that is not consistent with cost causality principles. With respect to the OPA portion of the merged revenue requirement, this approach would implicitly implement the methodology that was not accepted by the OEB when it was proposed by the OPA in its 2011 fees application, EB-2010-0279.

Based on the OEB's Decision and Order in that proceeding, which is quoted above, it would not be appropriate for this approach to be implemented unless it can be shown analytically that the difference in the causal costs associated with domestic and export customers if viewed as distinct customer classes is acceptable. The analysis contained in section 4.3 addresses this concern.

4.2 TWO CUSTOMER CLASSES WITH A DIFFERENTIATED USAGE FEE

Consistent with the issues addressed in OEB Decision and Order EB-2010-0279, an option for the new IESO usage fee would be to establish separate usage fees for domestic and export customers based on their fully allocated costs. This approach would be similar to the standard rate setting process used by OEB-regulated distributors for determining the rates for their customer classes.

4.3 ANALYSIS OF THE STANDARD VS DIFFERENTIATE FEE OPTIONS

Elenchus has developed a cost allocation model for the IESO that treats domestic and export customers as two customer classes and allocates the total revenue requirement of the merged IESO to those classes using a fully allocated costing methodology. This IESO cost allocation model is methodologically consistent with the OEB-approved model that allocates the costs of electricity distributors to their customer classes. The model is described in section 5, below.

The results of this cost allocation methodology using the IESO's 2015 budget are presented in Table 1.

Table 1: Usage Fees and Revenue-to-Cost Ratios for Domestic, Export and Combined Customer Classes, with Different and Common Usage Fees

	Allocated Costs	MWh	Class-Specific Usage Fees			Common Usage Fee	
			100% RCR	80% RCR	120% RCR	Rate	R/C Ratio
Domestic	\$167,215,374	143,611,300	\$1.1644	\$0.9315	\$1.3972	\$1.1468	98.5%
Export	\$17,675,559	17,615,161	\$1.0034	\$0.8027	\$1.2041	\$1.1468	114.3%
Combined	\$184,890,933	161,226,461	\$1.1468			\$1.1468	100.00%

Table 1 shows the allocated cost of each potential “class” of service (Domestic and Export if separate classes are established and Combined if there is a single usage fee). The table also shows the corresponding MWh of each class based on the proposed billing determinant described in section 3 (i.e., AQEW + SQEW + EG). The Class-Specific Usage Fees column shows the rates that would correspond to each class having a revenue-to-cost (R/C) ratio of 100% along with the rates that would result in R/C ratios of 80% to 120%. The Common Usage Fee column shows the revenue-to-cost ratios that would result if a single standard rate per MWh were used for both domestic and export customers.

A central consideration in assessing whether it is equitable to treat two groups of customers that are distinguishable, such as domestic and export customers, as a single class for rate setting purposes is whether the rates that they would be charged if they are separate classes differ significantly from the uniform rate. If their rates would not differ significantly, treating them as separate classes would result in unnecessary

complexity in the rate setting process and in the resulting rate structure. The standard approach to assessing rate equity is on the basis of revenue-to-cost (R/C) ratios.

The range of acceptable R/C ratios for electricity distributors is set out in the OEB's March 31, 2011 Report, on Cost Allocation, section 2.9.4. Table 1 (page 36) of that Report sets out the acceptable ranges by customer class. The Report's table is replicated below.

Table 2: Revenue-to-Cost Ratio Ranges

SERVICE CLASS	RANGE
Residential	85 to 115%
General Service < 50 kW	80 to 120%
General Service 50 to 4,999 kW	80 to 120%
Large User	85 to 115%
Unmetered Scattered Load	80 to 120%
Street Lighting	70 to 120% ¹⁰
Sentinel Lighting	80 to 120%

If the OEB were to adopt an R/C ratio range of 80% to 120% for the IESO's usage fee, it would follow that a single standard usage fee (\$1.1468) would be considered equitable if it is within the range bracketed by the 80% and 120% R/C ratio for each class. As Table 1 shows, the standard usage fee is within this range for both classes.

Another way to look at this issue is to determine the R/C ratio of the classes if both are charged the same rate. The "Rate" column under the "Common Usage Fee" heading in Table 1 is determined by dividing the total revenue requirement of the IESO by the billing determinant for the combined class (i.e., the total MWh of domestic plus export customers). The R/C ratio values are determined by dividing the revenue of each class (Rate x MWh) by their allocated costs. If the resulting R/C ratios are equitable, it would lend support to treating domestic and export customers as a single class and charging a uniform usage fee to all customers. On the other hand, if either R/C ratio is outside of

¹⁰ In addition, in the Board's recent Review of Cost Allocation Policy for Unmetered Loads OEB File No. EB-2012-0383, the revenue-to-cost ratio for the Street Lighting Class was changed to 80% to 120%. See Issuance of New Cost Allocation Policy for Street Lighting Rate Class dated June 12, 2015.

1 the OEB-approved range, then it may justify establishing separate domestic and export
2 classes for purposes of the IESO usage fee.

3 A decision on whether to establish separate domestic and export rate classes may also
4 involve balancing the goal of equity with other objectives such as simplicity and the cost
5 of supporting a more complex rate structure. In particular, if the dollar impact on any
6 group of customers is small, it may justify adopting a single usage fee for all customers
7 despite R/C ratios that might otherwise be considered inequitable.

8 **5 OVERVIEW OF THE IESO COST ALLOCATION MODEL**

9 The cost allocation model that Elenchus has developed for the IESO is based on cost
10 causality and follows the traditional three steps of a cost allocation methodology.

11 Based on interviews with IESO staff to determine the activities performed by all
12 departments, Elenchus undertook a functional-classification of the IESO's revenue
13 requirement based on how each identified function is performed for (i) the exclusive
14 benefit of domestic customers, (ii) the exclusive benefit of export customers, or (iii) for
15 the benefit of both domestic and export customers.

16 The functionally-classified costs are allocated to two "customer classes", or types of
17 service: domestic and export. These classes are analogous to the customer classes
18 served by distributors in that they are easily identifiable and "cause", or benefit from, the
19 transmission system and therefore the activities/services of the IESO in different ways.
20 For purposes of determining cost causality, the domestic class can be thought of as the
21 in-province end-use customers who ultimately pay the IESO usage fee that is embedded
22 in their monthly bills.

23 The IESO's 2015 forecast revenue requirement and 2014 year-end assets were used in
24 developing the recommended approach. The IESO's 2016 budget has not been used
25 for this evidence since the IESO does not develop its budget in sufficient detail to be
26 used as for cost allocation purposes until later in the year.

