OEB STAFF INTERROGATORY 1

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 1, Page 3

Preamble:

At Exhibit B, Tab 1, Schedule 1, Page 3, the application states:

> "[T]he SME currently has 20 full time equivalents ("FTEs") and is proposing to add up to 3 FTEs during the 2023 to 2027 period. The incremental FTEs will help support ongoing core operations which are currently understaffed as the SME has been reducing its reliance on certain work historically performed by consultants and external vendors, as well as expected additional Third Party Access ("TPA") activities, and other change initiatives as later described. By moving more responsibilities in-house the SME will reduce expenses for outsourced work and build its in-house knowledge and expertise."

Questions:

a. Please briefly explain the ongoing core operations that are understaffed.

b. Please briefly explain the roles and responsibilities of the three proposed FTEs.

c. Please estimate the reduction in net costs the SME will realize from reducing its reliance on consultants and external vendors and hiring internal staff.

RESPONSE

a. In the past 5 years, the SME has used external contractors to augment the existing SME staff complement in the following areas that were under-resourced:

   i. Technical Writers – The SME must maintain and update Technical Interface Specifications, User Manuals, Training materials and other documentation for LDCs.

   ii. ServiceNow Developers – The SME must maintain and update ServiceNow as this provides the framework for the IT Service Management solution for all interactions with LDCs.

   iii. Meter Data Management Technical Specialist – For every new release, upgrade, or service pack to the EnergyIP software that runs the MDM/R, the SME

performs full regression testing through hundreds of test cases to ensure that the MDM/R will continue to operate as planned.

iv. Data Analysts – Data Analysts provide analytics support for data extracts to support LDCs, the IESO, the OEB and Third Party Access activities.

b. Depending on the workload and resourcing, the SME has proposed a Technical Writer, a Meter Data Management Technical Specialist and a Data Analyst. The roles are described briefly in the bullet above and below.

Technical Writer

Responsibilities
The position will be responsible for analyzing materials (architectural/system, diagrams, business process maps, etc.) and existing documents to write processes procedures and other technical documents by: • Co-ordinating with Subject Matter Experts, Business Analysts and other Project Office staff the collection of the information necessary to develop the business requirements documentation, design documentation, project management documentation, and solution specifications required for the development of processes, information systems and related tools associated with the business processes, policies and standards used within the IESO organization. • Coordinating with technical leads and the Project Office to develop procedures, test plans, as well as project and technical documentation based on industry best practices.

Meter Data Management Technical Specialist

Responsibilities
• Develops and/or modifies processes for the Meter Data Management and Repository ("MDM/R") and its operation integrated with the business requirements of users and stakeholders of the MDM/R. • Maintains MDM/R interface specifications, documents processes documents, and other MDM/R reference material.

- Develops training strategies, plans and programs to meet the needs of the users and stakeholders of the MDM/R.
- Coordinates project activities including software testing and deployments.
- Plans, develops and documents test scenarios, test procedures, test data, and expected test results.
- Assesses the impact of proposed changes to the MDM/R.
- Lead test case development and execution for system changes.
- Lead the design and implementation of functional enhancements to the Meter Data Management system
- Support the MDM CSAE 3416 audit
- Provide knowledge transfer and mentoring of staff.

Data Analyst

Responsibilities
• Acquire data from data sources (MDM/R or DataMart) and maintain databases. • Interpret data and use statistical methods to analyze smart meter data and generate useful business reports. • Identify, analyze and interpret smart meter data to create models that depicts the trend or pattern in the customer energy usage and customer population as a whole. • Work with management team to recommend the growing trend and advise the data-driven insights. • Develop and implement databases, data collection systems, data analytics and other strategies that optimize statistical efficiency and quality.

- Work with different internal and external stakeholders to understand the data analysis requirements.
- Participate in data strategy discussions and related stakeholder meetings.

The SME intends to fill these roles in 2023.

c. Annual costs for three Contractors for the roles listed above is approximately $720,000. Annual costs for three regular employees is approximately $480,000. This results in an estimated reduction in net costs of $240,000 per year.

OEB STAFF INTERROGATORY 2

INTERROGATORY

Reference: Exhibit B, Tab 3, Schedule 1, Page 1 of 5

Preamble:

At Exhibit B, Tab 3, Schedule 1, Page 1 of 5, the application states:

> "Currently, the SME is using the Balancing Variance Account (BVA) and corresponding sub-accounts which includes the Third-Party Access Variance Account (TPAVA). The SME proposes to move from tracking in and reporting on the BVA and its associated sub-accounts to reporting through the proposed Operating Reserve Balance Account (ORBA)."

The SME proposes to continue the Third-Party Access Variance Account (TPAVA) as part of the ORBA.

Question:

a. Please confirm that reporting on the ORBA will break down the associated sub-accounts, including the TPAVA (i.e., the SME is not proposing to eliminate the sub-accounts and create a catch-all variance account through the ORBA).

RESPONSE

The SME proposes to continue the Third-Party Access Variance Account as part of the ORBA. The SME proposes to discontinue the use of the following three sub-accounts: Costs Account, Revenue Account, and the Service Level Credits Account sub-account.

This change in reporting is being made commensurate with the move from cash accounting to accrual accounting. Under accrual accounting it is not practical to have the three sub-accounts the SME is proposing to discontinue as those are not tracked separately as they are under cash accounting.

As described in the application the SME will report using the information in table 2 below. The SME will also prepare and file information on Third Party Access related revenues and costs as agreed to in the settlement agreement in the recent Third Party Access application (EB-2021-0292) and shown in Table 1 below.

Table 1			
	Rate	**Costs are recovered Revenue**	**Revenue and costs are tracked**
Canadian Governmental Entities Request	$145/hour	From the Canadian Governmental Entities requestor	TPA Variance Account

Table 2	
SME Operating Reserve Balance Account ($M)	**2023**
2023 Actual Opening Balance	$2.0
Surplus (Deficit)	($0.3)
Closing Balance	$2.2
OEB Approved Balance	$2.5

OEB STAFF INTERROGATORY 3

INTERROGATORY

Reference: Exhibit B, Tab 3, Schedule 1, Page 1 of 5

Question:

a. Please confirm that reporting on the ORBA will break down the associated sub-accounts, including the TPAVA (i.e., the SME is not proposing to eliminate the sub-accounts and create a catch-all variance account through the ORBA).

RESPONSE

Confirmed, the SME does not intend to alter the operating reserve from the previously approved amount of $2.5 million during the 2023-2027 period.

EDA INTERROGATORY 1

Issue 1: ***Is the Independent Electricity System Operator, in its capacity as the Smart Metering Entity (SME), proposed $137.5 million revenue requirement for the January 1, 2023, to December 31, 2027, period appropriate?***

INTERROGATORY

EDA Question 1: Accrual Accounting

Reference: Exhibit B, Tab 1, Schedule 1, Page 2 & Exhibit B, Tab 3, Schedule 1, Page 2

Preamble:

The SME proposes to adopt accrual accounting as of January 1, 2023.

Questions:

Please provide a table that shows the impact of the transition from cash-based accounting to accrual-based accounting on the SME's revenue requirement. Please provide:

a. the revenue requirement for the bridge year 2022 presented using cash-based accounting

b. the proposed 2023 test year revenue requirement presented in using cash-based accounting and accrual accounting

c. the proposed 2024 test year revenue requirement presented using accrual accounting

Please be detailed, state all assumptions, and provide all supporting calculations.

RESPONSE

The main difference between the cash and accrual accounting is the recognition of the capital expenses when they are incurred as opposed to over the time in which they will generate benefits (amortization). For the 2023-2027 revenue requirement we have assumed the capital will be amortized over a 5-year useful life on a straight-line basis.

