

Notes to Financial Statements

1. NATURE OF OPERATIONS

- a) The Independent Electricity System Operator (IESO) is a not-for-profit, non-taxable, corporation established pursuant to Part II of the *Electricity Act, 1998*. The predecessor Independent Electricity System Operator and the Ontario Power Authority (OPA) were amalgamated by statute effective on January 1, 2015, and continued as the Independent Electricity System Operator. As set out in the *Electricity Act, 1998*, the IESO operates pursuant to a licence granted by the Ontario Energy Board (OEB). The amalgamation was effected pursuant to Bill 14, *Building Opportunity and Securing Our Future Act (Budget Measures), 2014*, which received Royal Assent on July 24, 2014. Schedule 7 of the Bill amended the *Electricity Act, 1998*, by amalgamating the two predecessor corporations and by continuing them as the Independent Electricity System Operator. 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 amalgamated IESO and all their rights, properties and assets become the rights, properties and assets of the amalgamated 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 objects of the IESO as contained in the *Electricity Act, 1998*, and Ontario Regulation 288/14 are as follows:

- to exercise the powers and perform the duties assigned to it under this Act, the regulations, directions, the market rules and its licence;
- to enter into agreements with transmitters to give it 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 this Act;
- to participate in the development by any standards authority of criteria and standards relating to the reliability of the integrated power system;
- to establish and enforce criteria and standards relating to the reliability of the integrated power system;
- to work with the responsible authorities outside of Ontario to co-ordinate the IESO's activities with the activities of those authorities;
- to operate the IESO-administered markets to promote the purposes of this Act;
- to engage in activities related to contracting for the procurement of electricity supply, electricity capacity and conservation resources;
- to engage in activities related to settlements, payments under a contract entered into under the authority of this Act and payments provided for under this Act or the *Ontario Energy Board Act, 1998*;
- to engage in activities in support of the goal of ensuring adequate, reliable and secure electricity supply and resources in Ontario;
- to forecast electricity demand and the adequacy and reliability of electricity resources for Ontario for the short-term, medium-term and long-term;
- to conduct independent planning for electricity generation, demand management, conservation and transmission;
- 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 engage in activities in support of system-wide goals for the amount of electricity to be produced from different energy sources;
- to engage in activities that facilitate load management;
- to engage in activities that promote electricity conservation and the efficient use of electricity;
- to assist the Board by facilitating stability in rates for certain types of consumers;
- to collect and make public information relating to the short-term, medium-term and long-term electricity needs of Ontario and the adequacy and reliability of the integrated power system to meet those needs; and

- to engage in such other objects as may be prescribed by the regulations.
- b) The IESO was designated the Smart Metering Entity (SME) 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, 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 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).

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 (PSAB) 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 regulatory deferral account, before such rebates, exceeds regulated limits.

For 2015, the system fee for the then newly amalgamated IESO was comprised of the combined rate calculations of the respective pre-amalgamation entities. Specifically, the former IESO rate base was calculated on electricity withdrawn from the IESO-controlled grid (including scheduled exports and embedded generation), whereas the former OPA rate base only considered Ontario electricity consumers. The OEB approved the continued use of this combined rate calculation for 2016 in an interim order issued on December 22, 2015.

These financial statements do not include the revenue and expenses of the financial transactions of market participants within the IESO-administered markets (IAM).

Other revenue represents amounts that accrue to the IESO relating to investment income on funds passing through market settlement accounts, as well as application fees. Such revenue is recognized as it 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 to offset 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) Regulated assets and liabilities

As a rate-regulated entity, the IESO, in appropriate circumstances establishes regulated assets or liabilities and thereby defers the impact on the statement of operations of certain expenses or revenues because they are probable to be collected or refunded to market participants through future billings. The IESO has applied guidance from United States Generally Accepted Accounting Principles (US GAAP) Topic 980, *Regulated Operations*, in this policy.

e) Market accounts – assets and liabilities

The IESO records the market accounts assets, liabilities and amounts due to and from market participants held on behalf of the IESO-administered markets in its statements of financial position. The IESO-administered markets is a balancing system, and as such, the net position of market accounts will settle to a \$nil balance in accordance with market rules.

f) 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.

g) 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.

h) 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 2016	Estimated Average Service Life 2015
Facilities	37	37
Market systems and applications	4 to 12	4 to 12
Infrastructure and other assets	4 to 10	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 2016.

i) 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 15 years (2015 – 15 years) and OPEB plan is 16.2 years (2015 – 14.7 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.

j) 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.

k) 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 that involve a greater degree of uncertainty include the carrying values of tangible capital assets, accrued pension liability and accrual for employee future benefits other than pensions. Actual results could differ from those estimates.