5.1 FUNCTIONAL-CATEGORIZATION¹¹

Elenchus determined that the IESO's expenses can be functionally-categorized by business unit and department (the top two levels of the organizational management structure). Using this approach, the IESO's accounting data can be incorporated directly into the cost allocation model. Departments are functionally-categorized based on the function they perform so that costs can be allocated based on the classes that cause those costs to be incurred.

The following seven business units account for most of the IESO's costs:

- Market and Resource Development
- Conservation and Corporate Relations
- Information and Technology Services
- Planning, Law, and Aboriginal Relations
- Corporate Services
- Market and System Operations
- Market Assessment and Compliance Division ("MACD")

The remaining costs require additional functional-classes to be identified for cost allocation purposes:

- CEO (Office, NERC Membership, Audit)
- Others (Amortization, Interest, Uncleared Salary)

Each department within each business unit was identified as a separate functional-category. Descriptions of the functions performed by each department are provided below, along with each department's 2015 budget figure and the allocator used for allocating its costs. The allocators are described in section 5.2. The details are also summarized in the Allocation Detail Worksheet that appears as Appendix A.

¹¹ The classification/categorization step, that is normally used in cost allocation models for integrated or distribution utilities (e.g., demand-related, energy-related and customer-related) is not relevant in the case of the IESO. The functionalization and classification/categorization steps have been combined to identify cost categories that are then allocated using the identified allocators.

5.1.1 CEO (OFFICE, NERC MEMBERSHIP, AUDIT)

CEO Office

The CEO's Office provides overall management of the IESO.

Budget: \$1,440,412

Allocation method: Total Other OM&A

NERC Membership

The Electricity Act sets the IESO's objectives including Object 6 (d) which requires participation in the development by any standards authority of criteria and standards relating to the reliability of the integrated power system. The Act defines a "standards authority" as the North American Electric Reliability Corporation or any successor thereof, or any other agency designated by regulation that approves standards or criteria applicable in and outside Ontario for the reliability of transmission systems.

Budget: \$3,898,640

Allocation method: 50:50 split between domestic and export

Internal Audit

Internal Audit (IA) provides independent, objective assurance and consulting services designed to add value and improve the IESO operations. IA contributes towards the accomplishment of the IESO objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes throughout the organization.

Budget: \$1,434,104

Allocation method: Domestic and export in proportion to energy (TWh)

5.1.2 MARKET AND SYSTEM OPERATIONS

Market and System Operations is responsible for the operational planning and assessment functions, managing the short-term operation of Ontario's competitive wholesale electricity market, and directing the operation of the IESO-controlled grid. It is

1 organized in two divisions - Power System Assessments and Market Operations with
2 three departments each. A seventh department reports directly to the VP, Operations -
3 Change Initiatives.

4 The three departments of Power System Assessments are System Performance,
5 Reliability Assessments, and Connections and Registrations. The three departments of
6 Market Operations are Operational Effectiveness, System Operations, and Market
7 Forecast and Integration.

8 ***Vice President Office***

9 The VP's Office provides overall management of the business unit.

10 Budget: \$1,407,935

11 Allocation method: Sum of allocated costs of the departments

12 ***System Performance***

13 System Performance provides a large variety of power system analysis services, most
14 notably the operating security limits used in all operational timeframes. System
15 Performance also develops and maintains the online and offline system models and
16 tools used in power system analysis studies.

17 Budget: \$6,198,803

18 Allocation method: Domestic and export in proportion to energy (TWh)

19 ***Reliability Assessments***

20 Reliability Assessments is responsible to meet the IESO's NERC and NPCC reliability
21 standard obligation for mid to long-term reliability assessments. This includes demand
22 forecasts, resource adequacy assessments and performing system-wide transmission
23 assessments. Although these activities relate directly to NERC and NPCC membership
24 requirements, they also ensure overall system reliability for domestic customers.

25 Budget: \$3,634,163

26 Allocation method: Domestic and export in proportion to energy (TWh)

Connections and Registrations

Connections & Registrations performs reliability assessments, performance validation and registration activities for all new and modified connections that connect to the IESO Controlled Grid and/or participate in the IESO Administered Markets.

Budget: \$4,987,700

Allocation method: Domestic and export in proportion to energy (TWh)

Operational Effectiveness

Operational Effectiveness assesses power system events, develops processes and documentation for executing tasks in Market Operations, supports Market and System Operations compliance with reliability standards, maintains Operating Agreements with Ontario transmitters and neighboring system operators, maintains ancillary service contracts with market participants and prepares power system emergency plans.

Budget: \$3,634,964

Allocation method: Domestic and export in proportion to energy (TWh)

System Operations

System Operations Department (SOD) is responsible for real-time operations. SOD staff direct the reliable operations of the Ontario power system within system capabilities, and operate the Ontario electricity market to efficiently select resources (both generation and dispatchable load resources within Ontario plus economic imports from and exports to neighboring jurisdictions) to balance supply and demand and prepare data – including market prices and resource schedules – for settlement.

Budget: \$11,891,779

Allocation method: Domestic and export in proportion to energy (TWh)

Market Forecast and Integration

Market Forecasts and Integration (MFI) is responsible for the period 2-30 days in advance of each trade date. MFI staff assesses and approve Market Participant requests to remove equipment from service for maintenance (~15,000 requests

annually), assess near-term resource adequacy requirements and publish reports detailing the state of the power system, allowing market participants to plan their operations. Each day MFI staff also prepare the daily Operating Plan to be executed by System Operations for the next day's operation, which includes forecasts of electricity demand and the output of variable generators in the province (both wind and solar), and a schedule of resources committed to satisfy next day electricity demand. MFI staff also deliver an extensive amount of training within Market Operations to on-board new staff and to provide continuing education, allowing Market Operations to meet requirements of reliability standards bodies.

Budget: \$2,602,330

Allocation method: Domestic and export in proportion to energy (TWh)

Operations Change Initiatives

Operations Change Initiatives is a project management office leading and supporting change initiatives impacting the business unit and liaising with other business units on capital programs and business planning.

Budget: \$910,270

Allocation method: Domestic and export in proportion to energy (TWh)

5.1.3 MARKET AND RESOURCE DEVELOPMENT

Vice President Office

The VP's Office provides overall management of the business unit.

Budget: \$1,228,410

Allocation method: Sum of allocated costs of the departments

Contract Management

The Contract Management group is responsible for managing contracts resulting from the IESO's electricity supply procurements, as well as demand-side management and load management initiatives. As of Q2 2015, the IESO had approximately 23,217 MW of

electricity supply capacity under contract. This group is responsible for the fulfillment of the IESO's obligations under these contracts, including financial settlement, enforcement of supplier's obligations under these procurement contracts, data collection, analysis and reporting on the contracts. This group also manages the various energy support programs under the Green Energy and Green Economy Act, 2009.

