

APPrO INTERROGATORY 12

Issue 2.0 Usage Fees

Issue 2.1 Is the methodology used to derive the IESO's proposed 2023 Usage Fees to be paid commencing January 1st, 2023 appropriate?

Issue 2.2 Is the methodology used to derive the IESO's proposed 2024 Usage Fees to be paid commencing January 1st, 2024 appropriate?

Issue 2.3 Is the methodology used to derive the IESO's proposed 2025 Usage Fees to be paid commencing January 1st, 2025 appropriate?

2.0-APPrO-12

INTERROGATORY

Reference: Exhibit C, Tab 1, Schedule 1; Exhibit C, Tab 2, Schedule 1, Attachment 1

Preamble: The application evidence states in part that "to calculate the 2023, 2024 and 2025 usage fees, the IESO requested Elenchus to rerun its model using the [IESO] Business Plan and the charge determinants discussed in the sections that follow."

Questions:

a) Please provide a copy of the inputs (data, worksheets, etc.) and outputs that were used by the Elenchus model to calculate the proposed 2023-2025 usage fees for each of domestic and export customers.

b) How might the modelling be impacted by capacity import calls and capacity export calls?

c) How might the forecasted usage fees be impacted by capacity import calls and capacity export calls?

d) Please advise which IESO Reliability Outlook was used to provide forecast

1 volumes for the purpose of calculating 2023 usage fees, and which IESO Annual
2 Planning Outlook reports were used to calculate the usage fees for 2024 and
3 2025.
4

5 **RESPONSE**

6 a) The inputs of the Elenchus model are:

- 7 • The 2023-2025 Budget columns of the OM&A Business Unit Table filed as Exhibit
8 D-1-2, Attachment 1;
9 • The 2023-2025 load forecast volumes filed in Exhibit C-2-1, Attachment 1;
10 • The cost allocation model outputs are provided in Attachment 1 to this
11 interrogatory response.

12 b) The IESO is unclear on the meaning of capacity import calls and capacity export calls.

13 c) See b) above.

14 d) The Q4 2022 Reliability Outlook released on December 21, 2022 was used to provide
15 forecast export volumes for 2023. The 2022 Annual Planning Outlook released December
16 28, 2022, was used to provide forecast export volumes for 2024 and 2025.

Revenue to Cost Summary Worksheet

Class Revenue, Cost Analysis

2023

		Total	1 Domestic	2 Export
Revenue at Existing Rates		\$199,992,778	\$186,748,757	\$13,244,021
Factor required to recover Revenue Requirement		1.04404		
Revenue at Status Quo Rates		\$208,800,000	\$194,972,743	\$13,827,257
Revenue at Single Rate		\$208,300,000	\$190,515,109	\$17,784,891
Expenses				
CEO	CEO	\$1,500,000	\$1,398,643	\$101,357
M&R	Markets & Reliability	\$37,400,000	\$34,206,745	\$3,193,255
PCRA	Planning, Conservation and Resource Adequacy	\$24,400,000	\$24,400,000	\$0
CRSEI	Corporate Relations, Stakeholder Engagement and Innovation	\$15,100,000	\$15,100,000	\$0
ITS	Information and Technology Services	\$46,800,000	\$43,637,660	\$3,162,340
LRCG	Legal Resources and Corporate Governance	\$28,200,000	\$24,526,592	\$3,673,408
CS	Corporate Services	\$29,300,000	\$27,220,157	\$2,079,843
MACD	Market Assessment and Compliance Division	\$2,400,000	\$2,195,085	\$204,915
MR	Market Renewal	\$5,300,000	\$4,847,480	\$452,520
HR	Human Resources	\$6,200,000	\$5,781,057	\$418,943
Other	Corporate Adjustment - General	\$700,000	\$652,700	\$47,300
Int	Corporate Adjustment - Interest	(\$11,400,862)	(\$10,427,443)	(\$973,419)
Dep	Corporate Adjustment - Depreciation on fixed assets	\$22,900,862	\$20,945,560	\$1,955,302
Revenue Requirement		\$208,800,000	\$194,484,237	\$14,315,763
Revenue Requirement Input equals Output				
RF	Other Revenues	\$500,000	\$500,000	\$0
Rate Revenue Required		\$208,300,000	\$193,984,237	\$14,315,763
Revenue to Expense at Status Quo Rates		100.00%	100.51%	96.59%
Revenue to Expense at Single Rate		100.00%	98.21%	124.23%
Volume (MWh)		153,186,325	140,107,102	13,079,223
Separate Rates			\$1.3845	\$1.0945
Rate Weight (percent of domestic rate)				79.1%
Rounded Rates			\$1.3845	\$1.0945
Revenue at Rounded Rates		\$208,293,493	\$193,978,283	\$14,315,210
Surplus (Shortfall) - Rounded Rates		(\$6,507)	(\$5,954)	(\$553)

Revenue to Cost Summary Worksheet

Class Revenue, Cost Analysis

2024

		Total	1 Domestic	2 Export
Revenue at Existing Rates		\$203,314,620	\$193,225,717	\$10,088,903
Factor required to recover Revenue Requirement		1.07666		
Revenue at Status Quo Rates		\$218,900,000	\$208,037,717	\$10,862,283
Revenue at Single Rate		\$218,400,000	\$204,354,934	\$14,045,066
Expenses				
CEO	CEO	\$1,500,000	\$1,415,001	\$84,999
M&R	Markets & Reliability	\$39,100,000	\$36,585,522	\$2,514,478
PCRA	Planning, Conservation and Resource Adequacy	\$26,200,000	\$26,200,000	\$0
CRSEI	Corporate Relations, Stakeholder Engagement and Innovation	\$15,800,000	\$15,800,000	\$0
ITS	Information and Technology Services	\$49,400,000	\$46,600,691	\$2,799,309
LRCG	Legal Resources and Corporate Governance	\$30,500,000	\$26,788,211	\$3,711,789
CS	Corporate Services	\$30,200,000	\$28,442,830	\$1,757,170
MACD	Market Assessment and Compliance Division	\$2,500,000	\$2,339,228	\$160,772
MR	Market Renewal	\$4,400,000	\$4,117,041	\$282,959
HR	Human Resources	\$6,400,000	\$6,037,336	\$362,664
Other	Corporate Adjustment - General	\$600,000	\$566,000	\$34,000
Int	Corporate Adjustment - Interest	(\$9,700,000)	(\$9,076,204)	(\$623,796)
Dep	Corporate Adjustment - Depreciation on fixed assets	\$22,000,000	\$20,585,204	\$1,414,796
Revenue Requirement		\$218,900,000	\$206,400,860	\$12,499,140
Revenue Requirement Input equals Output				
RF	Other Revenues	\$500,000	\$500,000	\$0
Rate Revenue Required		\$218,400,000	\$205,900,860	\$12,499,140
Revenue to Expense at Status Quo Rates		100.00%	101.04%	86.90%
Revenue to Expense at Single Rate		100.00%	99.25%	112.37%
Volume (MWh)		154,929,767	144,966,402	9,963,365
Separate Rates			\$1.4203	\$1.2545
Rate Weight (percent of domestic rate)				88.3%
Rounded Rates			\$1.4203	\$1.2545
Revenue at Rounded Rates		\$218,394,822	\$205,895,781	\$12,499,041
Surplus (Shortfall) - Rounded Rates		(\$5,178)	(\$5,079)	(\$99)

Revenue to Cost Summary Worksheet

Class Revenue, Cost Analysis

2025

		1	2
		Domestic	Export
Revenue at Existing Rates	\$208,631,468	\$200,077,189	\$8,554,279
Factor required to recover Revenue Requirement	1.10098		
Revenue at Status Quo Rates	\$229,700,000	\$220,281,872	\$9,418,128
Revenue at Single Rate	\$229,700,000	\$217,461,509	\$12,238,491
Expenses			
CEO	\$1,599,304	\$1,514,662	\$84,642
M&R	\$40,682,289	\$38,514,723	\$2,167,566
PCRA	\$24,889,164	\$24,889,164	\$0
CRSEI	\$16,892,646	\$16,892,646	\$0
ITS	\$51,577,546	\$48,847,835	\$2,729,711
LRCG	\$32,185,988	\$28,290,143	\$3,895,845
CS	\$31,486,292	\$29,817,716	\$1,668,576
MACD	\$3,798,346	\$3,595,969	\$202,377
MR	\$2,498,912	\$2,365,769	\$133,143
HR	\$6,397,215	\$6,058,646	\$338,569
Other	(\$99,956)	(\$94,666)	(\$5,290)
Int	(\$9,195,997)	(\$8,706,031)	(\$489,966)
Dep	\$26,988,251	\$25,550,308	\$1,437,943
Revenue Requirement	\$229,700,000	\$217,536,884	\$12,163,116
Revenue Requirement Input equals Output			
Other Revenues	\$0	\$0	\$0
Rate Revenue Required	\$229,700,000	\$217,536,884	\$12,163,116
Revenue to Expense at Status Quo Rates	100.00%	101.26%	77.43%
Revenue to Expense at Single Rate	100.00%	99.97%	100.62%
Volume (MWh)	158,554,513	150,106,676	8,447,836
Separate Rates		\$1.4492	\$1.4398
Rate Weight (percent of domestic rate)			99.3%
Rounded Rates		\$1.4492	\$1.4398
Revenue at Rounded Rates	\$229,697,790	\$217,534,595	\$12,163,195
Surplus (Shortfall) - Rounded Rates	(\$2,210)	(\$2,289)	\$79

APPrO INTERROGATORY 13

Issue 2.0 Usage Fees

Issue 2.1 Is the methodology used to derive the IESO's proposed 2023 Usage Fees to be paid commencing January 1st, 2023 appropriate?

Issue 2.2 Is the methodology used to derive the IESO's proposed 2024 Usage Fees to be paid commencing January 1st, 2024 appropriate?

Issue 2.3 Is the methodology used to derive the IESO's proposed 2025 Usage Fees to be paid commencing January 1st, 2025 appropriate?

2.0-APPrO-13

INTERROGATORY

Reference: Exhibit C, Tab 1, Schedule 1; Exhibit C, Tab 2, Schedule 1, Attachment 1

Preamble: The application evidence states in part that "to calculate the 2023, 2024 and 2025 usage fees, the IESO requested Elenchus to rerun its model using the [IESO] Business Plan and the charge determinants discussed in the sections that follow."

Questions:

a) Exports are forecasted to decrease by approximately 35% over the 2023-2025 period, according to Exhibit C, Tab 2, Schedule 1, Attachment 1. Please explain why proposed 2025 usage fees almost the same for both export customers and domestic customers?

b) According to APPrO's calculations, the IESO's proposed 2023-2025 export usage fees results in over a 36% increase over the three-year period. Please explain the impact of these increases on intertie transactions, including annual clearing price revenues and distribution, and the overall economic efficiency of grid operations.

c) Please evaluate (if not already done so) and explain the impact of the IESO's

1 proposed 2023-2025 export usage fee in the context of the conclusions set out in
2 the IESO's "Market Implications of the Export Transmission Service Rate" report
3 dated July 2021.

4
5 **RESPONSE**

6 a) See the response to 2.1 APPrO Interrogatory 6 a) and 2.1 APPrO Interrogatory 11 a).

7 b) The IESO's usage fees for domestic and export customers are calculated by the IESO by
8 Elenchus using a model developed in 2016, reviewed by Elenchus in 2021, and approved
9 as part of the IESO's 2022 Revenue Requirement Submission (EB-2022-0002) as per
10 Exhibit C, Tab 1, Schedule 1. The IESO has not conducted analysis to determine the
11 impact of the export usage fee on the market.

12 c) See response to part b). The increase in export usage fees may potentially have impacts
13 similar in direction to those laid out in the IESO's "Market Implications of the Export
14 Transmission Service (ETS) Rate" report dated July 2021 for an increase in the ETS rate.
15 These include the potential to offset the Intertie Congestion Price (ICP) revenue collected
16 on exporting interties, as well as the potential to reduce some of the operational and
17 economic benefits of some marginal exports where the market price between Ontario
18 and a neighboring jurisdiction in each hour is small.

EDA INTERROGATORY 6

2.1 Is the methodology used to derive the IESO's proposed 2023 Usage Fees to be paid commencing January 1st, 2023, appropriate?

2.2 Is the methodology used to derive the IESO's proposed 2024 Usage Fees to be paid commencing January 1st, 2024, appropriate?

2.3 Is the methodology used to derive the IESO's proposed 2025 Usage Fees to be paid commencing January 1st, 2025, appropriate?

2.0-EDA-6

INTERROGATORY

Reference: ExC-T2-S1-Attachment 1

Preamble:

Questions:

a) IESO has requested approval to rely on and use the information provided to the IESO by LDCs on the amount of embedded generation in their service territories under O. Reg 429-04 in calculating the total usage fee to be billed to each LDC each billing period. The Domestic Customer Usage fee includes embedded generation reported from distribution networks and allocated losses to calculate this rate. Please describe in detail how the IESO has engaged with LDCs to report activity within their distribution systems to forecast embedded generation as a 10% increase from 2023's 7 TWh to 7.7 TWh in 2024, and 2025.

b) Electrification is changing the shape of Ontario's demand. Accelerated electric vehicle

1 adoption and charging profiles are expected to shift the overall annual system demand
2 and exhibit strong and steady growth through the end of the 2030s. The new multi-year
3 application has updated its assumptions to adopt the Annual Planning Outlook (APO) in
4 its forecasted Ontario demand. Please provide the breakdown from IESO's 2022 Annual
5 Planning Outlook for Ontario demand (TWh) that supports the following APO
6 assumptions used in the IESO's load and forecast volumes.

7 2023 – 135.8 TWh
8 2024 – 140.1 TWh
9 2025 – 145.4 TWh

10 c) Please provide a summary of the IESO Business Plan which allocates expenses between
11 domestic and export customer classes to calculate the usage fees split for 2023, 2024,
12 and 2025.

13 d) Please provide the impact to the forecast charge determinants, both in total and of
14 losses, which are attributable to IESO's pathways to decarbonization report. Please
15 discuss how de-carbonization policies are expected to impact the IESO's 2023, 2024, and
16 2025 charge determinants forecast used to derive the proposed domestic and export
17 usage fees.

18
19 **RESPONSE**

20 a) The IESO's forecast of embedded generation is based on the historical information
21 provided by LDCs plus any future IESO-contracted embedded generation that is set to
22 come online in future years, which has typically been 0 MW over the last number of
23 years with the completion of the feed-in-tariff programs. The 2023 forecast of embedded
24 generation is from the Reliability Outlook released on December 21 2022 which used
25 historical data for embedded generation up to September 2022 given full year actuals
26 were not yet available when the outlook was prepared. The 2024 and 2025 forecast of
27 embedded generation is from the 2022 Annual Planning Outlook which used embedded

1 generation up to July 2022 given that full year actuals were not yet available when the
2 demand forecast was prepared as part of the 2022 outlook.