3. NEW ACCOUNTING POLICIES

As of January 1, 2016, the IESO changed its accounting policy regarding the recognition of assets and liabilities subject to rate regulation. The change was made to better reflect the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model. This change has been applied retroactively and has increased amounts previously unrecorded for regulatory assets and decreased amounts previously reported for accumulated deficit.

The IESO recognizes two regulated assets: 1) unrecovered smart metering expenses and 2) unrecovered PSAB transition items.

The smart metering expenses result from the IESO's role as the Smart Metering Entity. As such, the IESO funds its SME operating costs and capital investment in the meter data management/repository (MDM/R) through fees from users of smart meters in Ontario. The OEB approves the Smart Metering Entity charge and the charge is intended to cover the costs of developing and operating the MDM/R.

The unrecovered PSAB transition items result from the IESO's adoption of Canadian public sector accounting standards effective January 1, 2011. 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.

Regulated assets consist of the following:

As of December 31 (in thousands of Canadian dollars)	2016	2015
	\$	\$
Unrecovered smart metering expenses	21,623	40,849
Unrecovered PSAB transition items	43,441	47,353
Closing balance	65,064	88,202

In addition, as of January 1, 2016, the IESO changed its accounting policy regarding the recognition of market accounts assets and liabilities on the statement of financial position. The change was made to better reflect the assets and liabilities and amounts due to and from market participants held by the IESO on behalf of the IAM at year end. This change has been applied retroactively and has increased amounts previously unrecorded for market accounts assets and liabilities. There is no impact to the accumulated deficit or revenues and expenses as the IESO is not party to these transactions as per the market rules.

Components of the market accounts are as follows:

As of December 31 (in thousands of Canadian dollars)	2016	2015
	\$	\$
Cash, restricted for market activities	244,755	271,574
Amounts due from market participants	1,391,260	1,171,389
Interest receivable	186	158
Revolving line of credit	(150,501)	(12,739)
HST receivable	25,531	20,247
Amounts due to market participants	(1,392,643)	(1,380,086)
Other liabilities	(118,588)	(70,543)
Closing balance	-	-

Comparative figures

A detailed reconciliation of the IESO's restated statement of financial position as at December 31, 2015, as follows:

As of (in thousands of Canadian dollars)	December 31, 2015 (as reported)	December 31, 2015 adjustments	December 31, 2015 (as restated)
	\$	\$	\$
FINANCIAL ASSETS			
Cash and cash equivalents	14,715		14,715
Accounts receivable	33,199		33,199
Long-term investments	37,318		37,318
Regulated assets	-	88,202	88,202
Market accounts - assets	-	1,443,121	1,443,121
TOTAL FINANCIAL ASSETS	85,232	1,531,323	1,616,555
LIABILITIES			
Accounts payable and accrued liabilities	48,868		48,868
Accrued interest on debt	315		315
Rebates due to market participants	9,595		9,595
Debt	90,000		90,000
Accrued pension liability	36,062		36,062
Accrued liability for employee future benefits other than pension	84,501		84,501
Market accounts - liabilities	-	1,443,121	1,443,121
TOTAL LIABILITIES	269,341	1,443,121	1,712,462
NET DEBT	(184,109)	88,202	(95,907)
NON-FINANCIAL ASSETS			
Net tangible capital assets	103,716		103,716
Prepaid expenses	6,197		6,197
TOTAL NON-FINANCIAL ASSETS	109,913		109,913
ACCUMULATED SURPLUS/(DEFICIT)			
Accumulated surplus/(deficit) from operations	(81,854)	88,202	6,348
Accumulated remeasurement gains	7,658		7,658
ACCUMULATED SURPLUS/(DEFICIT)	(74,196)	88,202	14,006

A detailed reconciliation of the IESO's restated statement of operations for the year ended December 31, 2015, is as follows:

For the year ended (in thousands of Canadian dollars)	December 31, 2015 (as reported)	December 31, 2015 adjustments	December 31, 2015 (as restated)
	\$	\$	\$
IESO CORE OPERATIONS			
System fees	190,099	(3,912)	186,187
Other revenue	5,377		5,377
Interest and investment income	1,430		1,430
Core operations revenues	196,906	(3,912)	192,994
Compensation and benefits	(104,994)		(104,994)
Professional and consulting	(21,461)		(21,461)
Operating and administration	(35,005)		(35,005)
Core operating expenses	(161,460)		(161,460)
Amortization	(17,933)		(17,933)
Interest	(1,610)		(1,610)
Core expenses	(181,003)		(181,003)
Core operations annual surplus before rebates	15,903	(3,912)	11,991
Rebates due to market participants	(9,595)		(9,595)
Core operations annual surplus	6,308	(3,912)	2,396
MARKET SANCTIONS AND PAYMENT ADJUSTMENTS			
Market sanctions and payment adjustment	6,021		6,021
Compensation and benefits	(3,094)		(3,094)
Professional and consulting	(1,351)		(1,351)
Operating and administrative	(114)		(114)
Customer education and market enforcement expenses	(4,559)		(4,559)
Market sanctions and payment adjustments annual surplus	1,462		1,462
SMART METERING ENTITY			
Smart metering charge	46,215	(20,030)	26,185
Compensation and benefits	(2,607)		(2,607)
Professional and consulting	(14,902)		(14,902)
Operating and administration	(4,200)		(4,200)
Smart metering operating expenses	(21,709)		(21,709)
Amortization	(3,524)		(3,524)
Interest	(952)		(952)
Smart metering expenses	(26,185)		(26,185)
Smart metering entity annual surplus	20,030	(20,030)	-
ANNUAL SURPLUS	27,800	(23,942)	3,858
ACCUMULATED SURPLUS/(DEFICIT) FROM OPERATIONS, BEGINNING OF PERIOD	(109,654)	112,144	2,490
ACCUMULATED SURPLUS/(DEFICIT) FROM OPERATIONS, END OF PERIOD	(81,854)	88,202	6,348

4. 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 \$39,972 thousand (2015 – \$37,019 thousand). As at December 31, the market value allocation of these long-term investments was 62.3% equity securities and 37.7% debt securities (2015 – 56.0% and 44.0% respectively).

Balanced portfolio of pooled funds

As at December 31 (in thousands of Canadian dollars)	2016	2015
	\$	\$
Opening balance	37,019	33,758
Net purchase of investments	2,667	1,889
Change in fair value	286	1,372
Closing balance	39,972	37,019

In addition to the balanced portfolio of pooled funds, the IESO has a long-term deposit with Canada Revenue Agency in the amount of \$383 thousand (2015 – \$299 thousand) pertaining to the Retirement Compensation Arrangements Trust (Note 7).

5. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

As at December 31 (in thousands of Canadian dollars)	2016	2015
	\$	\$
Relating to operations	35,630	43,125
Relating to tangible capital assets	3,333	5,743
Closing balance	38,963	48,868

6. REBATES DUE TO MARKET PARTICIPANTS AND ACCUMULATED SURPLUS

In 2016, the IESO recognized \$12,551 thousand in rebates due to market participants of system fees (2015 – \$9,595). As at December 31, 2016, rebates due to market participants were \$22,146 thousand, with the 2015 portion of \$9,595 thousand rebated in January 2017.

The IESO's approved regulatory deferral account balance has been historically maintained at a maximum of \$10.0 million. The 2016 approved regulatory deferral account balance at \$10.0 million was approved by the OEB on December 1, 2016.

Prior to 2014, unrealized gains and losses from portfolio investments and foreign exchange were included in the balance of the regulatory deferral account (life-to-date total \$4,144 thousand). As of January 1, 2014, only realized gains and losses are included in this balance.