Budget: \$7,245,981

Allocation method: Domestic class only

Renewables Procurement

The Renewables Procurement group is responsible for procuring electricity supply from renewable resources undertaken in response to directives received from the Minister of Energy. The group provides analysis and policy advice to the government, designs, implements, and executes procurement programs and initiatives, and interacts with stakeholders for all renewable generation technologies as well as energy storage. A key focus of the group continues to be the design and administration of the FIT and microFIT programs. However, the group is also responsible for other procurement activities, such as the design and implementation of competitive procurements (e.g., Large Renewable Procurement), and the negotiation of bilateral contracts for renewable energy, including opportunities to secure renewable generation from other jurisdictions.

Budget: \$2,661,529

Allocation method: Domestic class only

Clean Energy Procurement

The Clean Energy Procurement group is responsible for procuring supply from clean energy resources undertaken in response to directives from the Minister of Energy. The group's primary focus is the design and implementation of procurements for natural gas-fired generation, including combined-cycle, simple-cycle, and combined heat and power ("CHP"). Procurements also include supply from other sources, such as energy recovery projects, energy from waste ("EFW") projects, coal-fired facilities converted to natural gas, and the procurement of load management services. Clean Energy

Procurement also provides strategic, analytical and research support to groups within the Market and Resource Development as well as at the organizational level.

Budget: \$1,224,622

Allocation method: Domestic class only

Policy and Analysis

This group has merged with the Clean Energy Procurement and Contract Management groups. Consequently, it will not appear as a separate functional-category to be allocated in the 2016 cost allocation model. For purposes of the 2015 cost allocation it was treated as a separate category, reflecting the breakdown of the 2015 budget. The allocation will not be affected by the merging of these departments since the allocation method will not be changed as a result of the merging of the departments.

Budget: \$1,455,035

Allocation method: Domestic class only

Markets

The Markets group is responsible for the development of the IESO administered markets (IAM) and supports the advancement of sector policies that promote the IESO's market principles. The IAM includes participation from dispatchable and non-dispatchable generation and loads, as well as traders importing and exporting power on the interties. The primary focus of the group is to improve the ability of the IAM to deliver system reliability efficiently, by encouraging competition, innovation and enabling informed decisions by all participants through transparent and efficient price signals. The group works with internal and external stakeholders in the development of potential changes and through the market rule amendment process that governs market design and participation. The group also provides quantitative analysis and research that supports market development and other sector policy initiatives.

Budget: \$5,499,521

Allocation method: Domestic and export in proportion to energy (TWh)

5.1.4 CONSERVATION AND CORPORATE RELATIONS

Vice President Office

The VP's Office provides overall management of the business unit.

Budget: \$764,142

Allocation method: Sum of allocated costs of the departments

Conservation Performance

The Conservation Performance group is responsible for verification and validation of energy and demand savings and cost effectiveness analysis of conservation programs delivered to direct or transmission-connected customers and to distribution-connected or LDC customers. The group also manages the review and approval of LDC CDM Plans and the LDC-led business cases for new conservation programs and pilots. The group provides sector-based (residential, commercial /institutional and industrial) engineering support specific to program design, program applications and other technical matters. A key mandate of the group is the assessment of conservation potential through the Achievable Potential Study and other market research studies on customer, channel, partner and brand engagement with conservation programs.

Budget: \$4,091,445

Allocation method: Domestic class only

Business Development

The Business Development Group is responsible for engaging the marketplace in energy conservation activities and managing relationships with key stakeholders (LDC's and channel partners) and customers to help grow capability across the province. The group provides strategic guidance on key conservation messaging and helps build awareness through its customer outreach activities. Business development is also responsible for delivering conservation solutions to direct connected customers.

Budget: \$2,389,847

Allocation method: Domestic class only

Strategic Engagement and Innovation

The Strategic Engagement & Innovation group is responsible for functions crossing the company. The group is responsible for government affairs and issues management, managing relationships with municipal governments, facilitating Local Advisory Committees to support system planning and broader public engagement, and support demand side innovation through the Conservation Fund. The group works closely with the Stakeholder and Public Affairs group to coordinate the IESO's activities.

Budget: \$3,218,911

Allocation method: Domestic and export in proportion to energy (TWh)

Program Delivery and Partner Services

The Program Delivery & Partner Services group is responsible for managing the division's budget requirements, qualifying payment requests, developing and managing of contracts, co-ordinate internal audits and compliance tests, all internal and external reporting of achievements and spending of our program and services and managing the delivery of all the conservation programs with our partners.

Budget: \$2,058,304

Allocation method: Domestic class only

Stakeholder and Public Affairs

The Stakeholders and Public Affairs group is responsible for media relations, employee communications, editorial services, executive speeches and presentations, French translation, the IESO's corporate websites and social media accounts, conservation marketing and the saveONenergy brand, the Stakeholder Advisory Committee, stakeholder engagement framework, customer education, market training and outreach and support to customers and market participants. These responsibilities stretch across all functions of the IESO.

Budget: \$4,520,581

Allocation method: Domestic and export in proportion to energy (TWh)

Marketing

This department has merged with the Stakeholder and Public Affairs department described above. Consequently, it will not appear as a separate category to be allocated in the 2016 cost allocation model. For purposes of the 2015 cost allocation it was treated as a separate category, reflecting the breakdown of the 2015 budget. The allocation will not be affected by the merging of these departments since the allocation method will not be changed as a result of the merging of the departments.

Budget: \$528,424

Allocation method: Domestic class only

5.1.5 INFORMATION AND TECHNOLOGY SERVICES

Vice President Office

The VP's Office provides overall management of the business unit.

Budget: \$1,033,559

Allocation method: Sum of allocated costs of the departments

Information Technology Services supports the IESO's existing business applications and infrastructure, provides internal customer service relating to the IESO's IT systems, and develops solutions to respond to changing business needs. All departments provide broad-based support to all other IESO business units and departments.

This business unit includes the following departments:

- Organizational Governance (\$3,638,288)
- Business Solutions and Business Analysis (\$11,622,249)
- Technology Support (\$15,875,082)
- Solutions (Adelaide) \$563,825)
- IT Operations (\$2,346,315)
- Facilities (\$9,170,740)

Allocation method: Total Other OM&A

5.1.6 PLANNING, LAW, AND ABORIGINAL RELATIONS

Vice President Office

The VP's Office provides overall management of the business unit.

Budget: \$1,318,290

Allocation method: Sum of allocated costs of the departments

General Counsel

The Legal Services group (General Counsel) provides legal advice and guidance on a full range of legal matters including: compliance with all relevant laws and market rules, dispute resolution/litigation support, development & management of contracts, procurement processes for the full range of IESO activities, including conservation programs and generation supply procurements, the development of market rules and programs. It also provides governance and logistical support for the Board of Directors to ensure effective and timely decision making, and manages requests to the organization under the Freedom of Information and Protection of Privacy Act.