3 b) For 2023, the IESO's forecast is from the Reliability Outlook released December 21,
4 2022; the drivers of demand and assumptions are described within the associated
5 Reliability Outlook document and associated tables¹. For 2024 and 2025, the IESO's
6 forecast volumes come from the 2022 Annual Planning Outlook (APO) released
7 December 28, 2022. The associated modules, methodology and supplementary data²
8 describe the demand forecast methodology, assumptions and drivers.

9 c) Please see the response to 2.0 APPrO Interrogatory 12 a). Attachment 1 to the response
10 provides the allocation based on the Business Units Table filed in Exhibit D-1-2.

11 d) The forecast volumes are not impacted by the IESO's Pathways to Decarbonization
12 report.

¹ <https://www.ieso.ca/en/Sector-Participants/Planning-and-Forecasting/Reliability-Outlook>

² <https://www.ieso.ca/en/Sector-Participants/Planning-and-Forecasting/Annual-Planning-Outlook>

OEB STAFF INTERROGATORY 13

ISSUE 2: Usage Fees

2.0-OEB STAFF-13

INTERROGATORY

Reference:

- a. EB-2020-0230, Exhibit C / Tab 1 / Schedule 1 / Attachment 1
- b. EB-2022-0002, Exhibit C / Tab 1 / Schedule 1 / Attachment 1
- c. EB-2022-0318, Exhibit C / Tab 1 / Schedule 1 / Attachment 1
- d. EB-2022-0002, Exhibit H / Tab 5.1 / Schedule 13 – 5.1 SEC 19, Attachment 1, p. 5

Preamble:

Attachment 1 of Exhibit C-1-1 of successive applications has provided the forecast volumes that underly domestic and export user fees. The most recent attachment provides actual demand and transmission losses for previous years.

Questions:

- a) Please complete Table 1 for the years 2019 and 2020 and correct any transcription errors. Please provide references for the values for 2019 and 2020. The forecast and actual demand for domestic and export users are not including transmission losses.

Table 1 - Forecast and Actual Demand, as applicable – 2019 to 2025*

(TWh)	2019	2020	2021	2022	2023	2024	2025
Forecast Domestic Demand			132.4	135.0	135.8	140.1	145.4
Actual Domestic Demand (Ref c.)	135.1	132.2	133.9	137.5	N/A	N/A	N/A
Forecast Export Demand			17.0	15.9	13.3	10.2	8.6
Actual Export Demand (Ref c.)	19.8	20.4	17.2	17.5	N/A	N/A	N/A
Forecast Transmission Losses			2.9	3.0	3.0	3.1	3.2
Actual Transmission Losses (Ref c.)	3.0	2.1	2.0	2.5	N/A	N/A	N/A

* Note: Reference a. provided the forecast values for 2021, reference b. provided the forecast values for 2022, and reference c. provided the forecast values for 2023, 2024, and 2025.

b) Please complete Table 2 and correct any transcription errors. The transcribed values in Table 2 are from reference d.

Table 2 - Modelled and Actual Domestic and Export Revenue

(\$M)	2019	2020	2021	2022	2023	2024	2025
Modelled Domestic Class Revenue				185.4			
Actual Domestic Class Revenue					N/A	N/A	N/A
Modelled Export Class Revenue				16.1			
Actual Export Class Revenue					N/A	N/A	N/A

c) Based on the above tables, please comment on whether the IESO has generally under or over forecasted the electricity demand that underlie the usage fees in the 2019 to 2022 period.

RESPONSE

a) See Table 1 below for forecast and actual demand for the years 2019 to 2025, noting that demand for domestic and export users are not including transmission losses.

Table 1 - Forecast and Actual Demand 2019 to 2025*

(TWh)	2019	2020	2021	2022	2023	2024	2025
Forecast Domestic Demand	134.8	132.2	132.4	135.0	135.8	140.1	145.4
Actual Domestic Demand (Ref c.)	135.1	132.2	133.9	137.5	N/A	N/A	N/A
% of Variance	0.2%	-	1.1%	1.9%	N/A	N/A	N/A
Forecast Export Demand	19.1	20.4	17.0	15.9	13.3	10.2	8.6
Actual Export Demand (Ref c.)	19.8	20.4	17.2	17.5	N/A	N/A	N/A
% of Variance	3.7%	-	1.2%	10.1%	N/A	N/A	N/A
Forecast Transmission Losses	3.0	2.3	2.9	3.0	3.0	3.1	3.2
Actual Transmission Losses (Ref c.)	3.0	2.1	2.0	2.5	N/A	N/A	N/A
% of Variance	-	-8.9%	-31.0%	-16.7%	N/A	N/A	N/A
Total Forecast Demand (including losses, and embedded generation)	158.7	157.1	152.9	155.0	153.2	154.9	158.6
Total Actual Demand (including losses, and embedded generation)	158.3	157.4	155.9	159.8	N/A	N/A	N/A
% of Variance	-0.3%	0.2%	2.0%	3.1%	N/A	N/A	N/A

*Reference a. provided the forecast values for 2020 and 2021, reference b. provided the forecast values for 2022, and reference c. provided the forecast values for 2023, 2024, and 2025, as well as the values for Actual for 2019 to 2022. The Forecast for 2019 is from EB-2019-002 Exhibit B-1-1.

- b) See Table 2 below for modelled and actual revenue by domestic and export customer classes. Note that the IESO did not file for approval of 2020 usage fees until 2021 so revenues were not modelled in that year. As well, please note that the Actual calculations are based on Actual Quantity Energy Withdrawn/Scheduled Quantity Energy Withdrawn measurement data and current applicable rates, not on the actual monthly billing from the IESO.

Table 2 - Modelled and Actual Domestic and Export Revenue

(\$M)	2019	2020	2021	2022	2023	2024	2025
Modelled Domestic Class Revenue	171.9	N/A	173.2	185.4	194.0	205.9	217.5
Actual Domestic Class Revenue	171.5	168.4	177.0	189.9	N/A	N/A	N/A
Modelled Export Class Revenue	18.9	N/A	18.6	16.1	14.3	12.5	12.2
Actual Export Class Revenue	20.1	20.7	18.9	17.8	N/A	N/A	N/A

- c) In recent years (2021 and 2022), the IESO has under forecast the electricity demand that underlie the usage fees.

OEB STAFF INTERROGATORY 14

ISSUE 2: Usage Fees

2.0-OEB STAFF-14

INTERROGATORY

Reference:

- a. Exhibit C / Tab 1 / Schedule 1 / p. 2
- b. Exhibit C / Tab 2 / Schedule 1 / p. 6
- c. EB-2022-0318, Exhibit C / Tab 1 / Schedule 1 / Attachment 1

Preamble:

The domestic and export usage fees were calculated for the IESO by Elenchus Research Associates Inc. using a model that allocates costs in the Business Plan between the two customer classes using the charge determinants. One of the charge determinants is the most recent forecast for withdrawals by domestic and export users. The most recent forecast for 2023 is provided by the Reliability Outlook (RO) and the 2024 and 2025 forecasts are provided by the Annual Planning Outlook (APO).

Questions:

- a) Does the IESO have a confidence interval or range of reasonably expected demand for each of the forecast years for each rate class? If not, why not? If yes, what are they?
- b) How do any differences in assumptions, inputs, or methodology between the RO and APO affect the sensitivity or range of outputs of the resultant forecasts?
- c) What are the main factors that the IESO expects could affect actual demand to deviate from forecast? For each of the factors, please describe how they would lead to higher or lower actual demand compared what the IESO presents in its forecasts.

RESPONSE

- a) The IESO does not have a confidence interval or range of reasonably expected demand for each of the forecast years for each rate class because they reflect median, or most likely, conditions as per Northeast Power Coordinating Council (NPCC) Directory #1 requirements and the Ontario Resource and Transmission Assessment Criteria (ORTAC).
- b) Please refer to the response for part a), the IESO does not have a range of outputs of the resultant forecasts.
- c) The main factors that could affect actual demand to deviate from forecast in the 2023, 2024 and 2025 period are described below:
- Natural weather volatility could lead to actual demand being higher or lower than forecast depending on how the actual weather pattern compares to the normal weather conditions modelled in the forecast.
 - Level of economic activity could lead to actual demand being higher or lower than forecast depending on how the level of economic activity compares to the median growth conditions reflected in the forecasts. For example, in a recession, actual demand could be lower than forecast. Further, higher growth in an industrial sector compared to the median growth conditions reflected in the forecast could result in actual demand being higher than forecast.

OEB STAFF INTERROGATORY 15

ISSUE 2: Usage Fees

2.0-OEB STAFF-15

INTERROGATORY

Reference:

a. IESO Letter regarding evidence correction dated May 11, 2023

Preamble:

On May 11, 2023, the IESO filed corrected evidence for this proceeding noting two corrections: corrections to Tables 2 through 4 of Exhibit C-2-1 and the requested usage fees for 2023, 2024, and 2025. The first correction relates to an error in Tables 2 through 4 of Exhibit C-2-1, where total demand was decreased to include line losses. The resulting correction had an immaterial impact on the allocation of line losses. The second correction related to 100% of the projected line losses being erroneously allocated to domestic customers. This correction led the IESO to file recalculated usage fees in each of the years of the application for both domestic and export customers.

Questions:

a) Please explain the relationship between the two corrections, if any exists. In other words, are they related? If yes, how are they related?

b) Please confirm whether any other elements of the application that affect the requests, e.g., revenue requirement or capital expenditures, need to be updated in light of the two above noted corrections. If so, please provide the updates, otherwise, please explain

RESPONSE

- a) The two corrections are not related. The discovery of the error in Tables 2 through 4 led to a further review of the application by the IESO. During that review, the IESO discovered that that projected line losses were erroneously allocated to domestic customers.
- b) All elements affected by the correction were updated in evidence filed by the IESO on May 11, 2023.

VECC INTERROGATORY 11

Issue 2.0 Usage Fees

2.0-VECC-11

INTERROGATORY

Reference: Exhibit C, Tab 3, Schedule 1

Preamble:

Questions:

a) Please provide a table which provides the following:

i. A list of all services under which the \$145/hr charge is applied

ii. the number of estimated hours of work for each service for each year 2023 through 2025.

iii. The total estimated revenue for each service in each year 2023 through 2025.

b) Please explain for each service how \$145/hr was determined to be an appropriate cost recovery amount. Specifically, show the labour rate separate from the overhead recovery rate and explain how both components were estimated.

c) When was the \$145/hr first instituted as an hourly charge?

d) Please provide the impact of increasing the hourly charge to \$220 on the annual revenues from each service listed in a).

RESPONSE

a)

i. The \$145/hour charge is applied to the following services covered under this rate application:

1. Technical Feasibility Study (TFS), provided for under section 7 of Market Manual 1.4: Connection Assessment and Approval, that is an optional study the IESO can perform at the request of an applicant to assess the technical acceptability of a new or modified connection to the IESO-controlled grid.
2. System Impact Assessment (SIA), provided for under section 8 of Market Manual 1.4 and Expedited System Impact Assessment (E-SIA), provided for under section 9 of Market Manual 1.4, that are assessments mandated under section 6 of Chapter 4 of the Market Rules, to identify the impact of a proposed new or modified connection on the reliability of the integrated power system.
3. Reliable Integration Activities, described in section 6 of Market Manual 1.5: Market Registration Procedure, that include:
 - 1) Accept and record information submitted by market participants, coordination approval and issuance of the Registration Approval Notification (RAN), described in detail in section 3: Register Equipment and section 4: Maintain IESO Registered Data, of Market Manual 1.5.
 - 2) Participate in the Market Participant's proceeding(s) before NPCC, NERC, OEB, etc.
 - 3) Perform studies and analysis to confirm that a new or modified facility meets the general and specific requirements stipulated in the SIA or E-SIA, including validating the performance of the new or modified facility, provided for under section 3.12.2 of Market Manual 1.5 and detailed in Market Manual 1.6: Performance Validation.

- 4) Conduct studies and analysis to update operating security limits, operating procedures and other operational documentation as they relate to the new or modified facility.
- 5) Update the system and tools used by the IESO for the operation of the IESO-controlled grid and/or the IESO-administered markets with information about the new or modified facility.
- 6) Estimate the integration costs at the request of a market participant.

ii. & iii. The number of hours, and, consequently, the revenue for services in the first three categories listed above is dependent on the number of new projects that connection applicants or market participants seek to investigate, assess or integrate, respectively, with the IESO. Also, the number of hours the IESO spends for each individual project is dependent on a number of factors, some of which are: the quality of data provided by the applicant, connection applicant or market participant, the complexity and size of the project, the complexity of any existing limitations of the transmission system in the proposed connection area, proximity to an interconnection with a neighboring jurisdiction, etc. Given all these unknown variables, the IESO can only provide a high-level cost recovery projection for the activities, which are part of IESO's revenue requirement application. See Table 1 below:

Table 1- Projected Cost Recovery included in IESO's Revenue Requirement for 2023-2025

(\$ Millions)	2023 Budget	2024 Budget	2025 Budget
Cost Recovery Sources:			
Connection (SIA & TFS)	1.7	1.7	1.7
- System Integration Assessments (SIA)	1.4	1.4	1.4
- Technical Feasibility Studies (TFS)	0.3	0.3	0.3
Reliability Integration	0.8	1.7	2.2

- b) The rate of \$145/hr is the current IESO forecasted rate to recover labor and overhead costs on an hourly basis. The labor costs represent the average total compensation per working hours for the IESO as a general proxy for services rendered. The overhead rate is in accordance with conclusions from the cost allocation study filed as Exhibit C-3-1 of the IESO's 2018 Revenue Requirement Submission (EB-2018-0143). See Table 2 below for a breakdown of the rate:

Table 2 - Breakdown of Rate of \$145/hour

Category	\$/hour
Labor costs	\$117
Recovery of Overhead	\$28
Total	\$145

- c) The first charge instituted using the \$145/hr rate, was in 2008.
- d) Given the new hourly rate and assuming the number of hours remains unchanged then one could expect the cost recovery amount to increase in the proportionally. See Table 3 below:

Table 3- Cost Recovery at \$220/hour

	2023 Budget	2024 Budget	2025 Budget
(\$ Millions)			
Cost Recovery Sources:			
Connection (SIA & TFS)	2.6	2.6	2.6
- System Integration Assessments (SIA)	2.1	2.1	2.1
- Technical Feasibility Studies (TFS)	0.5	0.5	0.5
Reliability Integration	1.2	2.6	3.3

APPrO INTERROGATORY 6

Issue 2.1 Is the methodology used to derive the IESO's proposed 2023 Usage Fees to be paid commencing January 1st, 2023 appropriate?