(in millions of dollars)	2022 Budget Cash	2023 Cash	2023 Accrual	2024 Accrual
Revenue Requirement				
Compensation & Benefits	4.2	4.8	4.8	4.9
Professional & Consulting[1]	14.5	2.0	2.0	2.1
Operating & Administration[1]	7.6	20.5	20.5	20.6
Total OM&A Expenses	**26.3**	**27.3**	**27.3**	**27.6**
MDM/R capital expenses[2]	2.1	1.0	-	-
Amortization	-	-	0.0	0.2
Total Operating Budget	**28.4**	**28.3**	**27.3**	**27.7**

[1] In the 2018-2022 budget, the MDM/R operating fees were reported under Professional & Consulting, but we have reclassified that to the Operating & Administration category for the 2023-2027 period since it aligns better with the definition followed in our statutory statements

[2] Includes financing charges

EDA INTERROGATORY 2

Issue 1: ***Is the Independent Electricity System Operator, in its capacity as the Smart Metering Entity (SME), proposed $137.5 million revenue requirement for the January 1, 2023, to December 31, 2027, period appropriate?***

INTERROGATORY

EDA Question 2: Financial Statements

Reference: Nil

Question:

a. Please provide pro forma financial statements for each year in the 2023-2027 period.

RESPONSE

Pro-forma Financial Statement ($ Millions)	**2023**	**2024**	**2025**	**2026**	**2027**	**Total**
Revenue Requirement	**27.0**	**27.2**	**27.4**	**27.6**	**27.9**	**137.5**
Compensation and Benefits	4.8	4.9	5.0	5.1	5.2	25.0
Professional and Consulting	2.0	2.1	2.1	2.1	2.1	10.4
Operating and Administration	20.5	20.6	18.6	18.7	20.9	99.3
OM&A Expenses	**27.3**	**27.6**	**25.7**	**25.9**	**28.2**	**134.7**
Amortization	0.0	0.2	0.4	0.6	1.6	2.8
Total Operating Expenses	**27.3**	**27.7**	**26.0**	**26.4**	**29.7**	**137.5**
Operating Surplus/ (Deficit)	**(0.3)**	**(0.5)**	**1.4**	**1.2**	**(1.8)**	**-**

EDA INTERROGATORY 3

Issue 1: ***Is the Independent Electricity System Operator, in its capacity as the Smart Metering Entity (SME), proposed $137.5 million revenue requirement for the January 1, 2023, to December 31, 2027, period appropriate?***

INTERROGATORY

EDA Question 3

References: Exhibit A, Tab 3, Schedule 1, Page 1, Paragraph 3; Exhibit B, Tab 1, Schedule 1, Page 5; Exhibit B, Tab 1, Schedule 1, Page 4, Paragraph 7; Exhibit B, Tab 4, Schedule 2, Pages 1 through 3

Question:

a. Please provide a break-out the proposed annual revenue requirement for 2023-2027 for the activities identified in the cited evidence references.

RESPONSE

The response has been broken down into the references provided prior to the question.

A) Exhibit A, Tab 3, Schedule 1, Page 1, Paragraph 3

Please see in the table below the operating expenses related to the operation and maintenance of the SME'S MDM/R at Exhibit B, Tab A, Schedule 1, Page 1

B) Exhibit B, Tab 1, Schedule 1, Page 5

The requested information is provided at the evidence referenced in the question

($M)	2023	2024	2025	2026	2027	Total
MDM/R Operating Fee	13.9	13.8	11.7	11.7	13.7	64.8

C) Exhibit B, Tab 1, Schedule 1, Page 4, Paragraph 7

The requested information is provided in the table on page 4 of Exhibit B, Tab 1, Schedule 1 at the evidence referenced in the question.

D) Exhibit B, Tab 4, Schedule 2, Pages 1 through 3

There is no such exhibit; however, assuming that the reference is meant to be Exhibit B, Tab 4, Schedule 1, Pages 1 through 3, which relates to ongoing stakeholder outreach, then please see the response to S.1 EDA 4 b)

EDA INTERROGATORY 4

Issue 1: ***Is the Independent Electricity System Operator, in its capacity as the Smart Metering Entity (SME), proposed $137.5 million revenue requirement for the January 1, 2023, to December 31, 2027, period appropriate?***

INTERROGATORY

EDA Question 4

References: Exhibit B, Tab 1, Schedule 4, Pages 1 through 4; Exhibit B, Tab 1, Schedule 1, Page 1

Preamble:

The SME has undertaken multiple outreach activities with stakeholders and 3 consultations with local distribution companies ("LDCs") during the 2018-2022 period.

Questions:

a. Please describe the stakeholdering activities that the SME will undertake in 2023-2027.

b. Please identify the line item of the proposed revenue requirement that includes the costs of stakeholdering activities and quantify the portion of that line item related to stakeholdering activities; please present the response in the form of Table 1 provided at Exhibit B, Tab 1, Schedule 1, Page 1.

RESPONSE

a. Over the 2023-2027 period, the SME will continue to organize the SME Steering Committee ("SSC"), a committee made up of 8 senior members of the LDC community, a minimum of 5 times annually.

A sub-committee of the SSC, the SME Technical Panel is a group comprised of LDC technical employees who will also continue to meet every quarter to review proposed changes and enhancements to the MDM/R.

In addition, the SME intends to continue holding its annual LDC Event with an agenda that includes key MDM/R operational updates and discussions on issues of significance to the LDCs community.

The SME is also planning outreach activities in relation to the Third Party Access program to Government entities and other key stakeholders. Other stakeholder engagement activities may take the form of presence at the IESO's Stakeholder Advisory

Committee ("SAC"), focused discussions with forums of the Electricity Distributors Association ("EDA"), discussions with the Information and Privacy Commissioner of Ontario or other additional public and LDC engagements to fulfill the OEB's requirement of an assessment for expanding third party access beyond Canadian Governmental Entities.

There may be additional activities beyond those described above.

b. In the Operating Expenses table shown in Table 1 at Ex B, T1, S1, Page 1, a nominal annual amount of $75,000 is included for Stakeholder Engagement under "Professional and Consulting".

EDA INTERROGATORY 5

Issue 1: ***Is the Independent Electricity System Operator, in its capacity as the Smart Metering Entity (SME), proposed $137.5 million revenue requirement for the January 1, 2023, to December 31, 2027, period appropriate?***

INTERROGATORY

EDA Question 5

References: Exhibit B, Tab 1, Schedule 1, Pages 3 and 5

Question:

Please provide an asset continuity schedule for the period 2021 - 2027 in the format provided below; please use a materiality threshold of 0.50% of the SME's proposed Revenue Requirement for each year.

Please group assets according to their nature (e.g., software) and, if required, provide subgroupings based on the applicable depreciable life.

Please state the assumed depreciable life of each asset group.

Cost				Accumulated Depreciation				
Opening Balance [5]	Additions [4]	Disposals [6]	Closing Balance	Opening Balance [5]	Additions	Disposals [6]	Closing Balance	Net Book Value
			$ -				$ -	$ -
			$ -				$ -	$ -

RESPONSE

Given that the SME's reporting to the OEB is currently based on cash accounting, there is no asset continuity schedule for the period 2021-2022; however, below we are providing the asset continuity based on the IESO's statutory statements for the year 2021 and a projection for the years 2022-2027.

In accordance to the IESO's statutory statements, the SME only has one asset group, Meter Data Management/Repository ("MDM/R"), as this asset was built and managed by a third-party services provider. The budget assumes a 5-year useful life of assets for straight-line amortization.

	Cost			
($ M)	**Opening Balance**	**Additions**	**Disposals**	**Closing Balance**
2021 Actual	59.6		37.8	21.7
2022 Forecast	21.7			21.7
2023 Budget	21.7	1.0		22.7
2024 Budget	22.7	1.0		23.7
2025 Budget	23.7	1.0		24.7
2026 Budget	24.7	1.0		25.7
2027 Budget	25.7	6.0		31.7

1

	Accumulated Depreciation					
		Amortization Expense				
($ M)	**Opening Balance**	**2018-2022 SMC**	**2023-2027 SMC**	**Disposals**	**Closing Balance**	**Net Book Value**
2021 Actual	-44.8	-5.4		-37.8	-12.4	9.4
2022 Forecast	-12.4	-3.8			-16.2	5.6
2023 Budget	-16.2	-3.5	0.0		-19.7	3.1
2024 Budget	-19.7	-2.1	-0.2		-22.0	1.7
2025 Budget	-22.0		-0.4		-22.4	2.3
2026 Budget	-22.4		-0.6		-23.0	2.7
2027 Budget	-23.0		-1.6		-24.6	7.1

2

3 This disposal in 2021 is related to the old MDM/R platform that is no longer in use.

EDA INTERROGATORY 6

Issue 1: ***Is the Independent Electricity System Operator, in its capacity as the Smart Metering Entity (SME), proposed $137.5 million revenue requirement for the January 1, 2023, to December 31, 2027, period appropriate?***

INTERROGATORY

EDA Question 6

References: Exhibit B, Tab 1, Schedule 1, Page 4

Question:

Please provide an itemized list of the services that the IESO will provide to the SME and show the annual cost of each for the period 2023-2027.