Budget: \$4,194,831

Allocation method: Domestic and export in proportion to energy (TWh)

Regulatory Affairs

The Regulatory Affairs group is responsible for monitoring ongoing issues and managing IESO applications to/filings with multiple bodies, including the Ontario Energy Board (OEB), the National Energy Board (NEB), the North American Electric Reliability Corporation (NERC), the U.S. Federal Energy Regulatory Commissions (FERC) and the Northeast Power Coordinating Council (NPCC). Regulatory Affairs manages the IESO's annual revenue requirement submission with the OEB, as well as the IESO's participation in applications before, and any rules, standard, policies, or codes proposed by, the regulatory bodies listed above.

Budget: \$3,267,802

Allocation method: Domestic and export in proportion to energy (TWh)

Board

The Legal Services group (Board) provides governance and logistical support for the Board of Directors to ensure effective and timely decision making.

Budget: \$715,210

Allocation method: Domestic and export in proportion to energy (TWh)

First Nations and Metis Relations

The First Nations and Métis Relations group ("FNMR") is responsible for developing and maintaining the IESO's relationship with First Nations and Métis communities across the province. The IESO works to support the participation of Aboriginal communities in renewable energy through targeted incentives and initiatives.

The IESO also works to raise awareness and encourage Aboriginal community participation in IESO procurement processes, funding programs, and regional and long-term energy planning initiatives. At times, the First Nations and Métis Relations group is responsible for carrying out the procedural aspects of any duty to consult with Aboriginal communities as identified by the Crown.

Budget: \$807,900

Allocation method: Domestic class only

Transmission Integration

The responsibilities of the transmission integration group include regional integrated planning, bulk transmission planning, associated community and stakeholder outreaches and providing support to procurements undertaken by the IESO through performing assessments and testing of connections availability. While the work of transmission integration can benefit all customer groups, especially work on or that directly benefits interconnections, it is primarily performed to benefit Ontario consumers.

Budget: \$2,025,408

Allocation method: Domestic class only

Resource Integration

The Resource Integration group is uniquely responsible in Ontario for developing integrated power system plans to meet the projected electricity service requirements for Ontario customers at both the regional and provincial levels. Its plans provide advice to the government to help develop the Long Term Energy Plan and to guide program and capital investment decisions for new initiatives in the market, transmission, conservation and supply resources. The group focuses on the supply aspects of the plan and the integration of market, conservation, supply and transmission considerations to meet Ontario electricity needs. The Power System Planning Division works closely with other areas of the IESO to develop and implement initiatives.

Budget: \$2,360,010

Allocation method: Domestic class only

Demand and Conservation Planning

Demand and Conservation Planning (formerly Conservation Integration) develops estimates of electricity demand and conservation resources for the near, mid and long term. Demand and conservation estimates provide context for the development of supply and transmission plans, support regional planning and support the development of demand management programs. Near term forecasts support the development of the 18 Month Outlook.

Budget: \$347,768

Allocation method: Domestic class only

5.1.7 CORPORATE SERVICES

Vice President Office

The VP's Office provides overall management of the business unit.

Budget: \$549,954

Allocation method: Sum of allocated costs of the departments

Corporate Controller

The Corporate Controller's Department manages and is responsible for asset stewardship, controls and transaction processing at the IESO. This includes ensuring that financial resources are used effectively and that appropriate corporate policies and procedures are deployed in the areas of corporate accounting and reporting, market accounting and reporting, procurement and payroll. The activities carried out by the Corporate Controller's Department relate to ensuring appropriate controls exist and are implemented to validate the IESO's management of public funds. The functional responsibilities for this group are as follows:

- transaction processing, accounting and financial reporting for both the Corporation and the Market;
- tax compliance and reporting;
- monitoring and review of internal controls, as applicable;
- payroll; and
- procurement.

Budget: \$3,294,988

Allocation method: Domestic and export in proportion to energy (TWh)

Financial Planning and Analysis

The Financial Planning & Analysis (FP&A) group supports decision making and strategy development through leading budgeting and business planning, providing timely and quality analysis, implementing performance metrics and overseeing a risk framework to identify and mitigate risks to the business. FP&A assists other business units to deliver their initiatives by providing value-added analysis and strategic decision support. FP&A also provides financial reporting (i.e., monthly, quarterly and annual) as well as special purpose reports (e.g. Board of Directors, Province of Ontario).

Budget: \$1,401,192

Allocation method: Total Other OM&A

1 ***Treasury and Pension Operations***

2 The Treasury and Pension Operations group manages and is responsible for the IESO's
3 overall treasury related activities (liquidity, debt), the external insurance risk programs,
4 the IESO markets' credit risk framework, and the IESO pension plan's investments.

5 Budget: \$1,663,835

6 Allocation method: Total Other OM&A

7 ***Human Resources***

8 The Human Resources group provides leadership, systems, policies and processes to
9 achieve the organizational goals of attracting, developing, engaging and retaining skilled
10 individuals.

11 The Human Resources group provides ongoing and effective support for recruitment
12 and selection, performance management, conflict facilitation, labour relations, resolution
13 of legal and employee relations issues, and employee communications.

14 Working with senior management assists with the implementation of actions to increase
15 individual, group and organizational effectiveness, such as learning and development
16 initiatives, career planning, talent review and succession management planning, and
17 group effectiveness facilitation.

18 Budget: \$4,161,455

19 Allocation method: Total Other OM&A

20 ***Settlements***

21 IESO settlements oversees and reconciles more than \$14 billion in funds from the
22 electricity market by collecting funds from buyers; transferring funds to sellers; collecting
23 transmission tariffs; as well as settling the transmission rights market.

24 Budget: \$5,279,476

25 Allocation method: Domestic and export in proportion to energy (TWh)

5.1.8 MARKET ASSESSMENT AND COMPLIANCE DIVISION

The Market Assessment & Compliance Division (MACD) is responsible for investigating and determining whether market participants are compliant with the IESO market rules. MACD oversees activities and conduct in the electricity market through monitoring for anomalous outcomes and the investigation of potential breaches of the rules, which include North American reliability standards. MACD conducts enforcement of the rules in order to foster compliance and deter non-compliance. Market participants who breach the market rules may be subject to sanctions if appropriate. In addition, MACD performs audits and other reviews that can lead to the recovery of payments received by market participants. MACD also works with other IESO business units on market participant communications, education and training to promote compliance. Through its work to improve compliance with the market rules and reliability standards MACD's work benefits all market participants and end use customers.