2.0-APPrO-6

INTERROGATORY

Reference: Exhibit A, Tab 1, Schedule 5, Page 3 of 7; Exhibit C, Tab 2, Schedule 1

Preamble: IESO's 2023 proposed revenue requirement of \$208.4 million represents an increase of approximately 3.4% over the 2022 OEB approved revenue requirement of \$201.5 million. In contrast, the proposed usage fee for 2023 to be paid by export customers increases to \$1.0945/MWh from the 2022 OEB approved export usage fee of \$1.0126/MWh, which represents an increase of approximately 8.1%.

Questions:

- a) Please provide a detailed rationale for why the proposed 2023 usage fee for exports increases by more than double the percentage as compared to the total 2023 revenue requirement percentage increase.

RESPONSE

- a) The proposed domestic and export fees are calculated based on an established cost allocation methodology. The methodology is described in detail in an Elenchus report "IESO Cost Allocation Methodology Review" filed in EB-2022-0002 as Exhibit G-1-1, Attachment 5. This report describes the IESO's business units, the allocation of each department between domestic and export, and all changes to the model and methodology from the initial 2016 model.

1 The increase in the export fee is primarily due to the decline in forecast export volumes
2 projected over 2023-2025. As per the IESO's 2022 Annual Planning Outlook (APO)¹, Ontario's
3 exports are projected to decrease from historic levels because of increasing domestic
4 demand and the availability of resources which is impacted by nuclear refurbishments and
5 retirements. As stated in the APO, these changes will result in Ontario becoming a net
6 importer when historically it has been a net exporter.

7
8 A decline in export volumes has two impacts on the calculation of export fees: a reduction to
9 the share of costs allocated to the export customer class (the numerator); and a reduction to
10 the MWh billing determinant (the denominator). The impact of the lower MWh billing
11 determinant denominator outweighs the impact of reduced allocated costs to export,
12 resulting in a higher fee.

13
14 From 2022 to 2023 there is an 11.1% decline in costs allocated to the export customer class
15 (\$16.1 million in 2022 to \$14.3 million in 2023) and a 17.7% decline in forecast export
16 volumes (from 15.9 TWh in 2022 to 13.1 TWh in 2023). The result is a higher increase in the
17 export fee $[(100\% - 11.1\%) \text{ change in costs} / (100\% - 17.7\%) \text{ change in volumes}] =$
18 approximately 8.1% fee increase] compared to the 3.4% total revenue requirement increase.

¹ <https://www.ieso.ca/-/media/Files/IESO/Document-Library/planning-forecasts/apo/Dec2022/2022-Annual-Planning-Outlook.ashx>

APPrO INTERROGATORY 7

Issue 2.1 Is the methodology used to derive the IESO's proposed 2023 Usage Fees to be paid commencing January 1st, 2023 appropriate?

2.0-APPrO-7

INTERROGATORY

Reference: Exhibit C, Tab 2, Schedule 1

Preamble: The proposed 2023 domestic usage fee of \$1.3845/MWh represents an increase of approximately 4% over the 2022 OEB approved domestic usage fee of \$1.3329/MWh, while the proposed 2023 export usage fee of \$1.0945/MWh represents an increase of approximately 8.1% over the 2022 OEB approved export usage fee of \$1.0126/MWh.

Questions:

- a) Please provide a detailed rationale for why the proposed 2023 export usage fee increase is more than double that of the proposed 2023 domestic usage fee increase, from the 2022 OEB approved usage fees?

RESPONSE

- a) See the response to 2.1 APPrO Interrogatory 6a) which outlines the reasons for the 8.1% increase to the export usage fees in 2023. Domestic usage fees have increase by a lower amount (i.e. 4% in 2023) because domestic demand volumes are forecast to increase in 2023. This increases allocated costs to the domestic user class by 4.6% (the numerator), and increases the MWh billing determinant by 0.7% (the denominator). The net result is a smaller difference between allocated costs and volumes, resulting in a lower increase in the domestic fee compared to the export fee.

1 **SEC INTERROGATORY 19**

2 Issue 2.1 Is the methodology used to derive the IESO's proposed 2023 Usage Fees to be
3 paid commencing January 1st, 2023 appropriate?

4 2.0-SEC-19

5 INTERROGATORY

6 **Reference:** [C-1-1, p.2]

7 **Preamble:** The IESO states: "To calculate the 2023, 2024 and 2025 usage fees, the IESO
8 requested Elenchus to rerun its model using the Business Plan and the charge determinants
9 discussed in the sections that follow."

10 Questions:

11 a) Please provide a copy of the referenced model.

12
13 **RESPONSE**

14 a) Please see Attachment 1 - IESO 2023 Cost Allocation Model, Attachment 2 - 2024 Cost
Allocation Model, Attachment 3 - 2025 Cost Allocation Model, to this response.

IESO 2023 Cost Allocation & Fee Model

Version: May 5, 2023

Functionalized Accounts

IESO 2023 Fee Model

Revenue Requirement (\$)	\$208,300,000
Net Fixed Assets (\$)	\$102,646,990

Expense Accounts (Revenue Requirement)

Accounts	Forecast Financial Statement	Reclassify accounts	Reclassified Balance	Allocator
CEO Office	1,500,000		\$1,500,000	O&A
Markets & Reliability - VP Office	1,100,000		\$1,100,000	M&R
Markets & Reliability - Power System Assessments	11,200,000		\$11,200,000	TWh
Markets & Reliability - Market Operations	16,100,000		\$16,100,000	TWh
Markets & Reliability - Wholesale Market Development	3,700,000		\$3,700,000	TWh
Markets & Reliability - Reliability Assurance & Operational Assessments	5,300,000		\$5,300,000	TWh
Planning, Conservation and Resource Adequacy - VP Office and Planning Projects & Sustainability	1,004,115		\$1,004,115	PCRA
Planning, Conservation and Resource Adequacy - Resource Planning	6,225,514		\$6,225,514	DOM
Planning, Conservation and Resource Adequacy - Transmission Planning	5,020,576		\$5,020,576	DOM
Planning, Conservation and Resource Adequacy - Resource & System Adequacy	6,024,691		\$6,024,691	DOM
Planning, Conservation and Resource Adequacy - Energy Efficiency	6,125,103		\$6,125,103	DOM
Corporate Relations, Stakeholder Engagement and Innovation - VP Office	600,000		\$600,000	CRSEI
Corporate Relations, Stakeholder Engagement and Innovation - Government Affairs	500,000		\$500,000	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Corporate Communications	3,800,000		\$3,800,000	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Stakeholder and Community Engagement	5,900,000		\$5,900,000	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Innovation, Research & Development	4,300,000		\$4,300,000	DOM
Information and Technology Services - VP Office	900,000		\$900,000	ITS
Information and Technology Services - CIO Office (Organizational Governance Support)	2,100,000		\$2,100,000	O&A
Information and Technology Services - Information Security	5,400,000		\$5,400,000	O&A
Information and Technology Services - Business Services & Solution Delivery	18,100,000		\$18,100,000	O&A
Information and Technology Services - IT Infrastructure & Operations (Technology Services)	20,300,000		\$20,300,000	O&A
Legal Resources and Corporate Governance - VP Office	1,500,000		\$1,500,000	LRCG
Legal Resources and Corporate Governance - General Counsel	10,000,000		\$10,000,000	TWh
Legal Resources and Corporate Governance - Market Rules and Regulatory Affairs	2,600,000		\$2,600,000	TWh
Legal Resources and Corporate Governance - OEB Assessment Fees	600,000		\$600,000	TWh
Legal Resources and Corporate Governance - Board	800,000		\$800,000	TWh
Legal Resources and Corporate Governance - NERC and NPCC Membership	4,700,000		\$4,700,000	HALF

Asset Break Out Worksheet

IESO 2023 Fee Model

FIXED ASSETS	BALANCE SHEET ITEMS			EXPENSE ITEMS			
	Description	Break out Functions	Accumulated Depreciation - Fixed Assets Only	Asset net of Accumulated Depreciation and Contributed Capital	Estimated Average Service Life (Years)	Amortization Share	Amortization Share
Assets - Assets	\$56,423,729	\$ (28,494,311)	27,929,419	37	\$1,524,965.66	3.2%	\$727,100.37
Assets - Market systems & applications	\$338,405,073	\$ (302,900,825)	35,504,248	8	\$35,504,247.90	73.9%	\$16,928,349.48
Assets - Infrastructure & other assets	\$77,009,334	\$ (64,288,196)	12,721,138	7	\$11,001,333.36	22.9%	\$5,245,412.22
Assets - Assets Under Construction	\$26,492,185		26,492,185			0.0%	\$0
Total	\$498,330,321	\$ (395,683,332)	102,646,990		\$48,030,547		\$22,900,862
Functionalized Accounts		(\$395,683,332)	\$102,646,990				\$22,900,862

Revenue Worksheet

IESO 2023 Fee Model

		1	2
	Total	Domestic	Export
Billing Data			
Gross MWh	153,186,325	140,107,102	13,079,223
IESO MWh Rate		\$1.3329	\$1.0126
Net Class Revenue	\$199,992,778	\$186,748,757	\$13,244,021
Single Charge Scenario			
Revenue Requirement	\$208,300,000		
Uniform Rate		\$1.3598	\$1.3598
Revenue at Uniform Rate		\$190,515,109	\$17,784,891

Demand Data Worksheet

IESO 2023 Fee Model

Customer Classes		1	2
		Domestic	Export
Volume			
Demand		149.140	135.8
Less Transmission Line Losses		- 3.0	(2.7)
Embedded Generation		7.0	7.0
Gross MWh	TWh	153.19	140.1
Domestic MWh	DTWh	140.1	140.1

Gross MWh Matches 'Revenue' MWh

Revenue to Cost Summary Worksheet

IESO 2023 Fee Model

Class Revenue, Cost Analysis

		1	2
		Domestic	Export
Revenue at Existing Rates	\$199,992,778	\$186,748,757	\$13,244,021
Factor required to recover Revenue Requirement	1.04404		
Revenue at Status Quo Rates	\$208,800,000	\$194,972,743	\$13,827,257
Revenue at Single Rate	\$208,300,000	\$190,515,109	\$17,784,891
Expenses			
CEO	\$1,500,000	\$1,398,643	\$101,357
M&R	\$37,400,000	\$34,206,745	\$3,193,255
PCRA	\$24,400,000	\$24,400,000	\$0
CRSEI	\$15,100,000	\$15,100,000	\$0
ITS	\$46,800,000	\$43,637,660	\$3,162,340
LRCG	\$28,200,000	\$24,526,592	\$3,673,408
CS	\$29,300,000	\$27,220,157	\$2,079,843
MACD	\$2,400,000	\$2,195,085	\$204,915
MR	\$5,300,000	\$4,847,480	\$452,520
HR	\$6,200,000	\$5,781,057	\$418,943
Other	\$700,000	\$652,700	\$47,300
Int	(\$11,400,862)	(\$10,427,443)	(\$973,419)
Dep	\$22,900,862	\$20,945,560	\$1,955,302
Revenue Requirement	\$208,800,000	\$194,484,237	\$14,315,763
Revenue Requirement Input equals Output			
RF Other Revenues	\$500,000	\$500,000	\$0
Rate Revenue Required	\$208,300,000	\$193,984,237	\$14,315,763
Revenue to Expense at Status Quo Rates	100.00%	100.51%	96.59%
Revenue to Expense at Single Rate	100.00%	98.21%	124.23%
Volume (MWh)	153,186,325	140,107,102	13,079,223
Separate Rates		\$1.3845	\$1.0945
Rate Weight (percent of domestic rate)			79.1%
Rounded Rates		\$1.3845	\$1.0945
Revenue at Rounded Rates	\$208,293,493	\$193,978,283	\$14,315,210
Surplus (Shortfall) - Rounded Rates	(\$6,507)	(\$5,954)	(\$553)

Summary of Allocation by Class & Accounts

IESO 2023 Fee Model

ALLOCATION BY RATE CLASSIFICATION

Accounts	O1 Grouping	Total	1	2
			Domestic	Export
CEO Office	CEO	\$1,500,000	\$1,398,643	\$101,357
Markets & Reliability - VP Office	M&R	\$1,100,000	\$1,006,081	\$93,919
Markets & Reliability - Power System Assessments	M&R	\$11,200,000	\$10,243,731	\$956,269
Markets & Reliability - Market Operations	M&R	\$16,100,000	\$14,725,364	\$1,374,636
Markets & Reliability - Wholesale Market Development	M&R	\$3,700,000	\$3,384,090	\$315,910
Markets & Reliability - Reliability Assurance & Operational Assessments	M&R	\$5,300,000	\$4,847,480	\$452,520
Planning, Conservation and Resource Adequacy - VP Office and Planning Projects & Sustainability	PCRA			
		\$1,004,115	\$1,004,115	\$0
Planning, Conservation and Resource Adequacy - Resource Planning	PCRA	\$6,225,514	\$6,225,514	\$0
Planning, Conservation and Resource Adequacy - Transmission Planning	PCRA	\$5,020,576	\$5,020,576	\$0
Planning, Conservation and Resource Adequacy - Resource & System Adequacy	PCRA	\$6,024,691	\$6,024,691	\$0
Planning, Conservation and Resource Adequacy - Energy Efficiency	PCRA	\$6,125,103	\$6,125,103	\$0
Corporate Relations, Stakeholder Engagement and Innovation - VP Office	CRSEI	\$600,000	\$600,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Government Affairs	CRSEI	\$500,000	\$500,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Corporate Communications		\$3,800,000	\$3,800,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Stakeholder and Community Engagement	CRSEI	\$5,900,000	\$5,900,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Innovation, Research & Development	CRSEI	\$4,300,000	\$4,300,000	\$0
Information and Technology Services - VP Office	ITS	\$900,000	\$839,186	\$60,814
Information and Technology Services - CIO Office (Organizational Governance Support)	ITS			
		\$2,100,000	\$1,958,100	\$141,900
Information and Technology Services - Information Security	ITS	\$5,400,000	\$5,035,115	\$364,885
Information and Technology Services - Business Services & Solution Delivery	ITS	\$18,100,000	\$16,876,958	\$1,223,042
Information and Technology Services - IT Infrastructure & Operations (Technology Services)		\$20,300,000	\$18,928,301	\$1,371,699
Legal Resources and Corporate Governance - VP Office	LRCG	\$1,500,000	\$1,371,928	\$128,072
Legal Resources and Corporate Governance - General Counsel	LRCG	\$10,000,000	\$9,146,189	\$853,811
Legal Resources and Corporate Governance - Market Rules and Regulatory Affairs	LRCG	\$2,600,000	\$2,378,009	\$221,991
Legal Resources and Corporate Governance - OEB Assessment Fees	LRCG	\$600,000	\$548,771	\$51,229
Legal Resources and Corporate Governance - Board	LRCG	\$800,000	\$731,695	\$68,305
Legal Resources and Corporate Governance - NERC and NPCC Membership	LRCG	\$4,700,000	\$2,350,000	\$2,350,000
Legal Resources and Corporate Governance - Contract Management	LRCG	\$8,000,000	\$8,000,000	\$0
Market Assessment and Compliance Division - Market Assessment and Compliance Division	MACD			
		\$1,700,000	\$1,554,852	\$145,148
Market Assessment and Compliance Division - OEB Assessment Fees	MACD	\$700,000	\$640,233	\$59,767
Corporate Services - VP Office	CS	\$600,000	\$557,409	\$42,591
Corporate Services - Corporate Finance	CS	\$5,900,000	\$5,501,329	\$398,671
Corporate Services - Procurement	CS	\$1,800,000	\$1,678,372	\$121,628
Corporate Services - Risk, Performance & Reliance and Internal Audit	CS	\$2,100,000	\$1,958,100	\$141,900
Corporate Services - Settlements	CS	\$5,500,000	\$5,030,404	\$469,596
Corporate Services - Facilities	CS	\$10,000,000	\$9,324,286	\$675,714
Corporate Services - Enterprise Change	CS	\$3,400,000	\$3,170,257	\$229,743
Human Resources	HR	\$6,200,000	\$5,781,057	\$418,943
Corporate Adjustment - General	Other	\$700,000	\$652,700	\$47,300
Market Renewal	MR	\$5,300,000	\$4,847,480	\$452,520
Interest, Amortization and Registration Fees - Amortization	Dep	\$22,900,862	\$20,945,560	\$1,955,302
Interest, Amortization and Registration Fees - Interest	Int	(\$11,400,862)	(\$10,427,443)	(\$973,419)
Interest, Amortization and Registration Fees - Registration Fees	RF	(\$500,000)	(\$500,000)	\$0
Assets - Assets	rb	\$56,423,729	\$51,606,207	\$4,817,522
Assets - Market systems & applications	rb	\$338,405,073	\$309,511,662	\$28,893,411
Assets - Infrastructure & other assets	rb	\$77,009,334	\$70,434,189	\$6,575,145
Assets - Assets Under Construction	rb	\$26,492,185	\$24,230,252	\$2,261,933
Accumulated Amortization	rb	(\$395,683,332)	(\$361,899,438)	(\$33,783,894)
Total Allocation		\$310,946,990	\$287,867,110	\$23,079,880
Check		Okay		