RESPONSE

The SME will continue to be supported directly by resources from the IESO's mainstream business as required, usually from the following functions:

Legal, Regulatory Affairs, Finance, Settlements, Information Technology, and Human Resources.

In addition, as per the IESO's cost allocation study submitted as part of the evidence provided to the OEB during the 2018 revenue requirement submission, a portion of shared service functions within the IESO is allocated to the SME, this includes senior management time, payroll functions, information governance, technology services, and facility costs such as insurance and furniture amortization. The below table, shows the projected annual costs included in SME's revenue requirement for the described services provided by the IESO:

($M)	**2023**	**2024**	**2025**	**2026**	**2027**	**Total**
IESO Shared Services (does not include Third Party Access)	0.1	0.1	0.1	0.1	0.2	0.6
Third Party Access - shared services	0.1	0.1	0.1	0.1	0.1	0.5
IESO Cost Allocation	0.8	0.9	0.9	0.9	0.9	4.3
Total Annual Costs	**1.0**	**1.1**	**1.1**	**1.1**	**1.2**	**5.4**

EDA INTERROGATORY 7

Issue 1: ***Is the Independent Electricity System Operator, in its capacity as the Smart Metering Entity (SME), proposed $137.5 million revenue requirement for the January 1, 2023, to December 31, 2027, period appropriate?***

INTERROGATORY

EDA Question 7

References: Exhibit B, Tab 1, Schedule 1, Page 6, Table 1

Question:

Please expand the table to provide actual 2021 values and 2022 values stated on a Bridge Year basis (i.e., using as many months of actual data as is available and estimating the data for the remaining months).

Please provide a variance analysis for each line item; please be detailed and specific and provide all supporting data and assumptions.

RESPONSE

Operating Expenses ($M)	2021	2022 Bridge Year ***2***	2023	2024	2025	2026	2027
Compensation and Benefits	4.0	4.3	4.8	4.9	5.0	5.1	5.2
Professional and Consulting ***1***	13.1	13.3	2.0	2.1	2.1	2.1	2.1
Operating and Administration ***1***	4.8	5.8	20.5	20.6	18.6	18.7	20.9
OM&A Expenses	21.9	23.4	27.3	27.6	25.7	25.9	28.2
Amortization			0.0	0.2	0.4	0.6	1.6
Total Operating Expenses	21.9	23.4	27.3	27.7	26.0	26.4	29.7

Note 1: the core operating MDM/R services provided by the Operational Service Provider (OPS - IBM contract) were reported under Professional and Consulting prior to 2022. As the MDM/R

has become a mature operation, which requires ongoing maintenance and refreshes at a rate comparable with other similar IT projects, the Operational Service Provider contract is budgeted under Operation and Administration costs for the period of January 1, 2023 to December 31, 2027.

Note 2: 2022 Bridge Year includes 5 months of actual, and 7 months of forecast.

EDA INTERROGATORY 8

Issue 1: ***Is the Independent Electricity System Operator, in its capacity as the Smart Metering Entity (SME), proposed $137.5 million revenue requirement for the January 1, 2023, to December 31, 2027, period appropriate?***

INTERROGATORY

EDA Question 8

References: Exhibit B, Tab 3, Schedule 1, Page 5

Question:

Please quantify the impact to the proposed 2023 revenue requirement of a 1% change in each identified risk.

RESPONSE

A change of 1% in revenue or operating expenditures would represent about $0.3 million annually.

EDA INTERROGATORY 9

Issue 5: ***Is the SME's forecast of installed smart meters for the 2023 to 2027 period based on appropriate data and a sound methodology?***

INTERROGATORY

EDA Question 9:

Reference: Exhibit B, Tab 2, Schedule 1, Page 3

Preamble:

The SME forecasts that:

- Approximately 5.29 million smart meters will be enrolled in the MDM/R in 2023
- The number of smart meters will increase at a rate of 0.8% per year in the period from January 1, 2023, to December 31, 2027.

The 0.8% growth rate is based on a 5-year historical average of smart meter growth for both residential and general service.

The March 23, 2022 OEB Bulletin describes that some electricity LDCs are experiencing difficulty obtaining smart meters and that LDCs will not be at risk of compliance actions if, subject to certain expectations that are set out in the Bulletin, the LDC provides a conventional meter instead of a smart meter.

Questions:

a. Please discuss the appropriateness of the SME's assumption that the number of residential and General Service <50kW customers reported in the OEB's Statistical Yearbook represents the number of Smart Meters in Ontario.

b. Please discuss how the SME reconciles its data of number of Smart Meters with the customer count data set out in the OEB's Statistical Yearbook.

c. Please provide a detailed derivation of the proposed 0.8% growth rate; please provide all supporting facts and state all assumptions

d. Please provide a table that presents the SME's annual forecast of smart meters by rate class for the 2023-2027 period.

e. Please provide a table that compares the SME's previously approved historical forecast of the number of smart meters in the 2016-2020 period versus the actual number of smart meters reported in the OEB Yearbook. Please identify the drivers of the year over year changes and describe how the SME monitors the accuracy of its forecast of the number of deployed smart meters.

f. Please confirm that customers who are conventionally metered are charged the Smart Metering Entity Charge. Please describe the services that the SME provides customers who are conventionally metered.

g. Please discuss whether Electric Vehicles could be smart metered and if so, how has this been incorporated in the proposed growth rate.

h. Please identify, explain, and quantify any incremental costs that the SME may incur if Electric Vehicles are smart metered; please be detailed, state all assumptions and provide all supporting facts.

RESPONSE

a. The OEB Yearbooks should be the most reliable source for the number of installed residential and small general service < 50 kW customers, which are the customers with smart meters, for each LDC in Ontario as the OEB relies on the LDCs to provide complete and accurate information in their Reporting and Record-Keeping Requirements reports ("RRR"). As stated in the OEBs Yearbook:

> The OEB provides this Yearbook of Electricity Distributors to publish the financial and operational information collected from electricity distributors. It is compiled from data submitted by the distributors through the Reporting and Record-Keeping Requirements reports.

Additionally, the OEBs RRRs require that a self-certification statement by either the Chief Executive Officer or the RRR Signing Officer of the company that:

i. The information filed under the RRR is complete and accurate in all material respects;

ii. Adequate processes and controls are in place to ensure that the information filed under the RRR is accurate in all material respects; and

iii. The company is able to provide records substantiating the filings made under the RRR on request.

Given the above the SME believes the OEB Yearbooks are the appropriate source to use for the number of smart meters in Ontario.

b. The SME periodically performs comparisons of the smart meter count in the OEB Yearbook against the active Service Delivery Point ("SDP") count by LDC in the MDM/R database.

In addition, the SME compares total consumption submitted to the MDM/R by each LDC monthly to the average total monthly consumption reported by the LDC in the OEB Yearbook. This comparison is provided to each LDC as part of the monthly performance metrics report.

c. Please see the response to VECC 8 c).

d. SME's annual forecast of smart meters by rate class for the 2023-2027 period:

Smart Meter count numbers from 2020 OEB Yearbook

IESO Billing	Residential	% Residential increase	SGS< 50	% SGS<50 increase	Total SDPs (D+F)
2022	4,801,697		446,066		5,247,763
2023	4,840,111	0.80%	449,635	0.80%	5,289,745
2024	4,878,831	0.80%	453,232	0.80%	5,332,063
2025	4,917,862	0.80%	456,857	0.80%	5,374,720
2026	4,957,205	0.80%	460,512	0.80%	5,417,717
2027	4,996,863	0.80%	464,196	0.80%	5,461,059

e. For the IESO billing year 2018, the IESO estimated a total smart meter count (residential and SGS<50) of 4,889,512, with a year over year increase of an annual growth rate of 1%.