Budget: \$3,612,410

Allocation method: Domestic and export in proportion to energy (TWh)

5.1.9 OTHER (AMORTIZATION, INTEREST, UNCLEARED SALARY)

Amortization

Amortization is the standard expensing of all capital assets. IESO assets and amortization are not tracked by department; hence, they cannot be functionally-classified in detail. Elenchus notes that the pre-merged (December January 1, 2015) asset balances show that 94% of the total assets were former IESO assets. Former IESO assets would be allocated on the basis of TWh.

Budget: \$18,699,757

Allocation method: Domestic and export in proportion to energy (TWh)¹²

¹² Elenchus used the 2014 yearend breakdown of former IESO and former OPA assets to derive the weighted average of former IESO assets allocated on TWh and former OPA allocated on Other OM&A. See Appendix B. This calculation indicates that the TWh allocator is a reasonable proxy for this more detailed derivation of an Amortization allocator based on 2014 asset values.

Interest

The IESO revenue requirement does not include a weighted average cost of capital applied to rate base. Interest included in the IESO's revenue requirement is actual interest on net funding required to finance capital investments and working capital, net of accumulated surplus and other sources of funding.

Budget: \$1,284,000

Allocation method: Domestic and export in proportion to energy (TWh)¹³

Uncleared Salaries

"Uncleared salary" is an accounting label that is carried over from the legacy IESO financial systems. The amount is made up essentially equally of two items: provision for workforce harmonization post-merger (job mapping and pension-related costs) and amounts related to pension, expensed in the year arising from to IESO's adoption of public sector accounting standards:

Budget: \$6,728,736

Allocation method: Total Other OM&A

5.2 ALLOCATION

Allocation is the final step in any cost allocation model. It is the step that assigns costs to customer classes on the basis of the cost causality principle. In the case of the IESO, costs (functional-categories) are caused by domestic and/or export customers.

Shared expenses relate to functions that are necessary to serve both domestic and export customers, including the operation of the market and overall operation of the IESO. These expenses are essentially fixed and are required regardless of throughput. However, the size of the business units is influenced by the scale of the overall electricity market in Ontario. Further, it is reasonable to view the benefit that is derived

¹³ Elenchus used the 2014 yearend breakdown of former IESO and former OPA assets to derive the weighted average of former IESO assets allocated on TWH and former OPA allocated on Other OM&A. See Appendix B. This calculation indicates that the TWh allocator is a reasonable proxy for this more detailed derivation of an Interest allocator based on 2014 asset values.

1 by participants in the market as being proportionate to the volume of energy transmitted.
2 For that reason, where a service is used by all customers the cost is normally
3 considered to be energy related and costs are allocated on the basis of TWhs.

4 The IESO does not undertake any activities solely for the benefit of export customers.

5 Some functions exist primarily or exclusively for the benefit of domestic customers. All
6 of the costs of these functions are allocated to domestic customers. As detailed in the
7 preceding section, these include four of the five groups in the Market and Resource
8 Development business unit, as well as selected departments within the business units
9 of Conservation and Corporate Relations, and Planning, Law, and Aboriginal Relations.

10 Activities dedicated to domestic customers are activities that would not be required if the
11 transmission system were used only to wheel power into, out of, or through the
12 province. Hence, the activities are caused by, or benefit, only the domestic customers.
13 For example, renewable and clean energy procurement is undertaken in accordance
14 with government policy and is therefore considered to be "caused" by in-province (i.e.,
15 domestic) consumers. The primary beneficiaries are Ontario residents. These activities
16 may generate indirect benefits for export customers, but no consideration is given to
17 export customers and their ability to enjoy the benefit of these activities. Put simply,
18 there is no causal relationship between the wheeling of power through Ontario and the
19 cost incurred due to clean energy and renewable procurement.

20 The cost of groups that functionally support the rest of the organization are allocated to
21 the classes in the same proportion as the costs of the direct market support functions
22 are allocated (i.e., Other OM&A). This allocation is used for the CEO Office, Information
23 and Technology Services and three of the five groups within Corporate Services
24 (Financial Planning & Analysis, Treasury & Pension and Human Resources).

25 The costs related to NERC membership are caused in large part, but not exclusively to
26 maintain Ontario's export capability. These costs are allocated on a 50:50 basis to
27 export and domestic customers.

28 Appendix A shows the allocators used for each functional-category. The derivation of
29 each allocator appearing in the Appendix is described below.

5.2.1 PRIMARY ALLOCATORS

In the IESO cost allocation model, the allocation of energy related costs is based on the terawatt-hours of energy transmitted. Based on the forecasted 2015 Gross TWh – inclusive of embedded generation, the Terawatt-Hour Allocator allocates 89.07% of costs Domestic customers and 10.93% of costs to Export customers.

None of the IESO costs are allocated on the basis of demand. Unlike the transmission system itself, all of the IESO costs are most logically associated with (or caused by) the energy throughput of customers.

The individual customer-related costs (billing of market participants) are not significant. These costs are not allocated based on the number of customers in each class as they typically are in distribution cost allocation models.¹⁴

Table 3 presents the primary allocators used in the 2015 IESO cost allocation model. The TWh allocator will change for 2016 and subsequent years reflecting changes in the relative forecast volumes of domestic and export energy.

Table 3: Primary Allocators Used in the IESO Cost Allocation Model

	Total	Domestic	Export
Dedicated to Domestic	100.00%	100.00%	0.00%
TWh	100.00%	89.07%	10.93%
Equal Halves	100.00%	50.00%	50.00%

5.2.2 COMPOSITE ALLOCATORS

A composite allocator for each business unit is derived based on the departmental allocated costs of that business unit. The VP's office for each business unit is then allocated on the basis of its respective composite allocator.

Table 4 presents the composite allocators used in the 2015 IESO cost allocation model. These allocators are likely to change slightly when updated for 2016 and future years reflecting changes in budget allocations and the underlying cost allocations.

¹⁴ Each market participant receives one bill that includes the fees related to both domestic and export activity. Some generators handle their exports through a separate company that is also a market participant, so each entity would receive a separate bill for the IESO fees.

Table 4: Composite Al.locators

	Total	Domestic	Export
Market and System Operations	100.00%	89.07%	10.93%
Market and Resource Development	100.00%	96.68%	3.32%
Conservation and Corporate Relations	100.00%	94.63%	5.37%
Information and Technology Services	100.00%	90.61%	9.39%
Planning, Law and Aboriginal Relations	100.00%	93.49%	6.51%
Corporate Services	100.00%	89.78%	10.22%

5.3 COST ALLOCATION RESULTS

The resulting revenue responsibility and revenue to cost ratios are detailed in Table 5.