Composite Allocator Detail Worksheet

IESO 2023 Fee Model

	1	2
Demand Total	Domestic	Export

Fixed Assets

Assets - Assets	\$56,423,729	\$51,606,207	\$4,817,522
Assets - Market systems & applications	\$338,405,073	\$309,511,662	\$28,893,411
Assets - Infrastructure & other assets	\$77,009,334	\$70,434,189	\$6,575,145
Assets - Assets Under Construction	\$26,492,185	\$24,230,252	\$2,261,933
Gross Fixed Assets	\$498,330,321	\$455,782,311	\$42,548,011

Accumulated Amortization

Assets - Assets	(\$28,494,311)	(\$26,061,434)	(\$2,432,877)
Assets - Market systems & applications	(\$302,900,825)	(\$277,038,808)	(\$25,862,018)
Assets - Infrastructure & other assets	(\$64,288,196)	(\$58,799,196)	(\$5,488,999)
Assets - Assets Under Construction	\$0	\$0	\$0
Accumulated Amortization	(\$395,683,332)	(\$361,899,438)	(\$33,783,894)
Net Fixed Assets	\$102,646,990	\$93,882,873	\$8,764,117

Amortization Expense

Assets - Assets	\$727,100	\$665,020	\$62,081
Assets - Market systems & applications	\$16,928,349	\$15,482,988	\$1,445,362
Assets - Infrastructure & other assets	\$5,245,412	\$4,797,553	\$447,859
Assets - Assets Under Construction	\$0	\$0	\$0
Accumulated Amortization Total	\$22,900,862	\$20,945,560	\$1,955,302

Identifiable O&A

Markets & Reliability - VP Office	\$1,100,000	\$1,006,081	\$93,919
Markets & Reliability - Power System Assessments	\$11,200,000	\$10,243,731	\$956,269
Markets & Reliability - Market Operations	\$16,100,000	\$14,725,364	\$1,374,636
Markets & Reliability - Wholesale Market Development	\$3,700,000	\$3,384,090	\$315,910
Markets & Reliability - Reliability Assurance & Operational Assessments	\$5,300,000	\$4,847,480	\$452,520
Planning, Conservation and Resource Adequacy - VP Office and Planning Projects & Sustainability	\$1,004,115	\$1,004,115	\$0
Planning, Conservation and Resource Adequacy - Resource Planning	\$6,225,514	\$6,225,514	\$0
Planning, Conservation and Resource Adequacy - Transmission Planning	\$5,020,576	\$5,020,576	\$0
Planning, Conservation and Resource Adequacy - Resource & System Adequacy	\$6,024,691	\$6,024,691	\$0
Planning, Conservation and Resource Adequacy - Energy Efficiency	\$6,125,103	\$6,125,103	\$0
Corporate Relations, Stakeholder Engagement and Innovation - VP Office	\$600,000	\$600,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Government Affairs	\$500,000	\$500,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Corporate Communications	\$3,800,000	\$3,800,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Stakeholder and Community Engagement	\$5,900,000	\$5,900,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Innovation, Research & Development	\$4,300,000	\$4,300,000	\$0
Legal Resources and Corporate Governance - VP Office	\$1,500,000	\$1,371,928	\$128,072
Legal Resources and Corporate Governance - General Counsel	\$10,000,000	\$9,146,189	\$853,811
Legal Resources and Corporate Governance - Market Rules and Regulatory Affairs	\$2,600,000	\$2,378,009	\$221,991
Legal Resources and Corporate Governance - OEB Assessment Fees	\$600,000	\$548,771	\$51,229
Legal Resources and Corporate Governance - Board	\$800,000	\$731,695	\$68,305
Legal Resources and Corporate Governance - NERC and NPCC Membership	\$4,700,000	\$2,350,000	\$2,350,000
Legal Resources and Corporate Governance - Contract Management	\$8,000,000	\$8,000,000	\$0
Market Assessment and Compliance Division - Market Assessment and Compliance Division	\$1,700,000	\$1,554,852	\$145,148
Market Assessment and Compliance Division - OEB Assessment Fees	\$700,000	\$640,233	\$59,767
Corporate Services - Settlements	\$5,500,000	\$5,030,404	\$469,596
Market Renewal	\$5,300,000	\$4,847,480	\$452,520
O&A Total	\$118,300,000	\$110,306,307	\$7,993,693

Allocator Worksheet

IESO 2023 Fee Model

Details:

The worksheet below details how allocators are derived.

			1	2
Explanation	ID and Factors	Total	Domestic	Export
Energy				
System TWh	TWh	100.00%	91.46%	8.54%
Domestic TWh	DTWh	100.00%	100.00%	0.00%
CUSTOMER ALLOCATORS				
Composite Allocators				
Gross Assets	GA	100.00%	91.46%	8.54%
Net Fixed Assets	NFA	100.00%	91.46%	8.54%
Identifiable O&A	O&A	100.00%	93.24%	6.76%
Dedicated to Domestic	DOM	100.00%	100%	0%
Dedicated to Export	EXP	100.00%	0%	100%
Equal Halves	HALF	100.00%	50.00%	50.00%
Markets & Reliability	M&R	100.00%	91.46%	8.54%
Planning, Conservation and Resource Adequacy	PCRA	100.00%	100.00%	0.00%
Corporate Relations, Stakeholder Engagement and Innovation	CRSEI	100.00%	100.00%	0.00%
Information and Technology Services	ITS	100.00%	93.24%	6.76%
Legal Resources and Corporate Governance	LRCG	100.00%	91.46%	8.54%
Corporate Services	CS	100.00%	92.90%	7.10%

Allocation Detail Worksheet

IESO 2023 Fee Model

This sheet shows what accounts are included in the COSS and how the categorized costs are allocated.

Accounts	Classification and Allocation
CEO Office	O&A
Markets & Reliability - VP Office	M&R
Markets & Reliability - Power System Assessments	TWh
Markets & Reliability - Market Operations	TWh
Markets & Reliability - Wholesale Market Development	TWh
Markets & Reliability - Reliability Assurance & Operational Assessments	TWh
Planning, Conservation and Resource Adequacy - VP Office and Planning Projects & Sustainability	PCRA
Planning, Conservation and Resource Adequacy - Resource Planning	DOM
Planning, Conservation and Resource Adequacy - Transmission Planning	DOM
Planning, Conservation and Resource Adequacy - Resource & System Adequacy	DOM
Planning, Conservation and Resource Adequacy - Energy Efficiency	DOM
Corporate Relations, Stakeholder Engagement and Innovation - VP Office	CRSEI
Corporate Relations, Stakeholder Engagement and Innovation - Government Affairs	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Corporate Communications	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Stakeholder and Community Engagement	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Innovation, Research & Development	DOM
Information and Technology Services - VP Office	ITS
Information and Technology Services - CIO Office (Organizational Governance Support)	O&A
Information and Technology Services - Information Security	O&A
Information and Technology Services - Business Services & Solution Delivery	O&A
Information and Technology Services - IT Infrastructure & Operations (Technology Services)	O&A
Legal Resources and Corporate Governance - VP Office	LRCG
Legal Resources and Corporate Governance - General Counsel	TWh
Legal Resources and Corporate Governance - Market Rules and Regulatory Affairs	TWh
Legal Resources and Corporate Governance - OEB Assessment Fees	TWh
Legal Resources and Corporate Governance - Board	TWh
Legal Resources and Corporate Governance - NERC and NPCC Membership	HALF
Legal Resources and Corporate Governance - Contract Management	DOM
Market Assessment and Compliance Division - Market Assessment and Compliance Division	TWh
Market Assessment and Compliance Division - OEB Assessment Fees	TWh
Corporate Services - VP Office	CS
Corporate Services - Corporate Finance	O&A
Corporate Services - Procurement	O&A
Corporate Services - Risk, Performance & Reliance and Internal Audit	O&A
Corporate Services - Settlements	TWh
Corporate Services - Facilities	O&A
Corporate Services - Enterprise Change	O&A
Human Resources	O&A
Corporate Adjustment - General	O&A
Market Renewal	TWh
Interest, Amortization and Registration Fees - Amortization	TWh
Interest, Amortization and Registration Fees - Interest	TWh
Interest, Amortization and Registration Fees - Registration Fees	DOM
Assets - Assets	TWh
Assets - Market systems & applications	TWh
Assets - Infrastructure & other assets	TWh
Assets - Assets Under Construction	TWh
Accumulated Amortization	Assets

Reconciliation Worksheet

IESO 2023 Fee Model

Details:

The worksheet below shows reconciliation of costs included and excluded in the Trial Balance.

Accounts	Financial Statement	Balance in Summary by Class and Accounts	Difference
CEO Office	\$1,500,000	\$1,500,000	\$0
Markets & Reliability - VP Office	\$1,100,000	\$1,100,000	\$0
Markets & Reliability - Power System Assessments	\$11,200,000	\$11,200,000	\$0
Markets & Reliability - Market Operations	\$16,100,000	\$16,100,000	\$0
Markets & Reliability - Wholesale Market Development	\$3,700,000	\$3,700,000	\$0
Markets & Reliability - Reliability Assurance & Operational Assessments	\$5,300,000	\$5,300,000	\$0
Planning, Conservation and Resource Adequacy - VP Office and Planning Projects & Sustainability	\$1,004,115	\$1,004,115	\$0
Planning, Conservation and Resource Adequacy - Resource Planning	\$6,225,514	\$6,225,514	\$0
Planning, Conservation and Resource Adequacy - Transmission Planning	\$5,020,576	\$5,020,576	\$0
Planning, Conservation and Resource Adequacy - Resource & System Adequacy	\$6,024,691	\$6,024,691	\$0
Planning, Conservation and Resource Adequacy - Energy Efficiency	\$6,125,103	\$6,125,103	\$0
Corporate Relations, Stakeholder Engagement and Innovation - VP Office	\$600,000	\$600,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Government Affairs	\$500,000	\$500,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Corporate Communications	\$3,800,000	\$3,800,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Stakeholder and Community Engage	\$5,900,000	\$5,900,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Innovation, Research & Development	\$4,300,000	\$4,300,000	\$0
Information and Technology Services - VP Office	\$900,000	\$900,000	\$0
Information and Technology Services - CIO Office (Organizational Governance Support)	\$2,100,000	\$2,100,000	\$0
Information and Technology Services - Information Security	\$5,400,000	\$5,400,000	\$0
Information and Technology Services - Business Services & Solution Delivery	\$18,100,000	\$18,100,000	\$0
Information and Technology Services - IT Infrastructure & Operations (Technology Services)	\$20,300,000	\$20,300,000	\$0
Legal Resources and Corporate Governance - VP Office	\$1,500,000	\$1,500,000	\$0
Legal Resources and Corporate Governance - General Counsel	\$10,000,000	\$10,000,000	\$0
Legal Resources and Corporate Governance - Market Rules and Regulatory Affairs	\$2,600,000	\$2,600,000	\$0
Legal Resources and Corporate Governance - OEB Assessment Fees	\$600,000	\$600,000	\$0
Legal Resources and Corporate Governance - Board	\$800,000	\$800,000	\$0
Legal Resources and Corporate Governance - NERC and NPCC Membership	\$4,700,000	\$4,700,000	\$0
Legal Resources and Corporate Governance - Contract Management	\$8,000,000	\$8,000,000	\$0
Market Assessment and Compliance Division - Market Assessment and Compliance Division	\$1,700,000	\$1,700,000	\$0
Market Assessment and Compliance Division - OEB Assessment Fees	\$700,000	\$700,000	\$0
Corporate Services - VP Office	\$600,000	\$600,000	\$0
Corporate Services - Corporate Finance	\$5,900,000	\$5,900,000	\$0
Corporate Services - Procurement	\$1,800,000	\$1,800,000	\$0
Corporate Services - Risk, Performance & Reliance and Internal Audit	\$2,100,000	\$2,100,000	\$0
Corporate Services - Settlements	\$5,500,000	\$5,500,000	\$0
Corporate Services - Facilities	\$10,000,000	\$10,000,000	\$0
Corporate Services - Enterprise Change	\$3,400,000	\$3,400,000	\$0
Human Resources	\$6,200,000	\$6,200,000	\$0
Corporate Adjustment - General	\$700,000	\$700,000	\$0
Market Renewal	\$5,300,000	\$5,300,000	\$0
Interest, Amortization and Registration Fees - Amortization	\$22,900,862	\$22,900,862	\$0
Interest, Amortization and Registration Fees - Interest	(\$11,400,862)	(\$11,400,862)	\$0
Interest, Amortization and Registration Fees - Registration Fees	(\$500,000)	(\$500,000)	\$0
Assets - Assets	\$56,423,729	\$56,423,729	\$0
Assets - Market systems & applications	\$338,405,073	\$338,405,073	\$0
Assets - Infrastructure & other assets	\$77,009,334	\$77,009,334	\$0
Assets - Assets Under Construction	\$26,492,185	\$26,492,185	\$0
Accumulated Amortization	(\$395,683,332)	(\$395,683,332)	\$0
Total	\$310,946,990	\$310,946,990	\$0