IESO Billing Year	SME Forecast # meters	SME Forecast % increase	OEB Yearbook Actual # meters	Difference (OEB Yearbook actual - SME Forecast)
2018	4,889,512	1.00%	5,049,947	160,435
2019	4,938,407	1.00%	5,104,011	165,604
2020	4,987,791	1.00%	5,153,316	165,525
2021	5,037,669	1.00%	5,197,691	160,022
2022	5,088,046	1.00%	5,247,763	159,717

f. Customers who are conventionally metered are charged the Smart Metering Entity Charge. As stated in its application, the Smart Meter Entity uses the OEB Yearbook of Electricity Distributors to determine the number of customers with smart meters. As stated on page 2 of the 2020-21 Yearbook of Electricity Distributors: The yearbook "...is compiled from data submitted by the distributors through the Reporting and Record-Keeping Requirements."

g. The SME's current mandate is for Residential and SGS < 50kW Smart Meters. As Electric Vehicles are currently not individually smart metered, these have not been included in the proposed growth rate. Please see the response to S.1 Environmental defense 8.

h. Please see the response to question g) above.

EDA INTERROGATORY 10

Issue 6: ***Are the forecast staffing levels appropriate and reasonable.***

INTERROGATORY

EDA Question 10:

Reference: Exhibit B, Tab 1, Schedule 1, Pages 3 through 4

Preamble:

The SME proposes to increase its workforce by 3 FTEs during the 2023 to 2027 period to support ongoing core operations, to address an existing understaffing situation and to reduce the SME's reliance on consultants and external vendors.

Questions:

a. Please provide the job descriptions for each proposed new FTE and the status of the job description (e.g., whether draft, pending approval, approved)

b. Please discuss when each new FTE will be recruited for and the assumed starting date.

c. Please describe and quantify the anticipated reduction in consultant or vendor costs of recruiting 3 new FTEs.

RESPONSE

a. a., b., & c. Please see the response to OEB Staff IR #1

EDA INTERROGATORY 11

Issue 8: ***Is the proposal to retain $2.5 million in the Operating Reserve Balancing Account as an operating reserve for the SME appropriate?***

INTERROGATORY

EDA Question 11:

Reference: Exhibit B, Tab 3, Schedule 1, Pages 1 through 5

Preamble:

The historical SME debt and approximately $5 million of residual debt and financing costs were paid off ahead of schedule, by December 31, 2020, rather than the end of this five-year budget period, December 31, 2022, as forecast in the prior SMC application. As a result, the BVA had a surplus exceeding $2.5 million in 2020, which resulted in a rebate of $2.5 million to ratepayers in 2020 and, as will be provided in the annual Cost and Variance Report to be filed with the Board by May 31, 2022, a forecast rebate of $13.7 million in 2021.

Questions:

a. Please provide the accounting entries that the SME would make to the ORBA in the event of:

    i. a revenue shortfall

    ii. an unanticipated expenditure occurring

b. Please describe the approval process for making these accounting entries

c. Will the ORBA attract carrying charges? If so, please provide the associated accounting entries

d. Is the $2.5 million balance recorded in the ORBA account Principal or Principal and Carrying charges?

RESPONSE

a. The impact to the ORBA would be the following in the event of:

    i. A revenue shortfall – credit to the opening balance

ii. An unanticipated expenditure occurring – credit to the opening balance

b. The ORBA is meant to be an operating reserve account that will capture any over or under budget variances caused from the normal course of the SME operation and therefore no approval process is required to make these accounting entries; furthermore, the OEB approved the SME to maintain a balance of $2.5 million to fund for the same purposes as agreed to by all parties in Issue 11 of the Settlement Agreement to the 2017-2022 Smart Metering Charge Application (EB-2017-0290):

> Parties accept that it is appropriate for the SME to establish an operating reserve which will allow it to accommodate unplanned work activities that may be material in scope and are beyond the control of the SME.

c. Interest may be incurred to fund capital projects, in which case the interest will be capitalized in accordance to accounting principles and therefore will be amortized of the useful life of the asset; any variance between the budget and the actual amortization will be part of the ORBA changes.

d. Please see the answer to c. above

EDA INTERROGATORY 12

Issue 8: ***Is the proposed to retain $2.5 million in the Opening Reserve Balancing Account as an operating reserve for the SME appropriate?***

INTERROGATORY

EDA Question 12:

Reference: Exhibit B, Tab 3, Schedule 1, Pages 1 through 5

Preamble:

The SME's maximum balance that can be retained in the predecessor account was determined in a period when the SME's revenue requirement was greater than that proposed for the 2023-2027 period.

Question:

a. Please explain the appropriateness of continuing to rely on a maximum account balance that represents a larger proportion of the revenue requirement than it did in the period when the maximum balance amount was first approved.

RESPONSE

a. Please see the response to VECC IR #13

ED INTERROGATORY 1

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 1, Page 1

Preamble:

At Exhibit B, Tab 1, Schedule 1, Page 3, the application states:

> The Ontario Energy Board has provided a report to the Minister of Energy entitled *Design of an Optional Enhanced Time-of-Use Price* (EB-2022-0074). It stated:
>
> > Four stakeholders representing environmental groups, an industry association and an electricity distributor commented that net metering should be considered prior to implementation of an OETOU price plan.[1]
>
> The submissions of Environmental Defence stated as follows:
>
> > Environmental Defence recommends that the OEB ensure that utilities allow customers with net meters to participate in the optional TOU rate structure. As it currently stands, utilities switch customers to tiered rates from time-of-use rates when they provide a net meter.[2] This means that customers with net metering will not be able to benefit from the new optional enhanced TOU rates. This would rule out a number of proactive customers who might otherwise be interested in the optional rate.
> >
> > For example, customers with net metering are likely to have a solar installation or solar coupled with a battery. They are likely to be energy-savvy and environmentally conscious. They would therefore be prime candidates for the optional TOU rate. Excluding them would diminish the impact of the program.
> >
> > Furthermore, net metering customers could provide additional grid benefits by providing additional power to the grid at times of peak demand. For example, a net metered customer with a bi-directional electric vehicle charger or a solar/storage

[1] OEB, *Design of an Optional Enhanced Time-of-Use Price,* March 2022 (EB-2022-0074), p. 58.
[2] See, for example, Hydro Ottawa, Net Metering, https://hydroottawa.com/en/accounts-services/generation/net-metering.

installation could be incentivized to flow power back into the grid when it is needed the most.

In addition, it appears that the practice of switching customers off TOU rates when they receive a net meter is not entirely consistent with the applicable standards and regulations. Under the OEB's *Standard Supply Service Code for Electricity Distributors*, utilities are required to charge time-of-use rates to any customers with capable meters, which would include net meters (unless the customer requests tiered rates).[3] In addition, the formula set out in the net metering regulation (O. Reg. 541/05) requires that the rates for power conveyed from a customer/generator to the grid be "calculated on the same basis as the eligible generator's consumption of electricity." It is clearly worded to allow optional rate structures, including time-of-use rates for both consumption and generation. Instead, the practice is to take that TOU option away from customers.

The historical reasons for forcing net metered customers onto tiered rates is no longer applicable. The initial uptake for net metering was modest. As a result, it was easier to calculate billing manually rather than alter billing systems. This is no longer appropriate as there have been gradual increases in net metered customers over time and the number is likely to increase further with advances in distributed energy resources. Changes are required to the IESO's Meter Data Management and Repository (MDM/R) system and to distribution companies' billing systems. However, those changes are not onerous and would appear to be required or at least contemplated by O. Reg. 541/05 and the OEB's *Standard Supply Service Code for Electricity Distributors*. It is no longer appropriate in light of the needs of today's electricity system to prohibit net metered customers from participating in time-of-use rates.