Table 5: Cost Allocation Results

	Total	Domestic	Export
Revenue, dollars	\$184,890,933	\$164,690,256	\$20,200,677
Revenue, percent	100.00%	89.07%	10.93%
Revenue Requirement, dollars	\$184,890,933	\$167,215,374	\$17,675,559
Revenue Requirement, percent	100.00%	90.44%	9.56%
MWh	161,226,461	143,611,300	17,615,161
Allocated Cost per MWh	\$1.1468	\$1.1644	\$1.0034
Revenue to Cost Ratio at \$1.1468/MWh	100.00%	98.49%	114.29%

Table 5 shows that approximately 90% of the total revenue requirement is allocated to the domestic throughput. The domestic throughput is close to 89% of the total throughput. Since the percentage of the revenue requirement (costs) allocated to the domestic throughput is slightly greater than the percentage of volume attributable to domestic throughput, when the same fee is assumed for both domestic and export throughput, the resulting domestic revenue to cost ratio is less than 100% and the export revenue to cost ratio is greater than 100%.

1 The export variance from 100% is larger than the domestic variance because the export
2 volume is one-ninth of the domestic volume. Since the dollar values of the variances
3 from 100% are identical, the percentage variances differ by a factor of 9.

4 **6 CONCLUSIONS AND RECOMMENDATIONS**

5 The reasoning that supported the change from net to gross billing for the former IESO
6 usage fee in EB-2013-0381 is equally applicable to the portion of the new IESO revenue
7 requirement that corresponds to costs that were previously included in the OPA revenue
8 requirement. It is therefore recommended that the new IESO usage fee be billed on the
9 basis of AQEW + SQEW + EG as defined in section 3, above.

10 With respect to the justification for differentiating the usage fee that is applied to
11 domestic and export customers, it is noted that the revenue to cost ratios for the
12 separate classes if a single usage fee is adopted would be 98.5% and 114.3% for the
13 domestic and export classes, respectively. Using the OEB-approved revenue-to-cost
14 ratio range for most distribution classes of 80% to 120%, it can be concluded that the
15 uniform rate would be deemed to be equitable for both classes of customers. Rates
16 within a Board approved range are not considered to be either under-collecting or over-
17 collecting the causal costs related to a customer class, given the degree of uncertainty
18 inherent in cost allocation and other rate making principles.

Appendix A: Allocation Detail Worksheet

Accounts	2015 Budget	Allocator Used
CEO		
CEO Office	1,440,412	O&M
CEO Office - NERC Membership	3,898,640	HALF
Internal Audit	1,434,104	O&M
Market and System Operations		
VP Office	1,407,935	MSO
System Performance	6,198,803	TWh
Reliability Assessments	3,634,163	TWh
Connections & Registration	4,987,700	TWh
Operational Effectiveness	3,634,964	TWh
System Operations	11,891,779	TWh
Market Forecasts & Integration	2,602,330	TWh
Operations Change Initiatives	910,270	TWh
Market and Resource Development		
VP Office	1,228,410	MRD
Contract Management	7,245,981	DOM
Renewable Procurement	2,661,529	DOM
Clean Energy Procurement	1,224,622	DOM
Policy & Analysis	1,455,035	DOM
Markets	5,499,521	TWh
Conservation and Corporate Relations		
VP Office	764,142	CCR
Conservation Performance	4,091,445	DOM
Business Development	2,389,847	DOM
Strategic Engagement & Innovation	3,218,911	TWh
Program Delivery & Partner Services	2,058,304	DOM
Stakeholders & Public Affairs	4,520,581	TWh
Marketing	528,424	DOM
Information and Technology Services		
VP Office	1,033,559	ITS
Organizational Governance	3,638,288	O&M
Business Solutions + Business Analysis	11,622,249	O&M
Technology Support*	15,875,082	O&M
Solutions (Adelaide)*	563,825	O&M
IT Operations	2,346,315	O&M
Facilities	9,170,740	O&M

Accounts	2015 Budget	Allocator Used
Planning, Law and Aboriginal Relations		
VP Office	1,318,290	PLAR
General Counsel	4,194,831	TWh
Regulatory Affairs	3,267,802	TWh
Board	715,210	TWh
First Nations & Metis Relations	807,900	DOM
Transmission Integration	2,025,408	DOM
Resource Integration	2,360,010	DOM
Conservation Integration	347,768	DOM
Corporate Services		
VP Office	549,954	CS
Corporate Controller	3,294,988	TWh
Financial Planning & Analysis	1,401,192	O&M
Treasury & Pension Operations	1,663,835	O&M
Human Resources	4,161,455	O&M
Settlements	5,279,476	TWh
MACD	3,612,410	TWh
Others (IESO Corp Adj+Int+Amort)		
Amortization	18,699,757	TWh
Interest	1,284,000	TWh
Uncleared salary	6,728,736	O&M
Total Expenses	184,890,933	

Description of Allocators

Allocator	Description
Simple Allocators	
DOM	Allocated to Domestic
TWh	Terawatt Hours
HALF	50% Domestic, 50% Export
Composite Allocators	
CCR	Conservation and Corporate Relations
CS	Corporate Services
ITS	Information and Technology Services
MRD	Market and Resource Development
MSO	Market and System Operations
O&M	O&M (i.e., direct department expenses)
PLAR	Planning, Law and Aboriginal Relations

- 1 Note: The allocator values are provided in the Cost Allocation model, worksheet "Allocators".
- 2 The Allocated account balances are provided in the same model, worksheet "Summary by
- 3 Class & Accounts".

Appendix B: Asset Allocation Test

Assets

Accounts	2015 Budget	Allocator Used
Former IESO (Assets)		
Assets	50,501,000	TWh
Market systems & applications	255,047,000	TWh
Infrastructure & other assets	48,132,000	TWh
Assets Under Construction	19,671,000	TWh
Former OPA (Assets)		
Furniture & Equipment	3,384,000	O&M
Audio Visual	237,000	O&M
Telephone	382,000	O&M
Leasehold improvements	5,219,000	O&M
Computer Hardware	4,873,000	O&M
Computer Software	9,442,000	O&M
Accumulated Amortization	(310,970,000)	Assets
Net Fixed Assets	85,918,000	

Note: The IESO does not have a Rate Base similar to rate regulated utilities. Fixed Assets are allocated to test the assumption that TWh is a sensible allocator for Interest and Amortization.