IESO 2024 Cost Allocation & Fee Model

Version: May 5, 2023

Functionalized Accounts

IESO 2024 Fee Model

Revenue Requirement (\$)	\$218,400,000
Net Fixed Assets (\$)	\$102,646,990

Expense Accounts (Revenue Requirement)

Accounts	Forecast Financial Statement	Reclassify accounts	Reclassified Balance	Allocator
CEO Office	1,500,000		\$1,500,000	O&A
Markets & Reliability - VP Office	1,102,821		\$1,102,821	M&R
Markets & Reliability - Power System Assessments	11,629,744		\$11,629,744	TWh
Markets & Reliability - Market Operations	17,143,846		\$17,143,846	TWh
Markets & Reliability - Wholesale Market Development	3,709,487		\$3,709,487	TWh
Markets & Reliability - Reliability Assurance & Operational Assessments	5,514,103		\$5,514,103	TWh
Planning, Conservation and Resource Adequacy - VP Office and Planning Projects & Sustainability	1,100,000		\$1,100,000	PCRA
Planning, Conservation and Resource Adequacy - Resource Planning	6,400,000		\$6,400,000	DOM
Planning, Conservation and Resource Adequacy - Transmission Planning	5,200,000		\$5,200,000	DOM
Planning, Conservation and Resource Adequacy - Resource & System Adequacy	7,100,000		\$7,100,000	DOM
Planning, Conservation and Resource Adequacy - Energy Efficiency	6,400,000		\$6,400,000	DOM
Corporate Relations, Stakeholder Engagement and Innovation - VP Office	700,000		\$700,000	CRSEI
Corporate Relations, Stakeholder Engagement and Innovation - Government Affairs	500,000		\$500,000	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Corporate Communications	4,000,000		\$4,000,000	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Stakeholder and Community Engagement	6,300,000		\$6,300,000	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Innovation, Research & Development	4,300,000		\$4,300,000	DOM
Information and Technology Services - VP Office	900,000		\$900,000	ITS
Information and Technology Services - CIO Office (Organizational Governance Support)	2,200,000		\$2,200,000	O&A
Information and Technology Services - Information Security	5,600,000		\$5,600,000	O&A
Information and Technology Services - Business Services & Solution Delivery	19,100,000		\$19,100,000	O&A
Information and Technology Services - IT Infrastructure & Operations (Technology Services)	21,600,000		\$21,600,000	O&A
Legal Resources and Corporate Governance - VP Office	1,495,098		\$1,495,098	LRCG
Legal Resources and Corporate Governance - General Counsel	10,764,706		\$10,764,706	TWh
Legal Resources and Corporate Governance - Market Rules and Regulatory Affairs	2,890,523		\$2,890,523	TWh
Legal Resources and Corporate Governance - OEB Assessment Fees	697,712		\$697,712	TWh
Legal Resources and Corporate Governance - Board	797,386		\$797,386	TWh
Legal Resources and Corporate Governance - NERC and NPCC Membership	5,282,680		\$5,282,680	HALF

Asset Break Out Worksheet

IESO 2024 Fee Model

FIXED ASSETS	BALANCE SHEET ITEMS			EXPENSE ITEMS			
	Description	Break out Functions	Accumulated Depreciation - Fixed Assets Only	Asset net of Accumulated Depreciation and Contributed Capital	Estimated Average Service Life (Years)	Amortization Share	Amortization Share
Assets - Assets	\$56,423,729	\$ (28,494,311)	27,929,419	37	\$1,524,965.66	3.2%	\$698,498.07
Assets - Market systems & applications	\$338,405,073	\$ (302,900,825)	35,504,248	8	\$35,504,247.90	73.9%	\$16,262,430.97
Assets - Infrastructure & other assets	\$77,009,334	\$ (64,288,196)	12,721,138	7	\$11,001,333.36	22.9%	\$5,039,070.95
Assets - Assets Under Construction	\$26,492,185		26,492,185			0.0%	\$0
Total	\$498,330,321	\$ (395,683,332)	102,646,990		\$48,030,547		\$22,000,000
Functionalized Accounts		(\$395,683,332)	\$102,646,990				\$22,000,000

Revenue Worksheet

IESO 2024 Fee Model

		1	2
	Total	Domestic	Export
Billing Data			
Gross MWh	154,929,767	144,966,402	9,963,365
IESO MWh Rate		\$1.3329	\$1.0126
Net Class Revenue	\$203,314,620	\$193,225,717	\$10,088,903
Single Charge Scenario			
Revenue Requirement	\$218,400,000		
Uniform Rate		\$1.4097	\$1.4097
Revenue at Uniform Rate		\$204,354,934	\$14,045,066

Demand Data Worksheet

IESO 2024 Fee Model

Customer Classes		1		2	
		Total	Domestic	Export	
Volume					
Demand		150.265	140.1	10.2	
Less Transmission Line Losses		- 3.1	(2.9)	(0.2)	
Embedded Generation		7.7	7.7		
Gross MWh	TWh	154.93	145.0	10.0	
Domestic MWh	DTWh	145.0	145.0		

Gross MWh Matches 'Revenue' MWh

Revenue to Cost Summary Worksheet

IESO 2024 Fee Model

Class Revenue, Cost Analysis

	Total	1 Domestic	2 Export
Revenue at Existing Rates	\$203,314,620	\$193,225,717	\$10,088,903
Factor required to recover Revenue Requirement	1.07666		
Revenue at Status Quo Rates	\$218,900,000	\$208,037,717	\$10,862,283
Revenue at Single Rate	\$218,400,000	\$204,354,934	\$14,045,066
Expenses			
CEO	\$1,500,000	\$1,415,001	\$84,999
M&R	\$39,100,000	\$36,585,522	\$2,514,478
PCRA	\$26,200,000	\$26,200,000	\$0
CRSEI	\$15,800,000	\$15,800,000	\$0
ITS	\$49,400,000	\$46,600,691	\$2,799,309
LRCG	\$30,500,000	\$26,788,211	\$3,711,789
CS	\$30,200,000	\$28,442,830	\$1,757,170
MACD	\$2,500,000	\$2,339,228	\$160,772
MR	\$4,400,000	\$4,117,041	\$282,959
HR	\$6,400,000	\$6,037,336	\$362,664
Other	\$600,000	\$566,000	\$34,000
Int	(\$9,700,000)	(\$9,076,204)	(\$623,796)
Dep	\$22,000,000	\$20,585,204	\$1,414,796
Revenue Requirement	\$218,900,000	\$206,400,860	\$12,499,140
Revenue Requirement Input equals Output			
RF Other Revenues	\$500,000	\$500,000	\$0
Rate Revenue Required	\$218,400,000	\$205,900,860	\$12,499,140
Revenue to Expense at Status Quo Rates	100.00%	101.04%	86.90%
Revenue to Expense at Single Rate	100.00%	99.25%	112.37%
Volume (MWh)	154,929,767	144,966,402	9,963,365
Separate Rates		\$1.4203	\$1.2545
Rate Weight (percent of domestic rate)			88.3%
Rounded Rates		\$1.4203	\$1.2545
Revenue at Rounded Rates	\$218,394,822	\$205,895,781	\$12,499,041
Surplus (Shortfall) - Rounded Rates	(\$5,178)	(\$5,079)	(\$99)

Summary of Allocation by Class & Accounts

IESO 2024 Fee Model

ALLOCATION BY RATE CLASSIFICATION

Accounts	O1 Grouping	Total	1 Domestic	2 Export
CEO Office	CEO	\$1,500,000	\$1,415,001	\$84,999
Markets & Reliability - VP Office	M&R	\$1,102,821	\$1,031,899	\$70,921
Markets & Reliability - Power System Assessments	M&R	\$11,629,744	\$10,881,847	\$747,896
Markets & Reliability - Market Operations	M&R	\$17,143,846	\$16,041,344	\$1,102,502
Markets & Reliability - Wholesale Market Development	M&R	\$3,709,487	\$3,470,934	\$238,553
Markets & Reliability - Reliability Assurance & Operational Assessments	M&R	\$5,514,103	\$5,159,497	\$354,606
Planning, Conservation and Resource Adequacy - VP Office and Planning Projects & Sustainability	PCRA	\$1,100,000	\$1,100,000	\$0
Planning, Conservation and Resource Adequacy - Resource Planning	PCRA	\$6,400,000	\$6,400,000	\$0
Planning, Conservation and Resource Adequacy - Transmission Planning	PCRA	\$5,200,000	\$5,200,000	\$0
Planning, Conservation and Resource Adequacy - Resource & System Adequacy	PCRA	\$7,100,000	\$7,100,000	\$0
Planning, Conservation and Resource Adequacy - Energy Efficiency	PCRA	\$6,400,000	\$6,400,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - VP Office	CRSEI	\$700,000	\$700,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Government Affairs	CRSEI	\$500,000	\$500,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Corporate Communications	CRSEI	\$4,000,000	\$4,000,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Stakeholder and Community Engagement	CRSEI	\$6,300,000	\$6,300,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Innovation, Research & Development	CRSEI	\$4,300,000	\$4,300,000	\$0
Information and Technology Services - VP Office	ITS	\$900,000	\$849,000	\$51,000
Information and Technology Services - CIO Office (Organizational Governance Support)	ITS	\$2,200,000	\$2,075,334	\$124,666
Information and Technology Services - Information Security	ITS	\$5,600,000	\$5,282,669	\$317,331
Information and Technology Services - Business Services & Solution Delivery	ITS	\$19,100,000	\$18,017,676	\$1,082,324
Information and Technology Services - IT Infrastructure & Operations (Technology Services)	ITS	\$21,600,000	\$20,376,011	\$1,223,989
Legal Resources and Corporate Governance - VP Office	LRCG	\$1,495,098	\$1,398,950	\$96,148
Legal Resources and Corporate Governance - General Counsel	LRCG	\$10,764,706	\$10,072,439	\$692,267
Legal Resources and Corporate Governance - Market Rules and Regulatory Affairs	LRCG	\$2,890,523	\$2,704,636	\$185,886
Legal Resources and Corporate Governance - OEB Assessment Fees	LRCG	\$697,712	\$652,843	\$44,869
Legal Resources and Corporate Governance - Board	LRCG	\$797,386	\$746,107	\$51,279
Legal Resources and Corporate Governance - NERC and NPCC Membership	LRCG	\$5,282,680	\$2,641,340	\$2,641,340
Legal Resources and Corporate Governance - Contract Management	LRCG	\$8,571,895	\$8,571,895	\$0
Market Assessment and Compliance Division - Market Assessment and Compliance Division	MACD	\$1,800,000	\$1,684,244	\$115,756
Market Assessment and Compliance Division - OEB Assessment Fees	MACD	\$700,000	\$654,984	\$45,016
Corporate Services - VP Office	CS	\$598,020	\$563,224	\$34,795
Corporate Services - Corporate Finance	CS	\$5,880,528	\$5,547,301	\$333,227
Corporate Services - Procurement	CS	\$1,794,059	\$1,692,397	\$101,662
Corporate Services - Risk, Performance & Reliance and Internal Audit	CS	\$2,292,409	\$2,162,507	\$129,902
Corporate Services - Settlements	CS	\$5,880,528	\$5,502,358	\$378,170
Corporate Services - Facilities	CS	\$10,166,337	\$9,590,249	\$576,087
Corporate Services - Enterprise Change	CS	\$3,588,119	\$3,384,794	\$203,325
Human Resources	HR	\$6,400,000	\$6,037,336	\$362,664
Corporate Adjustment - General	Other	\$600,000	\$566,000	\$34,000
Market Renewal	MR	\$4,400,000	\$4,117,041	\$282,959
Interest, Amortization and Registration Fees - Amortization	Dep	\$22,000,000	\$20,585,204	\$1,414,796
Interest, Amortization and Registration Fees - Interest	Int	(\$9,700,000)	(\$9,076,204)	(\$623,796)
Interest, Amortization and Registration Fees - Registration Fees	RF	(\$500,000)	(\$500,000)	\$0
Assets - Assets	rb	\$56,423,729	\$52,795,181	\$3,628,549
Assets - Market systems & applications	rb	\$338,405,073	\$316,642,611	\$21,762,462
Assets - Infrastructure & other assets	rb	\$77,009,334	\$72,056,947	\$4,952,386
Assets - Assets Under Construction	rb	\$26,492,185	\$24,788,502	\$1,703,684
Accumulated Amortization	rb	(\$395,683,332)	(\$370,237,367)	(\$25,445,965)
Total Allocation		\$321,046,990	\$301,946,733	\$19,100,256
Check	Okay			

Composite Allocator Detail Worksheet

IESO 2024 Fee Model

	1	2
Demand Total	Domestic	Export

Fixed Assets

Assets - Assets	\$56,423,729	\$52,795,181	\$3,628,549
Assets - Market systems & applications	\$338,405,073	\$316,642,611	\$21,762,462
Assets - Infrastructure & other assets	\$77,009,334	\$72,056,947	\$4,952,386
Assets - Assets Under Construction	\$26,492,185	\$24,788,502	\$1,703,684
Gross Fixed Assets	\$498,330,321	\$466,283,240	\$32,047,081

Accumulated Amortization

Assets - Assets	(\$28,494,311)	(\$26,661,872)	(\$1,832,438)
Assets - Market systems & applications	(\$302,900,825)	(\$283,421,603)	(\$19,479,223)
Assets - Infrastructure & other assets	(\$64,288,196)	(\$60,153,892)	(\$4,134,304)
Assets - Assets Under Construction	\$0	\$0	\$0
Accumulated Amortization	(\$395,683,332)	(\$370,237,367)	(\$25,445,965)
Net Fixed Assets	\$102,646,990	\$96,045,873	\$6,601,116

Amortization Expense

Assets - Assets	\$698,498	\$653,578	\$44,920
Assets - Market systems & applications	\$16,262,431	\$15,216,612	\$1,045,819
Assets - Infrastructure & other assets	\$5,039,071	\$4,715,014	\$324,057
Assets - Assets Under Construction	\$0	\$0	\$0
Accumulated Amortization Total	\$22,000,000	\$20,585,204	\$1,414,796