Questions:

a. If the SME were directed to make the changes necessary to its Meter Data Management and Repository (MDM/R) system to facilitate time-of-use rates for net metered customers, could it do so within its proposed revenue requirement? Approximately how much would it cost to (a) initially implement the changes to the MDM/R, and (b)

[3] OEB, *Standard Supply Service Code for Electricity Distributors*, October 31, 2020 (s. 3.4.1: "Subject to section 3.5, the commodity prices for electricity payable by an RPP consumer that has an eligible time-of-use meter shall be: [formula for time-of-use rates]" Per s. 1.2.1, an eligible meter include any meter that records use data during the time-of-use periods. That includes net meters as they have that capability).

provide the additional data on an ongoing basis? How long would it take to implement those changes?

b. Please confirm that changes would be necessary to the SME's MDM/R for it to provide smart metering data to distributors for customers with net meters who wish to have time-of-use rates.

c. Would it be more cost-effective for the SME or each individual distributor to collect, manage, and store data on electricity conveyed into the distributor's distribution system by customers with net meters?

d. In the SME's view, does the OEB have the jurisdiction to approve funding to the SME through its revenue requirement to provide smart metering data to enable time-of-use rates for customers with net meters?

e. In the SME's view, is an amendment needed to the *Electricity Act* required before the SME could collect, manage, and store data on electricity conveyed into the distributor's distribution system by customers with net meters? In our view, the answer is no because (a) this is "related to the metering of customers' consumption or use of electricity in Ontario" as described in s. 53.8(2) of the *Electricity Act* and (b) the objects set out in 53.8 do not prohibit this activity. Please address these comments in the SME's response.

f. Does the SME receive consumption data from net meters in Ontario?

g. Does the SME receive data from net meters in Ontario recording the electricity conveyed into the distribution system by customers?

h. Is it cost-effective for the SME to continue to collect and manage consumption data for customers with net meters if the LDC must collect and manage the data regarding the conveyance of electricity into the distribution system?

i. Is it appropriate for the SME to continue to charge $0.43 per meter per month for net meters when the distributor is required to collect and process electricity conveyance data from those meters regardless of the SME's role?

j. Is it necessary for the SME to be involved in the collection and management of data from net meters? Is it possible for distributors to collect and manage this data and allow those customers to remain on time-of-use rates even?

RESPONSE

a. The SME believes, based on indicative costing, that it could make the necessary changes to the MDM/R to facilitate TOU rates for net-metered customers (Residential and General Service <50 kW) within its proposed revenue requirement. The SME expects that the implementation costs would be less than $250,000 and that ongoing costs would not be material. Detailed costing has not been undertaken at this time and would depend on the technical configuration. The estimated timeline to implement changes to the MDM/R to provide TOU rates for net-metered customer is 6 – 9 months.

b. Yes, changes would be necessary to the MDM/R to provide smart metering data to distributors for customers with net meters who wish to have time-of-use rates.

c. The SME does not have information on individual LDCs' costs or keep track of the LDCs' activities to perform the functions described, but understands that some LDCs may already need to utilize an onerous manual process for settling net metered customers. The SME believes that it could cost-effectively provide this service to the LDCs given the existing infrastructure of the MDM/R and the modest technical changes required for the MDM/R and thus help the LDCs mitigate time consuming and potentially less accurate manual processes Further the SME notes that it has exclusive authority to perform the functions listed in section 5 of Ontario Regulation 393/07 made under the *Electricity Act, 1998*, which includes providing all services performed on smart metering data to produce billing quantity data, including validation, estimating and editing services ("VEE"). These VEE services are performed by the SME on the consumption data of customers with smart meters, including net meters.

d. See the response to (e).

e. The SME's view is that an amendment to the *Electricity Act, 1998* would not be required for the SME to process electricity data consumption and generation of customers with net meters. However, amendments to existing regulations under the *Electricity Act, 1998* and/or the SME's OEB licence may be required.

f. Yes, the SME receives consumption data from net meters.

g. No, the SME does not receive generation data from net meters as it does not currently offer a net metering option.

h. See the response to (c).

i. In accordance with the OEB's direction, the SME charges the SMC to all Residential and General Service <50kW consumers with a smart meter installed as reported by the LDCs to the OEB for the OEB Yearbooks.

j. See the response to (c) above. In addition, an advantage of utilizing the MDM/R for net metering is that it would provide uniform VEE for billing purposes and serve as a central data repository of consumption and generation data for all Residential and General Service <50 kW customers in the province. The provincial government and the OEB have repeatedly recognized the value of MDM/R as a central data repository.

ED INTERROGATORY 2

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 1, Page 1

Questions:

a. Please provide a copy of all directives made under sections 28.3 or 28.4 of the *Ontario Energy Board Act, 1998,* relating to smart metering.

RESPONSE

a. There have not been any directives to the IESO related to smart metering in the last five years. All directives received by the IESO are available on the IESO's website at: Ministerial Directives (ieso.ca)

ED INTERROGATORY 3

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 1, Page 1

Questions:

a. The SME is proposing to charge $0.43 per meter per month for five years. Please provide comparisons of this cost with those incurred by other entities for similar services, including costs incurred by distributors in Ontario and elsewhere who provide these services in-house.

b. Please provide an estimate of what it would cost a distributor in Ontario to provide these services in-house without the involvement of the SME.

RESPONSE

a. The SME does not believe a cost comparison can be made as the MDM/R is a uniquely configured, multi-tenant (57 LDCs) solution. The SME cannot be compared with an individual distributor in Ontario and is not aware of an equivalent to the MDM/R in another jurisdiction. See the response to S.1 Environmental Defence 1(i).

b. The SME does not have information on individual LDCs' costs or abilities to perform the functions described. However, the service that the SME provides would need to replicated by 57 LDCs. Further the SME notes that it has exclusive authority to perform the functions listed in section 5 of Ontario Regulation 393/07 made under the *Electricity Act, 1998.*

ED INTERROGATORY 4

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 1, Page 1

Questions:

a. How many customers in Ontario have smart meters?

b. What percent of electricity customers in Ontario have smart meters?

c. Please provide a breakdown of the figures in (a) and (b) by customer type (e.g., residential, commercial, etc.).

d. What are the technical requirements of a smart meter?

e. Of all the smart meters that the SME collects data from, how many are net meters?

f. Of all the smart meters that the SME collects data from, how many are capable of measuring bi-directional flow?

g. Does the SME have any role with respect to generation meters, such as those for micro-FIT projects?

RESPONSE

As stated in its application the Smart Metering Entity uses the OEB's annual Yearbook of Electricity Distributors to determine the number of customers with smart meters. As stated on page 2 of the 2020-21 Yearbook of Electricity Distributors, the yearbook "...is compiled from data submitted by the distributors through the Reporting and Record-Keeping Requirements". Responses to a), b) and c) are from the 2020-21 OEB Yearbook.

a. The OEBs 2020 Yearbook shows there are 5.25 million smart meters installed as of December 31, 2020 and in its application the SME has estimated there will be 5.29 million smart meters installed as of the beginning of 2023. Only Residential and General Service < 50kW have smart meters.

b. The yearbook states there were 5,302,563 electricity customers as of December 31, 2020, based on this 99.9% of customers have a smart meter.

c. According to the OEB Yearbook there were 4.8 million residential and 0.45 million GS < 50 kW customers as of December 31, 2020.

d. The technical requirements of a smart meter are defined by Measurement Canada and are available through the following link: https://www.ic.gc.ca/eic/site/mc-mc.nsf/eng/lm00171.html

e. As the SME does not collect generation data, the SME does not have an accurate count of how many customers are net metered.

f. The SME does not track the capabilities of the smart meters installed, owned and operated by LDCs.

g. No, the SME does not currently have any role with respect to generation meters.

ED INTERROGATORY 5

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 1, Page 1

Questions:

a. Could the SME play a role in reducing the cost of small-scale distributed energy resource connections? For instance, could the SME work with distributors to reduce the likelihood that a customer will need to swap out their smart meter for a net meter if they join the net metering project (e.g. by encouraging more smart meters to have built-in bi-directional capabilities?

b. Is the SME capable of determining the quantity of electricity conveyed into Ontario's distribution system from customers with net meters?

RESPONSE

a. As the SME does not currently provide a net metering option it cannot answer this question. If the SME were to provide such a service it would work with all stakeholders and LDCs on implementing cost effective options. Having said that, the SME recognizes the importance of encouraging more smart meters to have built-in bi-directional capabilities which can accelerate the adoption of smart grid solutions by customers and other sector players alike.

b. Not at this time as currently, the SME does not provide a net metering option.

NOTL INTERROGATORY 1

Issue 1

INTERROGATORY

The use of the MDM/R is a requirement under regulation. Nonetheless, understanding how customers use or would use a service offering in the absence of the regulatory requirements is a sound business practice. Many Local Distribution Companies (LDCs) have discussed with NOTL Hydro that they would not use the MDM/R if it was not a regulatory requirement.