Allocator Comparison

	Domestic	Export
Net Assets Allocated as Above	\$76,535,417	\$9,382,583
Resulting Allocator	89.08%	10.92%
TWh Allocator	89.07%	10.93%

**2016 REGISTRATION FEES AND DEFERRAL AND
VARIANCE ACCOUNTS**

The IESO proposes to continue charging the registration and application fees as previously approved by the Board and as described below:

- a) Approval to continue to charge registration fees of up to \$10,000 per proposal for electricity supply and capacity procurements, including conservation and load management procurements.
- b) Approval to continue to charge non-refundable application fees for the Feed-in-Tariff ("FIT") program of \$0.50/kW of proposed Contract Capacity, having a minimum of \$500 and to a maximum of \$5,000.
- c) Approval to continue charging the Large Renewable Procurement qualification submission fee from Request for Qualification applicants which is the sum of:
 - a. The greater of: (a) \$2,000 for the first (or only, if only one renewable fuel is proposed) proposed renewable fuel submitted; or (b) \$1.00 per KW of estimated contract capacity for all large renewable projects to a maximum amount of \$30,000; plus
 - b. \$2,000 for each additional renewable fuel proposed.
- d) Approval to continue charging \$1,000 for the IESO's market participation application fee.

All fees listed above received approval through a Board decision dated November 6, 2014 (EB-2013-0326), except the \$1,000 application fee of the IESO, which received approval through a Board decision dated May 22, 2014 (EB-2013-0381).

The IESO charges registration fees to assist in covering a portion of the costs associated with processing and reviewing submissions. The use of registration fees is common in other jurisdictions running competitive processes for the procurement of electricity generation, and serves as a tool to focus IESO resources on applicants who are committed to the procurement process.

1 The IESO has forecast registration fees revenue of \$1 million for 2016. The IESO expects
2 this revenue to be collected from the LRP and FIT programs based on the IESO's
3 expectations of the applications and submissions it will receive in 2016.

4 **2014 Board Approved Deferral and Variance Accounts**

5 In its 2014 Revenue Requirement Submission the OPA sought, and the Board approved
6 the deferral accounts listed below:

- 7 • Government Procurement Costs Deferral Account ("GPCDA"),
- 8 • Registration Fee Deferral Account ("RFDA"), and
- 9 • Forecast Variance Deferral Account ("FVDA").

10 The IESO did not have any Board-approved variance or deferral accounts prior to its
11 merger with the OPA.

12 As no revenues were recorded in the GPCDA in 2014 or 2015 and no revenues are
13 expected to be recorded in the GPCDA in 2016 the IESO is not requesting a GPCDA for
14 2016.

15 The IESO does not propose to continue the RFDA but instead, will include revenues
16 generated by registration fees in 2016 in its revenue requirement for 2016, as described
17 in Exhibit B-1-1. The 2014 year-end balance of the RFDA was \$2.7 million, and the IESO
18 proposes to use this amount to cover a portion of the OPA's merger costs, as described
19 in Exhibit B-3-1. The 2015 year-end balance of the RFDA will be provided in the
20 March 31, 2016 filing of supplementary evidence. The IESO balances its borrowing
21 costs with any earnings through interest on an ongoing basis in order to minimize its,
22 and therefore ratepayers, costs

2016 Board Approved Deferral and Variance Accounts

For 2016, the IESO requests approval to continue to use only the Forecast Variance Deferral Account. As the IESO's revenue requirement is approved by the Board on a forecast basis and it is to be expected that there will generally be some variance between actual expenses and the Board-approved revenue requirement, these variances will be tracked through the FVDA as the OPA has historically done.

1 **TREATMENT OF IESO & OPA MERGER COSTS AND OPERATING RESERVES**

2 **IESO & OPA Merger Costs**

3 The government introduced the merger of the IESO and OPA in the 2014 Ontario Budget,
4 *Building Opportunity and Securing Our Future Act (Budget Measures), 2014*. The IESO and the
5 OPA began work on the merger of the organizations after receiving a July 17, 2014 letter
6 from the Minister of Energy describing the proposed legislation that would merge the two
7 entities and suggesting both agencies engage in the development of a merger work plan
8 given that speedy passage and Royal Assent, subject to legislative approval, was expected.
9 The legislation was ultimately passed on September 17, 2014 and came into effect on
10 January 1, 2015.

11 *Merger Savings*

12 The merger of the IESO and the OPA on January 1, 2015, has created the opportunity for
13 the IESO to better support change in the sector, and has generated efficiencies beneficial to
14 all market participants and usage fee payers. These benefits and other business planning-
15 related savings are illustrated by the IESO's proposed 2016 revenue requirement for costs
16 of \$182.1 million, and a net revenue requirement of \$181.1 million, when compared to the
17 \$190.2 million combined 2014 revenue requirements of the IESO (\$129.9 million) and OPA
18 (\$60.3 million).

19 The merger has driven savings which result from a workforce reduced by 35 employees,
20 real estate savings resulting from amalgamating staff into one location from two in
21 downtown Toronto and reducing the amount of floor space under lease at that location by
22 utilizing the space more efficiently, as well as the elimination of one Board of Directors.
23 These and other efficiencies have resulted in a decrease in annual costs of more than
24 \$5 million in 2015. Although there are risks and uncertainties in how future years will

1 unfold and the activities of the IESO may change, the IESO's 2016-2018 business planning
2 efforts build on these efforts to target savings of more than \$10 million by 2018.

3 *Merger Costs*

4 In order to merge the two organizations, the IESO and OPA incurred \$10.9 million in
5 merger costs on a combined basis in 2014. No merger costs were incurred in 2015 – the
6 IESO only included costs that were incurred in 2014 to enable the merger to take place. In
7 determining the merger costs, the time OPA and IESO staff spent on merger activities was
8 not tracked or included; only costs that were external, non-operating in nature and
9 incremental to regular operating costs were tracked and included as merger costs. The
10 costs associated with merging the two organizations that occurred in 2014 were tracked
11 separately and disclosed in each organization's 2014 Audited Financial Statements which
12 are available on the IESO's webpage, and at Exhibits A-3-2 and A-3-3 respectively
13 (\$5.3 million incurred by IESO and \$5.6 million incurred by OPA). The majority of the
14 costs were associated with compensation and benefits costs due to staff reductions of
15 35 people (\$7.8 million). Other merger costs were in contracted services and consultant
16 costs, which included legal and project management support (\$1.4 million), and other
17 expenses including facilities costs related to reduced office space as the IESO consolidated
18 two downtown office locations (\$1.7 million).

19 A breakdown of the costs incurred by the OPA and IESO in 2014 is shown in Table 1
20 below.

Table 1

2014 Merger Costs (\$ Million)			
	OPA	IESO	TOTAL
Labour	5.0	2.8	7.8
Contract services and consultants	0.6	0.8	1.4
Other	-	1.7	1.7
Sub-total	5.6	5.3	10.9

Treatment of IESO & OPA Merger Costs

For 2014, the OPA did not forecast revenues generated by the FIT program fee, the Large Renewable Procurement qualification submission fee, or any other registration fee, and did not include these fees in the OPA's 2014 usage fee calculation. Instead the OPA requested, and the Board approved, the establishment of the Registration Fee Deferral Account ("RFDA") to record and track revenues from completed procurement processes.