Identifiable O&A

Markets & Reliability - VP Office	\$1,102,821	\$1,031,899	\$70,921
Markets & Reliability - Power System Assessments	\$11,629,744	\$10,881,847	\$747,896
Markets & Reliability - Market Operations	\$17,143,846	\$16,041,344	\$1,102,502
Markets & Reliability - Wholesale Market Development	\$3,709,487	\$3,470,934	\$238,553
Markets & Reliability - Reliability Assurance & Operational Assessments	\$5,514,103	\$5,159,497	\$354,606
Planning, Conservation and Resource Adequacy - VP Office and Planning Projects & Sustainability	\$1,100,000	\$1,100,000	\$0
Planning, Conservation and Resource Adequacy - Resource Planning	\$6,400,000	\$6,400,000	\$0
Planning, Conservation and Resource Adequacy - Transmission Planning	\$5,200,000	\$5,200,000	\$0
Planning, Conservation and Resource Adequacy - Resource & System Adequacy	\$7,100,000	\$7,100,000	\$0
Planning, Conservation and Resource Adequacy - Energy Efficiency	\$6,400,000	\$6,400,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - VP Office	\$700,000	\$700,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Government Affairs	\$500,000	\$500,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Corporate Communications	\$4,000,000	\$4,000,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Stakeholder and Community Engagement	\$6,300,000	\$6,300,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Innovation, Research & Development	\$4,300,000	\$4,300,000	\$0
Legal Resources and Corporate Governance - VP Office	\$1,495,098	\$1,398,950	\$96,148
Legal Resources and Corporate Governance - General Counsel	\$10,764,706	\$10,072,439	\$692,267
Legal Resources and Corporate Governance - Market Rules and Regulatory Affairs	\$2,890,523	\$2,704,636	\$185,886
Legal Resources and Corporate Governance - OEB Assessment Fees	\$697,712	\$652,843	\$44,869
Legal Resources and Corporate Governance - Board	\$797,386	\$746,107	\$51,279
Legal Resources and Corporate Governance - NERC and NPCC Membership	\$5,282,680	\$2,641,340	\$2,641,340
Legal Resources and Corporate Governance - Contract Management	\$8,571,895	\$8,571,895	\$0
Market Assessment and Compliance Division - Market Assessment and Compliance Division	\$1,800,000	\$1,684,244	\$115,756
Market Assessment and Compliance Division - OEB Assessment Fees	\$700,000	\$654,984	\$45,016
Corporate Services - Settlements	\$5,880,528	\$5,502,358	\$378,170
Market Renewal	\$4,400,000	\$4,117,041	\$282,959
O&A Total	\$124,380,528	\$117,332,359	\$7,048,169

Allocator Worksheet

IESO 2024 Fee Model

Details:

The worksheet below details how allocators are derived.

			1	2
Explanation	ID and Factors	Total	Domestic	Export
Energy				
System TWh	TWh	100.00%	93.57%	6.43%
Domestic TWh	DTWh	100.00%	100.00%	0.00%
CUSTOMER ALLOCATORS				
Composite Allocators				
Gross Assets	GA	100.00%	93.57%	6.43%
Net Fixed Assets	NFA	100.00%	93.57%	6.43%
Identifiable O&A	O&A	100.00%	94.33%	5.67%
Dedicated to Domestic	DOM	100.00%	100%	0%
Dedicated to Export	EXP	100.00%	0%	100%
Equal Halves	HALF	100.00%	50.00%	50.00%
Markets & Reliability	M&R	100.00%	93.57%	6.43%
Planning, Conservation and Resource Adequacy	PCRA	100.00%	100.00%	0.00%
Corporate Relations, Stakeholder Engagement and Innovation	CRSEI	100.00%	100.00%	0.00%
Information and Technology Services	ITS	100.00%	94.33%	5.67%
Legal Resources and Corporate Governance	LRCG	100.00%	93.57%	6.43%
Corporate Services	CS	100.00%	94.18%	5.82%

Allocation Detail Worksheet

IESO 2024 Fee Model

This sheet shows what accounts are included in the COSS and how the categorized costs are allocated.

Accounts	Classification and Allocation
CEO Office	O&A
Markets & Reliability - VP Office	M&R
Markets & Reliability - Power System Assessments	TWh
Markets & Reliability - Market Operations	TWh
Markets & Reliability - Wholesale Market Development	TWh
Markets & Reliability - Reliability Assurance & Operational Assessments	TWh
Planning, Conservation and Resource Adequacy - VP Office and Planning Projects & Sustainability	PCRA
Planning, Conservation and Resource Adequacy - Resource Planning	DOM
Planning, Conservation and Resource Adequacy - Transmission Planning	DOM
Planning, Conservation and Resource Adequacy - Resource & System Adequacy	DOM
Planning, Conservation and Resource Adequacy - Energy Efficiency	DOM
Corporate Relations, Stakeholder Engagement and Innovation - VP Office	CRSEI
Corporate Relations, Stakeholder Engagement and Innovation - Government Affairs	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Corporate Communications	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Stakeholder and Community Engagement	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Innovation, Research & Development	DOM
Information and Technology Services - VP Office	ITS
Information and Technology Services - CIO Office (Organizational Governance Support)	O&A
Information and Technology Services - Information Security	O&A
Information and Technology Services - Business Services & Solution Delivery	O&A
Information and Technology Services - IT Infrastructure & Operations (Technology Services)	O&A
Legal Resources and Corporate Governance - VP Office	LRCG
Legal Resources and Corporate Governance - General Counsel	TWh
Legal Resources and Corporate Governance - Market Rules and Regulatory Affairs	TWh
Legal Resources and Corporate Governance - OEB Assessment Fees	TWh
Legal Resources and Corporate Governance - Board	TWh
Legal Resources and Corporate Governance - NERC and NPCC Membership	HALF
Legal Resources and Corporate Governance - Contract Management	DOM
Market Assessment and Compliance Division - Market Assessment and Compliance Division	TWh
Market Assessment and Compliance Division - OEB Assessment Fees	TWh
Corporate Services - VP Office	CS
Corporate Services - Corporate Finance	O&A
Corporate Services - Procurement	O&A
Corporate Services - Risk, Performance & Reliance and Internal Audit	O&A
Corporate Services - Settlements	TWh
Corporate Services - Facilities	O&A
Corporate Services - Enterprise Change	O&A
Human Resources	O&A
Corporate Adjustment - General	O&A
Market Renewal	TWh
Interest, Amortization and Registration Fees - Amortization	TWh
Interest, Amortization and Registration Fees - Interest	TWh
Interest, Amortization and Registration Fees - Registration Fees	DOM
Assets - Assets	TWh
Assets - Market systems & applications	TWh
Assets - Infrastructure & other assets	TWh
Assets - Assets Under Construction	TWh
Accumulated Amortization	Assets

Reconciliation Worksheet

IESO 2024 Fee Model

Details:

The worksheet below shows reconciliation of costs included and excluded in the Trial Balance.

Accounts	Financial Statement	Balance in Summary by Class and Accounts	Difference
CEO Office	\$1,500,000	\$1,500,000	\$0
Markets & Reliability - VP Office	\$1,102,821	\$1,102,821	\$0
Markets & Reliability - Power System Assessments	\$11,629,744	\$11,629,744	\$0
Markets & Reliability - Market Operations	\$17,143,846	\$17,143,846	\$0
Markets & Reliability - Wholesale Market Development	\$3,709,487	\$3,709,487	\$0
Markets & Reliability - Reliability Assurance & Operational Assessments	\$5,514,103	\$5,514,103	\$0
Planning, Conservation and Resource Adequacy - VP Office and Planning Projects & Sustainability	\$1,100,000	\$1,100,000	\$0
Planning, Conservation and Resource Adequacy - Resource Planning	\$6,400,000	\$6,400,000	\$0
Planning, Conservation and Resource Adequacy - Transmission Planning	\$5,200,000	\$5,200,000	\$0
Planning, Conservation and Resource Adequacy - Resource & System Adequacy	\$7,100,000	\$7,100,000	\$0
Planning, Conservation and Resource Adequacy - Energy Efficiency	\$6,400,000	\$6,400,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - VP Office	\$700,000	\$700,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Government Affairs	\$500,000	\$500,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Corporate Communications	\$4,000,000	\$4,000,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Stakeholder and Community Engage	\$6,300,000	\$6,300,000	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Innovation, Research & Development	\$4,300,000	\$4,300,000	\$0
Information and Technology Services - VP Office	\$900,000	\$900,000	\$0
Information and Technology Services - CIO Office (Organizational Governance Support)	\$2,200,000	\$2,200,000	\$0
Information and Technology Services - Information Security	\$5,600,000	\$5,600,000	\$0
Information and Technology Services - Business Services & Solution Delivery	\$19,100,000	\$19,100,000	\$0
Information and Technology Services - IT Infrastructure & Operations (Technology Services)	\$21,600,000	\$21,600,000	\$0
Legal Resources and Corporate Governance - VP Office	\$1,495,098	\$1,495,098	\$0
Legal Resources and Corporate Governance - General Counsel	\$10,764,706	\$10,764,706	\$0
Legal Resources and Corporate Governance - Market Rules and Regulatory Affairs	\$2,890,523	\$2,890,523	\$0
Legal Resources and Corporate Governance - OEB Assessment Fees	\$697,712	\$697,712	\$0
Legal Resources and Corporate Governance - Board	\$797,386	\$797,386	\$0
Legal Resources and Corporate Governance - NERC and NPCC Membership	\$5,282,680	\$5,282,680	\$0
Legal Resources and Corporate Governance - Contract Management	\$8,571,895	\$8,571,895	\$0
Market Assessment and Compliance Division - Market Assessment and Compliance Division	\$1,800,000	\$1,800,000	\$0
Market Assessment and Compliance Division - OEB Assessment Fees	\$700,000	\$700,000	\$0
Corporate Services - VP Office	\$598,020	\$598,020	\$0
Corporate Services - Corporate Finance	\$5,880,528	\$5,880,528	\$0
Corporate Services - Procurement	\$1,794,059	\$1,794,059	\$0
Corporate Services - Risk, Performance & Reliance and Internal Audit	\$2,292,409	\$2,292,409	\$0
Corporate Services - Settlements	\$5,880,528	\$5,880,528	\$0
Corporate Services - Facilities	\$10,166,337	\$10,166,337	\$0
Corporate Services - Enterprise Change	\$3,588,119	\$3,588,119	\$0
Human Resources	\$6,400,000	\$6,400,000	\$0
Corporate Adjustment - General	\$600,000	\$600,000	\$0
Market Renewal	\$4,400,000	\$4,400,000	\$0
Interest, Amortization and Registration Fees - Amortization	\$22,000,000	\$22,000,000	\$0
Interest, Amortization and Registration Fees - Interest	(\$9,700,000)	(\$9,700,000)	\$0
Interest, Amortization and Registration Fees - Registration Fees	(\$500,000)	(\$500,000)	\$0
Assets - Assets	\$56,423,729	\$56,423,729	\$0
Assets - Market systems & applications	\$338,405,073	\$338,405,073	\$0
Assets - Infrastructure & other assets	\$77,009,334	\$77,009,334	\$0
Assets - Assets Under Construction	\$26,492,185	\$26,492,185	\$0
Accumulated Amortization	(\$395,683,332)	(\$395,683,332)	\$0
Total	\$321,046,990	\$321,046,990	\$0

IESO 2025 Cost Allocation & Fee Model

Version: May 5, 2023

Functionalized Accounts

IESO 2025 Fee Model

Revenue Requirement (\$)	\$229,700,000
Net Fixed Assets (\$)	\$102,646,990

Expense Accounts (Revenue Requirement)

Accounts	Forecast Financial Statement	Reclassify accounts	Reclassified Balance	Allocator
CEO Office	1,599,304		\$1,599,304	O&A
Markets & Reliability - VP Office	1,099,521		\$1,099,521	M&R
Markets & Reliability - Power System Assessments	12,094,735		\$12,094,735	TWh
Markets & Reliability - Market Operations	17,992,167		\$17,992,167	TWh
Markets & Reliability - Wholesale Market Development	3,698,390		\$3,698,390	TWh
Markets & Reliability - Reliability Assurance & Operational Assessments	5,797,476		\$5,797,476	TWh
Planning, Conservation and Resource Adequacy - VP Office and Planning Projects & Sustainability	999,565		\$999,565	PCRA
Planning, Conservation and Resource Adequacy - Resource Planning	6,797,041		\$6,797,041	DOM
Planning, Conservation and Resource Adequacy - Transmission Planning	5,297,694		\$5,297,694	DOM
Planning, Conservation and Resource Adequacy - Resource & System Adequacy	5,197,737		\$5,197,737	DOM
Planning, Conservation and Resource Adequacy - Energy Efficiency	6,597,128		\$6,597,128	DOM
Corporate Relations, Stakeholder Engagement and Innovation - VP Office	699,695		\$699,695	CRSEI
Corporate Relations, Stakeholder Engagement and Innovation - Government Affairs	499,782		\$499,782	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Corporate Communications	4,098,216		\$4,098,216	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Stakeholder and Community Engagement	7,096,910		\$7,096,910	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Innovation, Research & Development	4,498,042		\$4,498,042	DOM
Information and Technology Services - VP Office	899,608		\$899,608	ITS
Information and Technology Services - CIO Office (Organizational Governance Support)	2,298,999		\$2,298,999	O&A
Information and Technology Services - Information Security	5,997,389		\$5,997,389	O&A
Information and Technology Services - Business Services & Solution Delivery	19,991,297		\$19,991,297	O&A
Information and Technology Services - IT Infrastructure & Operations (Technology Services)	22,390,252		\$22,390,252	O&A
Legal Resources and Corporate Governance - VP Office	1,490,092		\$1,490,092	LRCG
Legal Resources and Corporate Governance - General Counsel	11,126,020		\$11,126,020	TWh
Legal Resources and Corporate Governance - Market Rules and Regulatory Affairs	3,079,524		\$3,079,524	TWh
Legal Resources and Corporate Governance - OEB Assessment Fees	695,376		\$695,376	TWh
Legal Resources and Corporate Governance - Board	794,716		\$794,716	TWh
Legal Resources and Corporate Governance - NERC and NPCC Membership	5,960,368		\$5,960,368	HALF