Questions:

a. Has the SME polled or otherwise discussed with their LDC customers whether they would use the MDM/R services if they were not required to under regulations?

b. If not, why not?

c. If yes, what were the results?

d. Have any LDCs communicated to the SME that they believe they can perform the same function than the MDM/R at a lower cost and asked to be exempt?

e. Is exemption from using the MDM/R, including the elimination of the SME charge, an option if an LDC can demonstrate they can perform the same function at a lower cost?

RESPONSE

a. No, this question has not been asked by the SME as the use of the MDM/R is a requirement of the *Electricity Act*, *1998* and of Ontario Regulation 393/07. The IESO, designated as the Smart Metering Entity, has an obligation and the exclusive authority to provide this service to all LDCs in Ontario with smart meters.

b. See response to (a).

c. Not applicable.

d. No LDC representatives have communicated this to SME staff.

e. No. See response to (a).

CCC INTERROGATORY 1

INTERROGATORY

Reference: Exhibit B, Tab 1, Page 1

The proposed revenue requirement for the 2023 to 2027 period is $137.5 million. The revenue requirement for the previous period was $170.6 million.

Questions:

a. Please list all of the factors that have led to a reduction in the revenue requirement;

b. What was the actual revenue requirement during the 2018-2022 period?

RESPONSE

a. Refer to Smart Metering Charge (SMC) Application, Exhibit B, Tab 1, Schedule 1, Pages 2 through 6.

b. We have presumed the question is asking for actual revenues collected:

($M)	**2018 Actual**	**2019 Actual**	**2020 Actual**	**2021 Actual**	**2022 Budget**	**Total**
Total SME Revenue Requirement	**34.5**	**34.9**	**35.2**	**35.6**	**34.8**	**175.0**

CCC INTERROGATORY 2

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 1, Page 2

The SME is moving from a cash accounting method which has been in place since the OEB approved the initial Smart Metering Charge to an accrual accounting method.

Questions:

a. What is the impetus for moving to the accrual accounting method?

b. What is the impact of this accounting change on the overall 2023 to 2027 revenue requirement?

RESPONSE

a. As the historical SME debt has now been fully paid and the SME had operated under a cash accounting method since the Smart Meter Charge was originally approved by the OEB, there is no longer the need for a cash accounting method. In addition, by moving to accrual accounting, the SME's regulatory reporting will be aligned to how other regulated utilities/entities report to the OEB and to the SME values reported under the IESO's audited financial statements, which are prepared in accordance to Public Sector Accounting Standards (on an accrual basis).

b. The revenue requirement for 2023 to 2027 will be lower than if cash accounting was used and there will be a more stable term rate since assets are amortized over the period for which their benefits are being received.

CCC INTERROGATORY 3

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 1, Page 3

Questions:

a. Please explain the nature of the proposed capital investments over the 2023-2027 period.

b. Why is there a larger capital investment in 2026 of $ million?

RESPONSE

a. Reference: Exhibit B, Tab 1, Schedule 1, Pages 2 and 3

Capital Investments over the 2023-2027 period include expenditure on potential projects to add functionality to the MDM/R such as Net Metering or Commercial & Industrial meters, or Hardware and Software updates to improve performance or increase capacity to support an increase in 15-minute interval meters given the expected transition of certain LDCs to AMI 2.0 (Advanced Metering Infrastructure 2.0).

b. As the MDM/R hardware will have been in use for 8 years by 2026, a hardware refresh is scheduled for 2026 and 2027 to maintain the required performance levels.

CCC INTERROGATORY 4

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 1, Page 3

The SME is proposing to add an additional 3 FTEs during the 2023-2027 period. The evidence indicates that the rationale for these additions is to reduce expenses for outsourced work and build its in-house knowledge and expertise.

Questions:

a. Please provide the annual cost savings associated with this decision.

b. Did the SME undertake business case in support of its decision to move more responsibilities in-house?

c. If so, please provide that analysis.

d. If not, why not?

RESPONSE

Reference: Exhibit B, Tab 1, Schedule 1, Pages 2 and 3

a. Please see the response to S.6-Staff-1.

b. A costing analysis was conducted, please see the response to S.6-Staff-1.

c. Please see the response to S.6-Staff-1.

d. Please see the response to c) above.

CCC INTERROGATORY 5

INTERROGATORY

Reference: Exhibit B, Tab 2, Schedule 2, Page 1

Electricity customers are required to pay the SMC every month. The evidence indicates that the MDM/R provides a service that will continue to benefit all end-use smart meter customers across Ontario an continue to enable a number of value added applications from the data held and collected by the SME.

Question:

a. Please describe all of the services that the SME provides for Ontario electricity customers.

RESPONSE

Reference: Exhibit B, Tab 1, Schedule 1, Pages 2 and 3

a. The MDM/R is a legislatively mandated central hub, providing a common platform for storing, processing, validating and managing hourly electricity consumption information to the billing processes for residential and small general service (>50kW) customers of Ontario's local distribution companies ("LDCs") – all in a highly secure environment.

   The SME does not interact directly with residential or small general service customers directly, it provides a service to their LDCs.

   The MDM/R provides a Meter Reads Retrieval Web Services interface that can be used by an LDC and their AMI (Advanced Metering Infrastructure) Operators, Billing Agents and other organizations to access Meter Read data. The Web service supports requests for framed daily usage, register readings and interval data (including validation status and data quality flags) for a specified timeframe for a single SDP (Service Delivery Point – or a specific meter) at a time. The LDCs can then present the data via their own portal or interface, to allow their customers to see their data usage and make decisions regarding conservation, Time-of-Use pricing etc.

   Customers smart meters also produce large volumes of data related to consumption patterns that can be leveraged in ways that stimulate new value creation to benefit Ontario's customers as described below.

The Ontario Energy Board called on the Smart Metering Entity (SME) to provide public access to highly aggregated smart meter data to support research into how electricity is used in the province. The IESO also uses SME aggregated smart meter data as an input for its own forecasting models used to manage the power grid. Leveraging aggregated smart meter data has helped improve the accuracy of demand forecasting and understanding new trends and behaviours. As the IESO looks to the future, new work patterns are something our forecasters will take into account for daily operation of the grid. Some of this data has also been used to show the earlier impacts of COVID-19 on Ontario's electricity system as well as average home consumption patterns. The SME data has also been used to analyze the impact of the pandemic and the subsequent emergency measures to the economy by the IESO and OEB.

CCC INTERROGATORY 6

INTERROGATORY

Reference: Exhibit B, Tab 2, Schedule 1, Page 3

The projection for 2023 enrollment of smart meters is forecast to be approximately 5.29 million smart meters and average 5.37 million during the 2023-2027 period.

Question:

a. What is the basis for this forecast?

RESPONSE

Reference: Exhibit B, Tab 1, Schedule 1, Pages 2 and 3

a. Please see the response to S.5 VECC 8 c.

VECC INTERROGATORY 1

INTERROGATORY

Interrogatory: Is the Independent Electricity System Operator, in its capacity as the Smart Metering Entity (SME), proposed $137.5 million revenue requirement for the January 1, 2023 to December 31, 2027 period appropriate?

Reference: Exhibit A, Tab 3, Schedule 1

"The MDM/R became operational in 2008 and further development of, and updates to, the MDM/R have occurred since then and new functionality continues to be implemented."

Questions:

a. Please provide the chronology and description of the significant changes in functionality of the MDM/R since its origins in 2008.

RESPONSE

EnergyIP®, a meter data management and repository (MDM/R) system, is a comprehensive set of tools that provides a scalable solution for single or multi-commodity to address traditional use cases such as meter-to-cash. EnergyIP also performs long-term data storage and management for the vast quantities of data delivered by smart metering systems.

a. October 2007 – EnergyIP 5.1.3

March 2008 – EnergyIP 5.1.9

October 2008 – EnergyIP 5.5.2

April 2009 – EnergyIP 6.1

October 2009 – EnergyIP 6.3

- All of the above upgrades and releases were focused on a wide variety of functionalities, from performance, delivery of contracted scope, custom reports, virtual channels as well as issues with the definition of expected functionality as documented in IESO technical specifications versus eMeter® licensed functionality. Overall, the early release years could be categorized as progressive / iterative releases of new functionality.

