

## 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
<b>2016 Net Revenue Requirement</b>	<b>181.1</b>

#### *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". The results of the updated Elenchus report,  
18 charging one IESO fee has been determined to be reasonable and fair. This approach was  
19 also presented to the IESO Stakeholder Advisory committee at both the March 5 and  
20 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, its proposal to charge one fee to all customers is fair and reasonable.  
23 The IESO therefore ...(continued on page 6 as originally filed)

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
<b>Total Energy Volumes (gross TWh)</b>	<b>160.1</b>

### 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.

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