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

Accumulated Surplus

As at December 31 (in thousands of Canadian dollars)	2016	2015
	\$	\$
Regulatory deferral account (a)	10,000	10,000
Accumulated market sanctions and payment adjustments (b)	726	492
Remeasurement gains	3,762	3,514
Accumulated surplus – end of year	14,488	14,006

a) Regulatory Deferral Account

As at December 31 (in thousands of Canadian dollars)	2016	2015
	\$	\$
Accumulated surplus – beginning of year	10,000	7,604
Revenues (before rebates due to market participants)	190,219	192,994
Rebates due to market participants	(12,551)	(9,595)
Core operation expenses	(177,668)	(181,003)
Accumulated surplus – end of year	10,000	10,000

b) Accumulated Market Sanctions and Payment Adjustments

As at December 31 (in thousands of Canadian dollars)	2016	2015
	\$	\$
Accumulated surplus/(deficit) – beginning of year	492	(970)
Market sanctions and payment adjustments	3,889	6,021
Customer education and market enforcement expenses	(3,655)	(4,559)
Accumulated surplus – end of year	726	492

7. 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, 2016, the note payable to the OEFC was \$90.0 million (December 31, 2015 – \$90.0 million).

For the year ended December 31, 2016, the interest expense on the note payable was \$1,841 thousand (2015 – \$1,841 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, 2016, no amount was drawn on the credit facility (December 31, 2015 – \$nil).

For the year ended December 31, 2016, the interest expense on the credit facility was \$nil (2015 – \$279 thousand).

Retirement Compensation Arrangements Trust

In July 2013, the IESO established a Retirement Compensation Arrangements (RCA) Trust to provide security for the IESO's obligations under the terms of the supplemental employee retirement plan for its employees. As at December 31, 2016, the IESO has provided the RCA trustee with a bank letter of credit of \$30,466 thousand (2015 – \$28,408 thousand) the trustee can draw on if the IESO is in default under the terms of this plan.

8. 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)	2016 Pension Benefits	2015 Pension Benefits	2016 Other Benefits	2015 Other Benefits
	\$	\$	\$	\$
Accrued benefit obligation	507,724	482,994	91,014	83,455
Fair value of plan assets	523,756	475,714	-	-
Funded status as of measurement date	16,032	(7,280)	(91,014)	(83,455)
Employer contribution/other benefits payments after measurement date	2,416	427	588	582
Unrecognized actuarial (gain)/loss	(53,068)	(29,209)	175	(1,628)
Accrued liability recognized in the statement of financial position	(34,620)	(36,062)	(90,251)	(84,501)

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:

	2016	2015
Canadian equity securities	20.2%	19.9%
Foreign equity securities	39.9%	41.8%
Canadian debt securities	39.8%	39.0%
Cash equivalents	0.4%	0.6%
Forward foreign exchange contracts	(0.3%)	(1.3%)
	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:

	2016 Pension Benefits	2015 Pension Benefits	2016 Other Benefits	2015 Other Benefits
Discount rate at the end of the period	5.75%	6.00%	5.75%	6.00%
Rate of compensation increase	3.50%	3.75%	3.50%	3.75%
Rate of indexing	2.00%	2.25%	2.00%	2.25%

The assumed prescription drug inflation was 8.00% for 2016, grading down to an ultimate rate 4.50% per year in 2030. Dental costs are assumed to increase by 4.00% per year.

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

(in thousands of Canadian dollars)	2016 Pension Benefits	2015 Pension Benefits	2016 Other Benefits	2015 Other Benefits
	\$	\$	\$	\$
Current service cost (employer)	11,117	10,547	3,107	2,857
Interest cost	29,292	28,143	5,120	4,797
Expected return on plan assets	(27,626)	(26,053)	-	-
Amortization of net actuarial loss	(1,173)	(667)	(100)	(753)
Benefit cost	11,610	11,970	8,127	6,901

(in thousands of Canadian dollars)	2016 Pension Benefits	2015 Pension Benefits	2016 Other Benefits	2015 Other Benefits
	\$	\$	\$	\$
Employer contribution/other benefit payments	13,052	12,851	2,377	2,314
Plan participants' contributions	5,811	5,162	-	-
Benefits paid	23,317	21,155	2,377	2,314

The most recent actuarial valuation of the registered pension plan for funding purposes was at January 1, 2014, and the next required valuation is to be effective January 1, 2017.