May 2011 – EnergyIP 7.0

- Delivered performance improvements, defect corrections and minor new functionality.
- Both meter read data processing and synchronization performance improved significantly from the prior release (EnergyIP 6.3)

April 2012 – EnergyIP 7.2

- Measurement Canada's requirements to include register readings on customers' time-of-use bills.
- Calculative reads equality adjustment (periodic and hourly) and related measurement profiles.
- Quality indicators for externally estimated and calculated register reads using estimated intervals.
- Extension of the Trilliant meter readings interface for estimated register reads.

March 2015 – EnergyIP 7.6

- Maintenance updates to incorporate defect fixes, improvements in operational performance and quality, Oracles releases (a major new version of the software that contained significant new functionality) and other components going out of support

March 2017 – Energy IP 7.7

- Ensured the SME maintained vendor support for all the latest components of the application and operating system, and fixed a number of minor defects.

August 2020 – EnergyIP 8.6

- Improved operating performance by providing the MDM/R with the latest supported technology and hardware, which simplifies the architecture and improves system performance.

VECC INTERROGATORY 2

INTERROGATORY

Reference: Exhibit A, Tab 1, Schedule 1

Operating Expenses ($M)	**2023**	**2024**	**2025**	**2026**	**2027**	**Total**
Compensation and Benefits	4.8	4.9	5.0	5.1	5.2	25.0
Professional and Consulting	2.0	2.1	2.1	2.1	2.1	10.4
Operating and Administration	20.5	20.6	18.6	18.7	20.9	99.3
OM&A Expenses	**27.3**	**27.6**	**25.7**	**25.9**	**28.2**	**134.7**
Amortization	0.0	0.2	0.4	0.6	1.6	2.8
Total Operating Expenses	**27.3**	**27.7**	**26.0**	**26.4**	**29.7**	**137.5**

Question:

a. Please provide the equivalent table showing the actual expenses for the period 2018-2022.

RESPONSE

The table below shows 2018-2021 actual expenses with 2022 shows as per budget since the year is not yet available for actual expenses:

Operating Expenses ($M)	**2018 Actual**	**2019 Actual**	**2020 Actual**	**2021 Actual**	**2022 Budget**	**Total**
Compensation and Benefits	2.8	3.1	3.8	4.0	4.2	17.9
Professional and Consulting	15.7	16.5	13.0	13.1	14.5	72.8
Operating and Administration	5.0	6.1	5.8	4.8	7.6	29.3
OM&A Expenses	**23.5**	**25.7**	**22.6**	**21.9**	**26.3**	**120.1**
MDM/R Capital*	12.2	5.7	4.2	-	2.1	24.1
Total Expenses	**35.7**	**31.4**	**26.8**	**21.9**	**28.4**	**144.2**

*Includes financing charges

VECC INTERROGATORY 3

INTERROGATORY

Reference: Exhibit A, Tab 3, Schedule 1 & Exhibit B, Tab 4, Schedule 1

Questions:

a. Other than acting as a repository for meter data what services does the SME provide local distribution companies?

b. Please list the main activities of the SME and the number of FTEs assigned to each of those activities.

c. Please describe the SME's role in the Green Button initiative.

RESPONSE

a. The SME provides the following services beyond a repository for meter data for local distribution companies (LDCs):

- Validates Meter Read Data.
- Estimates Meter Read Data (when required).
- Performs Framing of Data into TOU or Tiered buckets.
- The MDM/R system provides billing quantity responses to LDCs for billing the customers.
- Develops and maintains functionality to assist with LDCs Mergers.
- Assists LDCs with Customer Information System replacement testing and validation.
- Provides Web Services so LDCs can provide their customers with data on their own portals.
- Provides Crossed Meter Data correction functionality.
- Responds to, and addresses, LDC service requests and support issues in a timely manner.
- Produces monthly performance metrics reports, daily summarized operational data, and a customized LDC Action Items list for each LDC through the MDM/R Service Desk tool.
- Provides data extracts for LDCs upon request.
- Provides a library of eLearning courses and webinars.
- Assists with testing of LDC systems to comply with new system requirements for new initiatives, examples include:

- Tiered rates pricing
- The ultra-low TOU rate that will be implemented in 2023

b. The main activities of the SME fall into the following categories and FTEs:

- Operations has five FTEs
- Data Governance & Quality Assurance has five FTEs
- Project & Contract Management has three FTEs
- Data & Analytics has two FTEs
- Management oversight and administrative support has five FTEs

c. A senior member of the SME team sits as an observer on both the IWG (Independent, Industry-led, Working Group for the implementation of Green Button in Ontario) and the ITWG (Independent, Industry Led, Technical Working Group for the implementation of Green Button in Ontario). These working groups meet weekly and have been meeting since February 2022.

The SME's MDM/R provides a Web Services API (Application Programming Interface) that allows LDCs to access consumption data for their customers via their respective Web portals. This data is available for up to 27 months, and LDCs can use this API to populate their Green Button responses if desired. No changes will be required on the MDM/R Web Services to support this functionality.

VECC INTERROGATORY 4

INTERROGATORY

Reference: Exhibit B, Tab 3, Schedule 1

Questions:

a. The SME/IESO notes that one of the forecast risks is an increase in interest rates. Interest rates recently been rising in response to monetary policy to address rising inflation. Please comment on how the recent increases in interest and inflation rates are impacting the 2023 SME forecast budget.

RESPONSE

a. It is too early for the SME to determine the impact of rising interest rate on the 2023 budget, since it will be dependent on the amount of capital expenses incurred and any operating surplus or deficit experienced in the year that might be available to fund the capital needs. Having said this, with a projected $1 million capital expense in 2023, we do not believe the impact from interest rates to be material.

VECC INTERROGATORY 5

INTERROGATORY

Reference: Exhibit B, Tab 2, Schedule 1

"For reference the proposed SMC for the 2023 to 2027 period is lower than the current SMC of $0.57 per meter per month, approved from January 1, 2018 to December 31, 2022, which is lower than the original SMC, approved from 2013 to 2018, of $0.79 per meter per month."

Questions:

a. What were the main factors driving the reduction in SME fees over the 2018 to 2022 period?

b. How does the change to accrual accounting impact the SME fee as compared to prior period which used cash accounting?

RESPONSE

a. The main factors driving the reduction were:

- higher number of meters installed by the LDCs through 2018-2021 than projected.
- savings in contractor costs and IBM operating service provider costs resulting from contract negotiations in 2018, completed after the decision on the 2017-2022 SMC Application had been issued.
- savings attained as a result of negotiated discounts on software maintenance contracts.
- MDM/R upgrade completed in 2020 and no advances on potential projects such as Net Metering or the integration of Commercial & Industrial meters in the MDM/R, resulting in lower capital improvements and associated costs.

b. The SME required significant cashflow to build up the capital assets in the initial stage of the program, and as cash basis accounting reflected total cost of capital assets in the revenue requirements, the per meter charge was higher. The change to accrual method accounting will reduce the revenue requirement as the value of the assets will be amortized over time based on their useful life and thus it will reduce the fluctuation from the capital assets impact to the revenue requirement.

VECC INTERROGATORY 6

INTERROGATORY

Reference: Exhibit B, Tab 2, Schedule 1

Questions:

a. Please provide a table showing the forecast revenues based on the assumed 0.8% growth rate in enrolled smart meters for the period 2023 to 2027.

RESPONSE

a. Please see below table for the projected 2023 to 2027 revenue based on a 0.8% growth rate in the number of smart meters enrolled in the MDM/R:

	2023	**2024**	**2025**	**2026**	**2027**	**Total**
Number of Meters (Millions)	5.290	5.332	5.375	5.418	5.461	**26.875**
SMC Fee ($ per meter per month)	0.43	0.43	0.43	0.43	0.43	**0.43**
Revenue Requirement ($ millions)	**27.1**	**27.3**	**27.5**	**27.7**	**27.9**	**137.5**

VECC INTERROGATORY 7

INTERROGATORY

Reference: Exhibit B, Tab 2, Schedule 1

Questions:

a. Under the IESO/SME proposal there will necessarily be a mismatch between the forecast revenues (increasing in each year) and the forecast costs (declining to 2026 and then increasing). Why would it not be better (more accurate) to adjust the SME charge each year to match the entity's budget?