Asset Break Out Worksheet

IESO 2025 Fee Model

FIXED ASSETS	BALANCE SHEET ITEMS			EXPENSE ITEMS			
Description	Break out Functions	Accumulated Depreciation - Fixed Assets Only	Asset net of Accumulated Depreciation and Contributed Capital	Estimated Average Service Life (Years)	Amortization Share	Amortization Share	Amortization Expense - Property, Plant, and Equipment
Assets - Assets	\$56,423,729	\$ (28,494,311)	27,929,419	37	\$1,524,965.66	3.2%	\$856,874.60
Assets - Market systems & applications	\$338,405,073	\$ (302,900,825)	35,504,248	8	\$35,504,247.90	73.9%	\$19,949,752.88
Assets - Infrastructure & other assets	\$77,009,334	\$ (64,288,196)	12,721,138	7	\$11,001,333.36	22.9%	\$6,181,623.18
Assets - Assets Under Construction	\$26,492,185		26,492,185			0.0%	\$0
Total	\$498,330,321	\$ (395,683,332)	102,646,990		\$48,030,547		\$26,988,251
Functionalized Accounts		(\$395,683,332)	\$102,646,990				\$26,988,251

Revenue Worksheet

IESO 2025 Fee Model

		1	2
	Total	Domestic	Export
Billing Data			
Gross MWh	158,554,513	150,106,676	8,447,836
IESO MWh Rate		\$1.3329	\$1.0126
Net Class Revenue	\$208,631,468	\$200,077,189	\$8,554,279
Single Charge Scenario			
Revenue Requirement	\$229,700,000		
Uniform Rate		\$1.4487	\$1.4487
Revenue at Uniform Rate		\$217,461,509	\$12,238,491

Demand Data Worksheet

IESO 2025 Fee Model

Customer Classes		1	2
		Domestic	Export
Volume			
Demand		145.4	8.6
Less Transmission Line Losses		(3.0)	(0.2)
Embedded Generation		7.7	
Gross MWh	TWh	150.1	8.4
Domestic MWh	DTWh	150.1	

Gross MWh Matches 'Revenue' MWh

Revenue to Cost Summary Worksheet

IESO 2025 Fee Model

Class Revenue, Cost Analysis

	Total	1 Domestic	2 Export
Revenue at Existing Rates	\$208,631,468	\$200,077,189	\$8,554,279
Factor required to recover Revenue Requirement	1.10098		
Revenue at Status Quo Rates	\$229,700,000	\$220,281,872	\$9,418,128
Revenue at Single Rate	\$229,700,000	\$217,461,509	\$12,238,491
Expenses			
CEO	\$1,599,304	\$1,514,662	\$84,642
M&R	\$40,682,289	\$38,514,723	\$2,167,566
PCRA	\$24,889,164	\$24,889,164	\$0
CRSEI	\$16,892,646	\$16,892,646	\$0
ITS	\$51,577,546	\$48,847,835	\$2,729,711
LRCG	\$32,185,988	\$28,290,143	\$3,895,845
CS	\$31,486,292	\$29,817,716	\$1,668,576
MACD	\$3,798,346	\$3,595,969	\$202,377
MR	\$2,498,912	\$2,365,769	\$133,143
HR	\$6,397,215	\$6,058,646	\$338,569
Other	(\$99,956)	(\$94,666)	(\$5,290)
Int	(\$9,195,997)	(\$8,706,031)	(\$489,966)
Dep	\$26,988,251	\$25,550,308	\$1,437,943
Revenue Requirement	\$229,700,000	\$217,536,884	\$12,163,116
Revenue Requirement Input equals Output			
RF Other Revenues	\$0	\$0	\$0
Rate Revenue Required	\$229,700,000	\$217,536,884	\$12,163,116
Revenue to Expense at Status Quo Rates	100.00%	101.26%	77.43%
Revenue to Expense at Single Rate	100.00%	99.97%	100.62%
Volume (MWh)	158,554,513	150,106,676	8,447,836
Separate Rates		\$1.4492	\$1.4398
Rate Weight (percent of domestic rate)			99.3%
Rounded Rates		\$1.4492	\$1.4398
Revenue at Rounded Rates	\$229,697,790	\$217,534,595	\$12,163,195
Surplus (Shortfall) - Rounded Rates	(\$2,210)	(\$2,289)	\$79

Summary of Allocation by Class & Accounts

IESO 2025 Fee Model

ALLOCATION BY RATE CLASSIFICATION

Accounts	O1 Grouping	Total	1 Domestic	2 Export
CEO Office	CEO	\$1,599,304	\$1,514,662	\$84,642
Markets & Reliability - VP Office	M&R	\$1,099,521	\$1,040,938	\$58,583
Markets & Reliability - Power System Assessments	M&R	\$12,094,735	\$11,450,323	\$644,411
Markets & Reliability - Market Operations	M&R	\$17,992,167	\$17,033,539	\$958,629
Markets & Reliability - Wholesale Market Development	M&R	\$3,698,390	\$3,501,338	\$197,051
Markets & Reliability - Reliability Assurance & Operational Assessments	M&R	\$5,797,476	\$5,488,585	\$308,891
Planning, Conservation and Resource Adequacy - VP Office and Planning Projects & Sustainability	PCRA			
		\$999,565	\$999,565	\$0
Planning, Conservation and Resource Adequacy - Resource Planning	PCRA	\$6,797,041	\$6,797,041	\$0
Planning, Conservation and Resource Adequacy - Transmission Planning	PCRA	\$5,297,694	\$5,297,694	\$0
Planning, Conservation and Resource Adequacy - Resource & System Adequacy	PCRA	\$5,197,737	\$5,197,737	\$0
Planning, Conservation and Resource Adequacy - Energy Efficiency	PCRA	\$6,597,128	\$6,597,128	\$0
Corporate Relations, Stakeholder Engagement and Innovation - VP Office	CRSEI	\$699,695	\$699,695	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Government Affairs	CRSEI	\$499,782	\$499,782	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Corporate Communications				
		\$4,098,216	\$4,098,216	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Stakeholder and Community Engagement	CRSEI	\$7,096,910	\$7,096,910	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Innovation, Research & Development	CRSEI	\$4,498,042	\$4,498,042	\$0
Information and Technology Services - VP Office	ITS	\$899,608	\$851,997	\$47,611
Information and Technology Services - CIO Office (Organizational Governance Support)	ITS			
		\$2,298,999	\$2,177,326	\$121,673
Information and Technology Services - Information Security	ITS	\$5,997,389	\$5,679,981	\$317,408
Information and Technology Services - Business Services & Solution Delivery	ITS	\$19,991,297	\$18,933,269	\$1,058,027
Information and Technology Services - IT Infrastructure & Operations (Technology Services)				
		\$22,390,252	\$21,205,262	\$1,184,991
Legal Resources and Corporate Governance - VP Office	LRCG	\$1,490,092	\$1,410,699	\$79,393
Legal Resources and Corporate Governance - General Counsel	LRCG	\$11,126,020	\$10,533,222	\$592,798
Legal Resources and Corporate Governance - Market Rules and Regulatory Affairs	LRCG	\$3,079,524	\$2,915,446	\$164,078
Legal Resources and Corporate Governance - OEB Assessment Fees	LRCG	\$695,376	\$658,326	\$37,050
Legal Resources and Corporate Governance - Board	LRCG	\$794,716	\$752,373	\$42,343
Legal Resources and Corporate Governance - NERC and NPCC Membership	LRCG	\$5,960,368	\$2,980,184	\$2,980,184
Legal Resources and Corporate Governance - Contract Management	LRCG	\$9,039,892	\$9,039,892	\$0
Market Assessment and Compliance Division - Market Assessment and Compliance Division	MACD			
		\$3,079,740	\$2,915,651	\$164,090
Market Assessment and Compliance Division - OEB Assessment Fees	MACD	\$718,606	\$680,319	\$38,288
Corporate Services - VP Office	CS	\$699,695	\$662,616	\$37,079
Corporate Services - Corporate Finance	CS	\$6,197,302	\$5,869,314	\$327,988
Corporate Services - Procurement	CS	\$2,199,043	\$2,082,660	\$116,383
Corporate Services - Risk, Performance & Reliance and Internal Audit	CS	\$2,099,086	\$1,987,993	\$111,093
Corporate Services - Settlements	CS	\$5,997,389	\$5,677,846	\$319,543
Corporate Services - Facilities	CS	\$10,195,561	\$9,655,967	\$539,594
Corporate Services - Enterprise Change	CS	\$4,098,216	\$3,881,320	\$216,896
Human Resources	HR	\$6,397,215	\$6,058,646	\$338,569
Corporate Adjustment - General	Other	(\$99,956)	(\$94,666)	(\$5,290)
Market Renewal	MR	\$2,498,912	\$2,365,769	\$133,143
Interest, Amortization and Registration Fees - Amortization	Dep	\$26,988,251	\$25,550,308	\$1,437,943
Interest, Amortization and Registration Fees - Interest	Int	(\$9,195,997)	(\$8,706,031)	(\$489,966)
Interest, Amortization and Registration Fees - Registration Fees	RF	\$0	\$0	\$0
Assets - Assets	rb	\$56,423,729	\$53,417,455	\$3,006,275
Assets - Market systems & applications	rb	\$338,405,073	\$320,374,740	\$18,030,333
Assets - Infrastructure & other assets	rb	\$77,009,334	\$72,906,251	\$4,103,083
Assets - Assets Under Construction	rb	\$26,492,185	\$25,080,673	\$1,411,512
Accumulated Amortization	rb	(\$395,683,332)	(\$374,601,194)	(\$21,082,138)
Total Allocation		\$332,346,990	\$314,714,808	\$17,632,181
Check	Okay			

Composite Allocator Detail Worksheet

IESO 2025 Fee Model

	1	2
Demand Total	Domestic	Export

Fixed Assets

Assets - Assets	\$56,423,729	\$53,417,455	\$3,006,275
Assets - Market systems & applications	\$338,405,073	\$320,374,740	\$18,030,333
Assets - Infrastructure & other assets	\$77,009,334	\$72,906,251	\$4,103,083
Assets - Assets Under Construction	\$26,492,185	\$25,080,673	\$1,411,512
Gross Fixed Assets	\$498,330,321	\$471,779,118	\$26,551,203

Accumulated Amortization

Assets - Assets	(\$28,494,311)	(\$26,976,124)	(\$1,518,186)
Assets - Market systems & applications	(\$302,900,825)	(\$286,762,170)	(\$16,138,655)
Assets - Infrastructure & other assets	(\$64,288,196)	(\$60,862,900)	(\$3,425,296)
Assets - Assets Under Construction	\$0	\$0	\$0
Accumulated Amortization	(\$395,683,332)	(\$374,601,194)	(\$21,082,138)
Net Fixed Assets	\$102,646,990	\$97,177,924	\$5,469,065

Amortization Expense

Assets - Assets	\$856,875	\$811,220	\$45,655
Assets - Market systems & applications	\$19,949,753	\$18,886,823	\$1,062,929
Assets - Infrastructure & other assets	\$6,181,623	\$5,852,264	\$329,359
Assets - Assets Under Construction	\$0	\$0	\$0
Accumulated Amortization Total	\$26,988,251	\$25,550,308	\$1,437,943

Identifiable O&A

Markets & Reliability - VP Office	\$1,099,521	\$1,040,938	\$58,583
Markets & Reliability - Power System Assessments	\$12,094,735	\$11,450,323	\$644,411
Markets & Reliability - Market Operations	\$17,992,167	\$17,033,539	\$958,629
Markets & Reliability - Wholesale Market Development	\$3,698,390	\$3,501,338	\$197,051
Markets & Reliability - Reliability Assurance & Operational Assessments	\$5,797,476	\$5,488,585	\$308,891
Planning, Conservation and Resource Adequacy - VP Office and Planning Projects & Sustainability	\$999,565	\$999,565	\$0
Planning, Conservation and Resource Adequacy - Resource Planning	\$6,797,041	\$6,797,041	\$0
Planning, Conservation and Resource Adequacy - Transmission Planning	\$5,297,694	\$5,297,694	\$0
Planning, Conservation and Resource Adequacy - Resource & System Adequacy	\$5,197,737	\$5,197,737	\$0
Planning, Conservation and Resource Adequacy - Energy Efficiency	\$6,597,128	\$6,597,128	\$0
Corporate Relations, Stakeholder Engagement and Innovation - VP Office	\$699,695	\$699,695	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Government Affairs	\$499,782	\$499,782	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Corporate Communications	\$4,098,216	\$4,098,216	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Stakeholder and Community Engagement	\$7,096,910	\$7,096,910	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Innovation, Research & Development	\$4,498,042	\$4,498,042	\$0
Legal Resources and Corporate Governance - VP Office	\$1,490,092	\$1,410,699	\$79,393
Legal Resources and Corporate Governance - General Counsel	\$11,126,020	\$10,533,222	\$592,798
Legal Resources and Corporate Governance - Market Rules and Regulatory Affairs	\$3,079,524	\$2,915,446	\$164,078
Legal Resources and Corporate Governance - OEB Assessment Fees	\$695,376	\$658,326	\$37,050
Legal Resources and Corporate Governance - Board	\$794,716	\$752,373	\$42,343
Legal Resources and Corporate Governance - NERC and NPCC Membership	\$5,960,368	\$2,980,184	\$2,980,184
Legal Resources and Corporate Governance - Contract Management	\$9,039,892	\$9,039,892	\$0
Market Assessment and Compliance Division - Market Assessment and Compliance Division	\$3,079,740	\$2,915,651	\$164,090
Market Assessment and Compliance Division - OEB Assessment Fees	\$718,606	\$680,319	\$38,288
Corporate Services - Settlements	\$5,997,389	\$5,677,846	\$319,543
Market Renewal	\$2,498,912	\$2,365,769	\$133,143
O&A Total	\$126,944,735	\$120,226,261	\$6,718,474

Allocator Worksheet

IESO 2025 Fee Model

Details:

The worksheet below details how allocators are derived.

			1	2
Explanation	ID and Factors	Total	Domestic	Export
Energy				
System TWh	TWh	100.00%	94.67%	5.33%
Domestic TWh	DTWh	100.00%	100.00%	0.00%
CUSTOMER ALLOCATORS				
Composite Allocators				
Gross Assets	GA	100.00%	94.67%	5.33%
Net Fixed Assets	NFA	100.00%	94.67%	5.33%
Identifiable O&A	O&A	100.00%	94.71%	5.29%
Dedicated to Domestic	DOM	100.00%	100%	0%
Dedicated to Export	EXP	100.00%	0%	100%
Equal Halves	HALF	100.00%	50.00%	50.00%
Markets & Reliability	M&R	100.00%	94.67%	5.33%
Planning, Conservation and Resource Adequacy	PCRA	100.00%	100.00%	0.00%
Corporate Relations, Stakeholder Engagement and Innovation	CRSEI	100.00%	100.00%	0.00%
Information and Technology Services	ITS	100.00%	94.71%	5.29%
Legal Resources and Corporate Governance	LRCG	100.00%	94.67%	5.33%
Corporate Services	CS	100.00%	94.70%	5.30%

Allocation Detail Worksheet

IESO 2025 Fee Model

This sheet shows what accounts are included in the COSS and how the categorized costs are allocated.