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

	2016 Pension Benefits	2015 Pension Benefits	2016 Other Benefits	2015 Other Benefits
Discount rate at the beginning of the period	6.00%	6.15%	6.00%	6.15%
Rate of compensation increase	3.75%	3.75%	3.75%	3.75%
Rate of indexing	2.25%	2.25%	2.25%	2.25%

9. TANGIBLE CAPITAL ASSETS

Net tangible capital assets consist of the following:

Tangible Capital Assets

(in thousands of Canadian dollars)	As at Dec. 31, 2015	Additions	Disposals	As at Dec. 31, 2016
	\$	\$	\$	\$
Facilities	52,281	3,692	-	55,973
Market systems and applications	278,458	28,535	-	306,993
Infrastructure and other assets	60,180	3,175	-	63,355
Meter data management/repository	35,900	1,011	-	36,911
Total cost	426,819	36,413	-	463,232

Accumulated Amortization

(in thousands of Canadian dollars)	As at Dec. 31, 2015	Amortization Expense	Disposals	As at Dec. 31, 2016
	\$	\$	\$	\$
Facilities	(22,604)	(1,697)	-	(24,301)
Market systems and applications	(251,210)	(12,336)	-	(263,546)
Infrastructure and other assets	(47,228)	(5,544)	-	(52,772)
Meter data management/repository	(25,329)	(3,861)	-	(29,190)
Total accumulated amortization	(346,371)	(23,438)	-	(369,809)

Net Book Value

(in thousands of Canadian dollars)	As at December 31, 2015	As at December 31, 2016
	\$	\$
Facilities	29,677	31,672
Market systems and applications	27,248	43,447
Infrastructure and other assets	12,952	10,583
Meter data management/repository	10,571	7,721
Total net book value	80,448	93,423
Assets under construction	23,268	11,624
Net tangible capital assets	103,716	105,047

In 2016, there were no adjustments to management's estimates of remaining asset service lives (2015 – decrease of \$653 thousand).

Interest capitalized to assets under construction during 2016 was \$260 thousand (2015 – \$263 thousand).

10. 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 \$2,508 thousand in 2016 (2015 – \$3,212 thousand).

11. RELATED PARTY TRANSACTIONS

The Province of Ontario is a related party as it is the controlling entity of the IESO. The OEFC, 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 7). Interest payments made by the IESO in 2016 for the note payable were \$1,841 thousand (2015 – \$1,841 thousand) and for the credit facility were \$nil (2015 – \$328 thousand). As of December 31, 2016, the IESO had an accrued interest payable balance with the OEFC of \$315 thousand (2015 - \$315 thousand).

Under the *Ontario Energy Board Act, 1998*, the IESO incurs registration and license fees. The total of the transactions with the OEB was \$1,747 thousand in 2016 (2015 – \$1,671 thousand).

The IESO performed connection and bulk electric system exception assessments for Hydro One in 2016. In 2016, the IESO invoiced Hydro One \$610 thousand (2015 – \$310 thousand).

The IESO procures short circuit studies and protection impact assessments as part of connection assessments, approvals and meter services on IESO-owned interconnected revenue meters from Hydro One. Additionally, the IESO paid Hydro One for the removal of the microwave tower at the Clarkson location. In 2016, the IESO incurred costs of \$188 thousand (2015 – \$525 thousand) for these services. As of December 31, 2016, the IESO had a net payable balance with Hydro One of \$4 thousand (2015 – \$149 thousand).

The IESO performed connection assessment and approvals for OPG, administered telecommunication services to market participants to connect to the real-time market systems and provides market-related training courses. In 2016, OPG was invoiced \$124 thousand (2015 – \$137 thousand). As of December 31, 2016, the IESO had a net receivable balance with OPG of \$5 thousand (2015 – \$4 thousand).

12. 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 have 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 primarily 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 U.S. dollars, primarily related to vendors' payments, and maintains a U.S. dollar-denominated bank account. From time to time, the IESO may utilize forward purchase contracts to purchase U.S. dollars for delivery at a specified date in the future at a fixed exchange rate. In addition, the IESO utilizes U.S. dollar spot rate purchases in order to satisfy any current accounts. As at December 31, 2016, 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 \$0.6 million as at December 31, 2016 (2015 – \$0.6 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, 2016, would have resulted in a change for the year of approximately \$7.5 million (2015 – \$6.8 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 that limits investments to primarily investment-grade investments with counterparty-specific limits. The accounts receivable balance as at December 31, 2016, included no material items past due and substantially all of the balance was collected within 30 days from December 31, 2016. 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.

13. COMMITMENTS

Operating commitments

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

As at December 31 (thousands of Canadian dollars)	
	\$
2017	5,489
2018	5,004
2019	3,919
2020	3,195

14. 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.

15. COMPARATIVE FIGURES

Certain comparative figures have been reclassified to conform with the financial statement presentation adopted in 2016.