RESPONSE

a. While there will be a mismatch the SME believes that the benefits of continuing to set the Smart Metering Charge for a five-year term provides greater benefits and efficiency than adjusting the SME charge annually.

The methodology proposed for 2023-2027 is unchanged from that agreed on by all parties in the settlement package of the original SMC application, EB-2012-0100/EB-2012-0211.

Setting the SMC for the five-year term has the following benefits:

- Rate stability,
- Lower operational costs for the SME, resulting in lower costs for customers, as only one application and hearing every five years,
- The simplicity of the methodology.

Additionally, if there is an overcollection in any year the SME is seeking to continue the previously approved process of rebating any overcollection of funds annually if the overcollection is at least $0.05/meter, which amounts to an overcollection of approximately $265,000 (5.37M meters * $0.05/meter).

VECC INTERROGATORY 8

INTERROGATORY

Reference: Exhibit B, Tab 2, Schedule 1

Questions:

a. Are there any sources of forecasts for electricity customer growth in Ontario other than the extrapolated historical trend of 0.8% that is proposed to be used?

b. Please provide the year-on-year historical growth rate for smart meters for each of the years 2008 to 2022 and separated by residential and GS<50 meters.

c. What is the basis for concluding that the past 5-year period growth in meters are reasonably representative of the next five years?

RESPONSE

a. In addition to the historical trend of 0.8% growth based on the past five OEB Yearbook of Electricity Distributors, the SME consulted with the IESO's Forecasting team that looks at forecasted housing starts in Ontario. While this forecast showed a slightly higher residential property growth rate of 0.94%, it was decided to use the historical trend of the OEB yearbooks so as not to overstate future revenue.

b. The Residential and SGS<50 meter count in the table below is taken from the OEB Yearbook of Electricity Distributors for the respective years.
The rollout of Smart meters in Ontario began in 2008 and was not complete until 2012. Also, not all LDCs were registered with the MDM/R until 2012. For these reasons, this table shows only the smart meter count for the years 2012 to 2022 as the SME does not have an accurate way to estimate the smart meter count before that time as there would have been a mix of smart meters and conventional meters throughout the province from 2008 to 2011. In addition, the Smart Metering Charge was not collected from LDCs until May 01st, 2013.

IESO Billing Year	OEB Yearbook Year	Residential	% Residential increase	SGS< 50	% SGS<50 increase	Total SDPs (D+F)	% Total increase
2012	2010	4,314,896		415,994		4,730,890	
2013	2011	4,354,381	0.92%	427,414	2.75%	4,781,795	1.08%
2014	2012	4,406,331	1.19%	430,289	0.67%	4,836,620	1.15%
2015	2013	4,460,593	1.23%	426,819	-0.81%	4,887,412	1.05%
2016	2014	4,502,650	0.94%	430,842	0.94%	4,933,492	0.94%
2017	2015	4,564,835	1.38%	434,999	0.96%	4,999,834	1.34%
2018	2016	4,612,551	1.05%	437,396	0.55%	5,049,947	1.00%
2019	2017	4,665,055	1.14%	438,956	0.36%	5,104,011	1.07%
2020	2018	4,712,742	1.02%	440,574	0.37%	5,153,316	0.97%
2021	2019	4,754,995	0.90%	442,696	0.48%	5,197,691	0.86%
2022	2020	4,801,697	0.98%	446,066	0.76%	5,247,763	0.96%

c. To estimate the future smart meter growth over the 2023-2027 budget period, the SME looked at the historical smart meter growth over the previous 5-year period as reported by the LDCs to the OEB, and published in the OEBs Yearbooks of Electricity Distributors. As shown in the Table below, the average annual percentage increase for Residential was 1.02% and average annual percentage increase for SGS<50 was 0.50% and an overall average annual increase of 0.97%. For the SME's revenue estimates for the period 2023-2027, a conservative annual growth of 0.80% was used.

IESO Billing	OEB Yearbook	Residential	% Residential increase	SGS< 50	% SGS<50 increase	Total SDPs (D+F)	% Total increase
2017	2015	4,564,835		434,999		4,999,834	
2018	2016	4,612,551	1.05%	437,396	0.55%	5,049,947	1.00%
2019	2017	4,665,055	1.14%	438,956	0.36%	5,104,011	1.07%
2020	2018	4,712,742	1.02%	440,574	0.37%	5,153,316	0.97%
2021	2019	4,754,995	0.90%	442,696	0.48%	5,197,691	0.86%
2022	2020	4,801,697	0.98%	446,066	0.76%	5,247,763	0.96%
Average Annual Increase			1.02%		0.50%		0.97%

VECC INTERROGATORY 9

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 1

"The SME currently has 20 full time equivalents ("FTEs") and is proposing to add up to 3 FTEs during the 2023 to 2027 period"

Questions:

a. Please confirm (or correct) that all SME FTEs are based on allocations of time for employees of the IESO.

b. Of the current 20 FTEs, how many are positions are exclusively employed on SME activities (i.e., 100% allocated time on SME activities)?

c. Of the 3 proposed incremental FTE's what is the forecast allocation of time for SME vs IESO activities for these FTEs in each of 2023 through 2027 (that is to say are there more than 3 FTEs being hired by the IESO but only a sub-set of their time allocated to the SME)?

RESPONSE

a. All SME FTE's are fully allocated to SME activities.

b. All 20 FTEs are exclusively employed on SME activities.

c. The 3 proposed incremental FTE's would be fully allocated to SME activities.

VECC INTERROGATORY 10

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 1

($M)	2023	2024	2025	2026	2027	Total
Compensation & Benefits	4.8	4.9	5.0	5.1	5.2	25.0

Questions:

a. Please provide a breakdown of the above table to show benefits separate from salary compensation.

b. Please also amend the table to show in each year the amount of compensation and benefits that are expected to be capitalized in each year.

RESPONSE

a. Please see below table with the breakdown between benefits and salary compensation for the projected 2023 to 2027 planning cycle

($M)	2023	2024	2025	2026	2027	Total
Compensation	3.7	3.8	3.9	4.0	4.0	19.4
Benefits	1.1	1.1	1.1	1.1	1.2	5.6
Compensation & Benefits	4.8	4.9	5.0	5.1	5.2	25.0

b. There is no capitalized compensation and benefits included in the table above, since the budget assumes that any capital expenses incurred will be though third-party vendors and not through internal labour.

VECC INTERROGATORY 11

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 1

"The SME will also continue to be supported by resources from the IESO's mainstream business as required, primarily in the areas of finance, settlements, legal, regulatory, information technology, and human resources."

Questions:

a. Does the Operating expense table (Total Operating Expenses of $137.5 million) include all costs for services from the IESO and third parties?

b. Who is the Operational Service Provider (OSP)?

RESPONSE

a. Yes, the Operating expense table (Total Operating Expenses of $137.5 million) does include all costs for services from the IESO and third parties.

b. The Operational Service Provider (OSP) is IBM.

VECC INTERROGATORY 12

INTERROGATORY

Reference: Exhibit B, Tab 3, Schedule 1

Questions:

a. What is the current balance of the BVA?

RESPONSE

a. The current balance of the BVA as of Dec 31, 2021 is $2.5 million

VECC INTERROGATORY 13

INTERROGATORY

Reference: Exhibit B, Tab 3, Schedule 1

Question:

a. Please explain the rationale for the amount of $2.5 million retained balance? What would be the benefit or harm of a different amount, for example $1 million or $3 million?

RESPONSE

a. The rationale provided in the 2018-2022 Smart Metering Charge application is shown below:

> With the scope and complexity of the SME's work continuing to expand, the SME recognizes the potential for additional unplanned work activities that may be material in scope and are beyond the control of the SME. This potential work is described below under the heading "Risks". In response to potential volatility in spending driven by changes in the volume of activities and the external environment, the SME seeks to accumulate a $2.5 million operating reserve in the BVA.[1]

The fundamentals for the $2.5M retained balance are unchanged from the time of the last application. For these reasons the SME is seeking to continue to retain $2.5M.

[1] EB-2017-0290 Exhibit B Tab 3 Schedule 1 Page 3 of 5