Accounts	Classification and Allocation
CEO Office	O&A
Markets & Reliability - VP Office	M&R
Markets & Reliability - Power System Assessments	TWh
Markets & Reliability - Market Operations	TWh
Markets & Reliability - Wholesale Market Development	TWh
Markets & Reliability - Reliability Assurance & Operational Assessments	TWh
Planning, Conservation and Resource Adequacy - VP Office and Planning Projects & Sustainability	PCRA
Planning, Conservation and Resource Adequacy - Resource Planning	DOM
Planning, Conservation and Resource Adequacy - Transmission Planning	DOM
Planning, Conservation and Resource Adequacy - Resource & System Adequacy	DOM
Planning, Conservation and Resource Adequacy - Energy Efficiency	DOM
Corporate Relations, Stakeholder Engagement and Innovation - VP Office	CRSEI
Corporate Relations, Stakeholder Engagement and Innovation - Government Affairs	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Corporate Communications	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Stakeholder and Community Engagement	DOM
Corporate Relations, Stakeholder Engagement and Innovation - Innovation, Research & Development	DOM
Information and Technology Services - VP Office	ITS
Information and Technology Services - CIO Office (Organizational Governance Support)	O&A
Information and Technology Services - Information Security	O&A
Information and Technology Services - Business Services & Solution Delivery	O&A
Information and Technology Services - IT Infrastructure & Operations (Technology Services)	O&A
Legal Resources and Corporate Governance - VP Office	LRCG
Legal Resources and Corporate Governance - General Counsel	TWh
Legal Resources and Corporate Governance - Market Rules and Regulatory Affairs	TWh
Legal Resources and Corporate Governance - OEB Assessment Fees	TWh
Legal Resources and Corporate Governance - Board	TWh
Legal Resources and Corporate Governance - NERC and NPCC Membership	HALF
Legal Resources and Corporate Governance - Contract Management	DOM
Market Assessment and Compliance Division - Market Assessment and Compliance Division	TWh
Market Assessment and Compliance Division - OEB Assessment Fees	TWh
Corporate Services - VP Office	CS
Corporate Services - Corporate Finance	O&A
Corporate Services - Procurement	O&A
Corporate Services - Risk, Performance & Reliance and Internal Audit	O&A
Corporate Services - Settlements	TWh
Corporate Services - Facilities	O&A
Corporate Services - Enterprise Change	O&A
Human Resources	O&A
Corporate Adjustment - General	O&A
Market Renewal	TWh
Interest, Amortization and Registration Fees - Amortization	TWh
Interest, Amortization and Registration Fees - Interest	TWh
Interest, Amortization and Registration Fees - Registration Fees	DOM
Assets - Assets	TWh
Assets - Market systems & applications	TWh
Assets - Infrastructure & other assets	TWh
Assets - Assets Under Construction	TWh
Accumulated Amortization	Assets

Reconciliation Worksheet

IESO 2025 Fee Model

Details:

The worksheet below shows reconciliation of costs included and excluded in the Trial Balance.

Accounts	Financial Statement	Balance in Summary by Class and Accounts	Difference
CEO Office	\$1,599,304	\$1,599,304	\$0
Markets & Reliability - VP Office	\$1,099,521	\$1,099,521	\$0
Markets & Reliability - Power System Assessments	\$12,094,735	\$12,094,735	\$0
Markets & Reliability - Market Operations	\$17,992,167	\$17,992,167	\$0
Markets & Reliability - Wholesale Market Development	\$3,698,390	\$3,698,390	\$0
Markets & Reliability - Reliability Assurance & Operational Assessments	\$5,797,476	\$5,797,476	\$0
Planning, Conservation and Resource Adequacy - VP Office and Planning Projects & Sustainability	\$999,565	\$999,565	\$0
Planning, Conservation and Resource Adequacy - Resource Planning	\$6,797,041	\$6,797,041	\$0
Planning, Conservation and Resource Adequacy - Transmission Planning	\$5,297,694	\$5,297,694	\$0
Planning, Conservation and Resource Adequacy - Resource & System Adequacy	\$5,197,737	\$5,197,737	\$0
Planning, Conservation and Resource Adequacy - Energy Efficiency	\$6,597,128	\$6,597,128	\$0
Corporate Relations, Stakeholder Engagement and Innovation - VP Office	\$699,695	\$699,695	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Government Affairs	\$499,782	\$499,782	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Corporate Communications	\$4,098,216	\$4,098,216	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Stakeholder and Community Engage	\$7,096,910	\$7,096,910	\$0
Corporate Relations, Stakeholder Engagement and Innovation - Innovation, Research & Development	\$4,498,042	\$4,498,042	\$0
Information and Technology Services - VP Office	\$899,608	\$899,608	\$0
Information and Technology Services - CIO Office (Organizational Governance Support)	\$2,298,999	\$2,298,999	\$0
Information and Technology Services - Information Security	\$5,997,389	\$5,997,389	\$0
Information and Technology Services - Business Services & Solution Delivery	\$19,991,297	\$19,991,297	\$0
Information and Technology Services - IT Infrastructure & Operations (Technology Services)	\$22,390,252	\$22,390,252	\$0
Legal Resources and Corporate Governance - VP Office	\$1,490,092	\$1,490,092	\$0
Legal Resources and Corporate Governance - General Counsel	\$11,126,020	\$11,126,020	\$0
Legal Resources and Corporate Governance - Market Rules and Regulatory Affairs	\$3,079,524	\$3,079,524	\$0
Legal Resources and Corporate Governance - OEB Assessment Fees	\$695,376	\$695,376	\$0
Legal Resources and Corporate Governance - Board	\$794,716	\$794,716	\$0
Legal Resources and Corporate Governance - NERC and NPCC Membership	\$5,960,368	\$5,960,368	\$0
Legal Resources and Corporate Governance - Contract Management	\$9,039,892	\$9,039,892	\$0
Market Assessment and Compliance Division - Market Assessment and Compliance Division	\$3,079,740	\$3,079,740	\$0
Market Assessment and Compliance Division - OEB Assessment Fees	\$718,606	\$718,606	\$0
Corporate Services - VP Office	\$699,695	\$699,695	\$0
Corporate Services - Corporate Finance	\$6,197,302	\$6,197,302	\$0
Corporate Services - Procurement	\$2,199,043	\$2,199,043	\$0
Corporate Services - Risk, Performance & Reliance and Internal Audit	\$2,099,086	\$2,099,086	\$0
Corporate Services - Settlements	\$5,997,389	\$5,997,389	\$0
Corporate Services - Facilities	\$10,195,561	\$10,195,561	\$0
Corporate Services - Enterprise Change	\$4,098,216	\$4,098,216	\$0
Human Resources	\$6,397,215	\$6,397,215	\$0
Corporate Adjustment - General	(\$99,956)	(\$99,956)	\$0
Market Renewal	\$2,498,912	\$2,498,912	\$0
Interest, Amortization and Registration Fees - Amortization	\$26,988,251	\$26,988,251	\$0
Interest, Amortization and Registration Fees - Interest	(\$9,195,997)	(\$9,195,997)	\$0
Interest, Amortization and Registration Fees - Registration Fees	\$0	\$0	\$0
Assets - Assets	\$56,423,729	\$56,423,729	\$0
Assets - Market systems & applications	\$338,405,073	\$338,405,073	\$0
Assets - Infrastructure & other assets	\$77,009,334	\$77,009,334	\$0
Assets - Assets Under Construction	\$26,492,185	\$26,492,185	\$0
Accumulated Amortization	(\$395,683,332)	(\$395,683,332)	\$0
Total	\$332,346,990	\$332,346,990	\$0

SEC INTERROGATORY 20

Issue 2.1 Is the methodology used to derive the IESO's proposed 2023 Usage Fees to be paid commencing January 1st, 2023 appropriate?

2.0-SEC-20

INTERROGATORY

Reference: [C-2-1]

Preamble:

Questions:

- a) Please provide a detailed explanation of the underlying methodology used to determine the domestic and export demand forecast for each of 2023, 2024, and 2025. Please include a detailed list off all assumptions and calculations made for the purpose of determining the export volumes.

RESPONSE

- a) The forecasts for 2023 are based on the assumptions and methodology underlying the Reliability Outlook (RO) released December 21, 2022. The associated Reliability Outlook¹ document outlines the process for generating the forecast for Ontario demand. The forecast of exports is generated using a three year average by month adjusted for the market conditions expected over the timeframe of the RO, such as wheel-through transactions and decreased domestic supply via nuclear outages .

The forecasts for 2024 and 2025 are based on the 2022 Annual Planning Outlook (APO)

¹ <https://www.ieso.ca/en/Sector-Participants/Planning-and-Forecasting/Reliability-Outlook>

1 released December 28, 2022. Ontario's system is simulated based on the the dispatch of
2 electricity resources using the variable cost of energy production. Neighbouring
3 jurisdiction's data on demand, supply and transmission is obtained from a model vendor.
4 Together, the model minimizes the cost of dispatch across the Eastern Interconnection,
5 taking into account electricity import and export opportunities. The associated modules,
6 methodology and supplementary data describe the determination of the exports
7 generated from the 2022 APO.²

² <https://www.ieso.ca/en/Sector-Participants/Planning-and-Forecasting/Annual-Planning-Outlook>

APPrO INTERROGATORY 8

Issue 2.2 Is the methodology used to derive the IESO's proposed 2024 Usage Fees to be paid commencing January 1st, 2024 appropriate?

2.0-APPrO-8

INTERROGATORY

Reference: Exhibit A, Tab 1, Schedule 5, Page 3 of 7; Exhibit C, Tab 2, Schedule 1

Preamble: IESO's 2024 proposed revenue requirement of \$218.4 million represents an increase of approximately 4.8% over the 2023 budget revenue requirement of \$208.4 million. In contrast, the proposed usage fee for 2024 to be paid by export customers increases to \$1.2445/MWh from the 2023 proposed \$1.0945/MWh, which represents an increase of approximately 14%.

Questions:

a) Please provide a detailed rationale for why the proposed 2024 usage fee for exports increases by almost three times the percentage as compared to the total proposed 2024 revenue requirement percentage increase.

RESPONSE

a) See the response to 2.1 APPrO Interrogatory 6a).

From 2023 to 2024 there is an 12.7% decline in costs allocated to the export customer class (\$14.3 million in 2023 to \$12.5 million in 2024) and a 23.8% decline in forecast export volumes (from 13.1 TWh in 2023 to 10.0 TWh in 2024). The result is a higher increase in the export fee $[(100\% - 12.7\% \text{ change in costs}) / (100\% - 23.8\% \text{ change in volumes}) = \text{approximately } 14.6\% \text{ fee increase}]$ compared to the 4.8% total revenue requirement increase.

APPrO INTERROGATORY 9

Issue 2.2 Is the methodology used to derive the IESO's proposed 2024 Usage Fees to be paid commencing January 1st, 2024 appropriate?

2.0-APPrO-9

INTERROGATORY

Reference: Exhibit C, Tab 2, Schedule 1

Preamble: The proposed 2024 domestic usage fee of \$1.4203/MWh represents an increase of approximately 2.5% over the proposed 2023 domestic usage fee of \$1.3845/MWh, while the proposed 2024 export usage fee of \$1.2545/MWh represents an increase of approximately 14% over the proposed 2023 export usage fee of \$1.0945/MWh.

Questions:

- a) Please provide a detailed rationale for why the proposed 2024 export usage fee increase is over five times that of the proposed 2024 domestic usage fee increase, from the proposed 2023 usage fees?

RESPONSE

- a) Please see the responses to 2.1 APPrO Interrogatory 6a) and 2.1 APPrO Interrogatory 8a) which outline the reasons for the 14% increase to the export usage fees in 2024. Domestic usage fees have increase by a lower amount (i.e., 2.5% in 2024) because domestic demand volumes are forecast to increase in 2024. This increases allocated costs to the domestic user class by 6.1% (the numerator) and increases the MWh billing determinant by 3.5% (the denominator). The net result is a smaller difference between allocated costs and volumes, resulting in a lower increase in the domestic fee compared to the export fee.

APPrO INTERROGATORY 10

Issue 2.3 Is the methodology used to derive the IESO's proposed 2025 Usage Fees to be paid commencing January 1st, 2025 appropriate?

2.0-APPrO-10

INTERROGATORY

Reference: Exhibit A, Tab 1, Schedule 5, Page 3 of 7; Exhibit C, Tab 2, Schedule 1

Preamble: IESO's 2025 proposed revenue requirement of \$229.7 million represents an increase of approximately 5.2% over the proposed 2024 budget revenue requirement of \$218.4 million. In contrast, the proposed usage fee for 2025 to be paid by export customers increases to \$1.4398/MWh from the 2024 proposed \$1.2545/MWh, which represents an increase of approximately 14.5%.

Questions:

a) Please provide a detailed rationale for why the proposed 2025 usage fee for exports increases almost triple the percentage as compared to the total proposed 2025 revenue requirement percentage increase.

RESPONSE

a) See the response to 2.1 APPrO Interrogatory 6a).

From 2024 to 2025 there is a 2.7% decline in costs allocated to the export customer class (\$12.5 million in 2024 to \$12.2 million in 2025) and a 15.2% decline in forecast export volumes (from 10.0 TWh in 2024 to 8.5 TWh in 2023). The result is a higher increase in the export fee $[(100\%-2.7\%) \text{ change in costs} / (100\%-15.2\%)]$ change in volumes = approximately 14.8% fee increase] compared to the 5.2% total revenue requirement increase.

APPrO INTERROGATORY 11

Issue 2.3 Is the methodology used to derive the IESO's proposed 2025 Usage Fees to be paid commencing January 1st, 2025 appropriate?

2.0-APPrO-11

INTERROGATORY

Reference: Exhibit C, Tab 2, Schedule 1

Preamble: The proposed 2025 domestic usage fee of \$1.4499/MWh represents an increase of approximately 2.1% over the proposed 2024 domestic usage fee of \$1.4212/MWh, while the proposed 2025 export usage fee of \$1.4398/MWh represents an increase of approximately 14.5% over the proposed 2024 export usage fee of \$1.2545/MWh.

Questions:

- a) Please provide a detailed rationale for why the proposed 2025 export usage fee increase is almost seven times that of the proposed 2025 domestic usage fee increase, from the proposed 2024 usage fees?

RESPONSE

- a) See the responses to 2.1 APPrO Interrogatory 6a) and 2.1 APPrO Interrogatory 10a) which outline the reasons for the 14.5% increase to the export usage fees in 2025. Domestic usage fees have increase by a lower amount (i.e., 2.1% in 2025) because domestic demand volumes are forecast to increase in 2025. This increases allocated costs to the domestic user class by 5.7% (the numerator) and increases the MWh billing determinant by 3.5% (the denominator). The net result is a smaller difference between allocated costs and volumes, resulting in a lower increase in the domestic fee compared to the export fee.