When the OPA filed the evidence cited above in August 2014, and when the Board approved the establishment of the RFDA in its November 6, 2014 Decision and Order, the merger of the IESO and OPA had been approved through legislation but had not yet taken effect. The Board's November 6, 2014 decision on the OPA's 2014 Revenue Requirement Submission approved the establishment of the RFDA and the Forecast Variance Deferral Account ("FVDA") but did not specifically speak to the treatment of funds tracked in the deferral accounts.

In its decision on the OPA's 2014 Revenue Requirement Submission, the Board found that merger costs "...should, if necessary, be applied for as part of a future revenue requirement

1 submission.”¹ The IESO recognizes that the costs associated with the merger and how
2 these were treated were of interest to the Board during the OPA’s 2014 Revenue
3 Requirement Submission and, as such, has provided a breakdown of how the IESO
4 proposes to treat these costs.

5 **The OPA’s Merger Costs**

6 The IESO proposes to fund the OPA’s 2014 merger costs of \$5.6 million through:

- 7 1. Utilizing the 2014 year-end surplus balance held in the Board approved RFDA, and
- 8 2. Utilizing the 2014 year-end surplus balance held in the Board approved FVDA,
9 which includes the OPA’s \$5 million operating reserve.

10 **1. The RFDA**

11 As the Board approved the establishment of the RFDA effective January 1, 2014, this
12 account had a zero balance on that date. As described in Exhibit B-2-1, in the calendar year
13 2014, \$2.7 million was generated through Board approved fees, and these were tracked in
14 the RFDA. The IESO proposes to use the 2014 year-end balance of the RFDA to partially
15 fund the OPA’s 2014 merger costs.

16 The 2015 year-end balance of the RFDA will be provided in the update the IESO will file
17 on March 31, 2016 and will be dealt with as described below.

18 **2. The surplus balance held in the FVDA at the end of 2014**

19 In 2014, the OPA had an operating surplus largely due to lower than expected operating
20 expenses. While the OPA’s forecast revenues were \$60.3 million, actual 2014 revenues
21 were \$60.2 million and operating expenses, not including merger costs, were \$57.7 million.
22 The OPA’s 2014 operating expenses were lower than forecast for multiple reasons,
23 primarily due to reduced professional consulting (\$3.3 million less than forecast). At year

¹ Page 7, OEB decision, EB-2013-0326, issued November 6, 2014

1 end 2014, an operating surplus of \$2.5 million in addition to the OPA's \$5 million operating
2 reserve resulted in a combined balance in the FVDA of \$7.5 million.

3 *RFDA + FVDA*

4 The RFDA balance of \$2.7 million plus the operating surplus in the FVDA of \$7.5 million
5 described above, less the OPA's merger costs of \$5.6 million, resulted in a final 2014 year-
6 end balance of \$4.6 million in the OPA's operating reserve. The resulting 2014 year-end
7 operating reserve balance of \$4.6 million is lower than the \$5 million operating reserve
8 allowed by the Board.

9 **The IESO's Merger Costs**

10 The IESO proposes to fund the IESO's 2014 merger costs of \$5.3 million through the
11 balance of the IESO's accumulated operating surplus as at the end of 2014.

12 While the IESO did not have any Board approved deferral accounts in 2014, it did have
13 greater than forecast revenues. In forecasting its 2014 revenues, the IESO used a forecast of
14 155.7 TWh as stated in the application filed November 4, 2013, while actual usage was
15 161.0 TWh. The IESO's 2014 operating expenses were lower than expected, primarily due
16 to reduced amortization expenses (fewer than planned assets coming into service). As a
17 result, the IESO's actual 2014 revenues were \$135.9 million and operating expenses were
18 \$132.6 million, which includes recovery of Canadian public sector accounting standards
19 ("PSAB") transition items of \$4.2 million, resulting in a 2014 operating surplus of
20 \$3.3 million. Effective January 1, 2011, the IESO adopted PSAB with a transition date of
21 January 1, 2010. The IESO includes a portion of the accumulated deficit resulting from the
22 PSAB transition items in the annual proposed expenditures to the OEB for recovery
23 through usage fees. The IESO also has a Board approved operating reserve of \$5 million,
24 resulting in a total 2014 year-end operating reserve of \$8.3 million before merger costs.

The IESO proposes to fund the IESO's 2014 merger costs of \$5.3 million through the 2014 year-end operating reserve of \$8.3 million. The resulting 2014 year-end operating reserve balance of \$3.0 million is lower than the \$5 million operating reserve allowed by the Board.

Treatment of the Year-end Balances of the IESO's 2015 Operating Reserve, the FVDA and the RFDA

As described above, the final 2014 year-end balance of the OPA's operating reserve was \$4.6 million and the final 2014 year-end balance of the IESO's operating reserve was \$3 million. This results in the merged organization beginning 2015 with an operating reserve of \$7.6 million, rather than the combined \$10 million previously approved by the Board for the IESO and OPA.

The 2014 balances are rolled into, and therefore accounted for, in the 2015 balances of the same account, the FVDA. The 2014 final year-end balance of the IESO's operating reserve has been rolled into the 2015 balance of the FVDA. The IESO proposes that any 2015 final year-end balance in the FVDA in excess of \$10 million be rebated to usage fee payers by the IESO.

Information on the 2015 year-end balances of the RFDA, the FVDA and the resulting final 2015 year-end balance of the operating reserve will be provided in the update to be filed on March 31, 2016.

As described in Exhibit B-1-1, the IESO proposes to rebate (or charge) any balance in the final year-end 2015 operating reserve above (or less than) \$10 million, based on the IESO's audited 2015 financial statements as approved by the IESO Board. The amount to be rebated (or charged) based on the audited operating reserve balance on December 31, 2015, will be provided in the March 31, 2016 update.

1 The IESO is proposing that any final year-end 2015 FVDA balance in excess of \$10 million
2 be recalculated into two pools of funds, as described below, to allow funds to be returned
3 to the OPA and IESO usage fee payers in a manner which accurately and fairly reflects the
4 usage fees they paid in 2015 as a percentage of total IESO revenues. The IESO proposes
5 that:

- 6 1. any returns to OPA usage fee payers be based on the revenue earned by the OPA
7 usage fee in 2015 divided by total revenues earned by the IESO in 2015, and
- 8 2. any returns to IESO usage fee payers be based on the revenue earned by the IESO
9 usage fee in 2015 divided by total revenues earned by the IESO in 2015.

10 The IESO will file a financial update on March 31, 2016 with audited financial statements,
11 including the 2015 year-end balance of the FDVA, including the IESO's final 2015 year-end
12 operating reserve, and the proposed rebates (or charges) to OPA and IESO fee payers.

Page Intentionally Blank