

OEB STAFF INTERROGATORY 17

1.4 *Is the IESO's Capital Expenditure budget for Fiscal Year 2019 appropriate?*

Staff IR #17

INTERROGATORY

Reference: Exhibit A-2-2. Pg. 17 of 27

Preamble: The table entitled Capital on page 17 of the IESO's Business 2019-2021 Plan provides a detailed account of all planned capital expenditures over the three-year planning period.

Questions:

a) Given the IESO did not spend its capital budget on either Core Operations or the MRP in 2018, how confident is the IESO that it will spend its budgeted 2019 allocation in both areas?

b) As of April 1, 2019, what percent of its 2019 budgeted capital expenditures for both core operations and MRP has the IESO spent?

RESPONSE

a) The capital envelope for 2018 was \$26.6 million and included \$4.0 million for Market Renewal related projects. Actual capital spending for 2018 was \$15.8 million. The primary variance driver was delayed starts of capital work within Market Renewal, Settlement Systems Replacement, Aspen refresh and IESO Portal, as well as a number of minor projects that were not undertaken during the year.

The 2019 capital envelope was reduced to \$17.3M for core projects excluding MRP, to bring the total requirement more in line with actual trends. Planning process refinements are expected to reduce the variances between actual and planned capital spending in 2019 and going forward.

The IESO continually manages prioritization of projects during the course of the year and Core Operations capital spending is expected to be in line with budget.

- 1 The capital underspend in MRP for 2018 was the result of delays in the release of the high-
- 2 level design documents for the Energy and Capacity work streams. In 2019, the program is
- 3 on schedule and is expected to be in line with the budgeted spend.

- 4 b) As of April 1, 2019 the IESO has spent 10.2% of its core operations capital budget.

- 5 As of April 1, 2019, MRP has spent 5% of its capital budget with only 8% of the total capital
- 6 budget for MRP falling within the first quarter of 2019.

ENERGY PROBE INTERROGATORY 9

Issue 1.4 Is the IESO's Capital Expenditure budget for Fiscal Year 2019 appropriate?

Issue 6.3 Are the IESO's forecast 2019 capital costs for the Market Renewal Program appropriate in the context of the scope and timing of the overall project?

INTERROGATORY

EP-9

References: Exhibit B Tab 2 Schedule 1 page 2 Table 4; Exhibit B Tab 3 Schedule 1, Attachment 1, Appendix 2-AA

Preamble: IESO has underspent its capital budget in 2016, 2017 and again in 2018

- a) Please provide the actual 2018 Operations and MRP Capital Project spend. Reconcile to the above references.
- b) Please provide a detailed explanation for the underspend in IESO's capital budget for 2018.
- c) Please discuss in detail why the major "jump" in MRP Capital in 2019 can be managed based on the history of underspend?
- d) Should IESO have an MRP Capital Variance Account (MRPCVA) to record and levelize MRP Capital Expenditures? Please discuss, including smoothing of fees.

RESPONSE

- a) Please see the response to AMPCO Interrogatory 18 b) & c), at Exhibit I, Tab 1.4, Schedule 12.18. The table below provides 2018 Actuals:

Category	2018 Actuals
Core Operations	14.4
MRP	1.4
Total	15.8

- b) Please see the response to OEB Staff Interrogatory 17 a), at Exhibit I, Tab 1.4, Schedule 1.17 and AMPCO Interrogatory 18 b).

1 c) Please see the response to OEB Staff Interrogatory 26 c), at Exhibit I, Tab 6.2,
2 Schedule 1.26.

3 d) IESO's Forecast Variance Defferal Account is used for MRP, as with other IESO
4 initiatives, to retain and refund program funding collected in years that the IESO
5 underspent its budget and track over-spending to be collected in a future funding
6 period.

7 The IESO utilizes its credit facilities to obtain capital for its projects, including MRP. The
8 recovery of the capital investment in MRP will occur when the energy and capacity
9 assets are in service through amortization expense, eliminating the requirement for a
10 capital variance account. The multi-year nature of the Market Renewal Program results
11 in differing proportions of capital and operating expenses in each implementation year.
12 The amortization of the capital investment will also occur over a multi-year timeframe.
13 These factors naturally result in a rate smoothing effect.

ENERGY PROBE INTERROGATORY 10

Issue 1.4 Is the IESO's Capital Expenditure budget for Fiscal Year 2019 appropriate?

Issue 6.3 Are the IESO's forecast 2019 capital costs for the Market Renewal Program appropriate in the context of the scope and timing of the overall project?

INTERROGATORY

EP-10

References.: Exhibit A, Tab 2, Schedule 2, Page 7, 2019-2021 Business Plan;

Exhibit B, Tab 3, Schedule 1, Attachment 1, Appendix 2-AA (Capital Projects)

Preamble: *"In 2019, the IESO is planning a capital envelope of \$17.3 million to facilitate the delivery of corporate priorities associated with its core business. An investment of \$38 million in capital costs is required to fund the next stage of the Market Renewal Program. Further details on the overall capital program are included in Appendix 3."*

- a) Please provide a schedule similar to Appendix 2-AAA showing the Capital Budgets for 2018 (Forecast and Actual) by category and the 2019 and 2020 Forecasts.
- b) Expand and provide a schedule for the MRP 2018 (Forecast and Actual) by category and the 2019 and 2020 Forecasts.
- c) Please provide a variance report for 2018 for Core Operations and MRP.

RESPONSE

- a) Please see table below:

Category	2018 Forecast	2018 Actuals	2019 Envelope	2020 Envelope
Core Operations	14.4	14.4	17.3	20.3
MRP	1.2	1.4	38.0	43.3
Total	15.6	15.8	55.3	63.6

- b) See table in a)

- c) Please see the response to OEB Staff Interrogatory 17 a), at Exhibit I, Tab 1.4, Schedule 1.17.

1 **SEC INTERROGATORY 10**

2 **1.1-SEC-10**

3 **INTERROGATORY**

4 [Ex.3-1, Attach 1; Appendix 2-AA] With respect to IESO's proposed capital projects:

- 5 a. Please add two columns showing: a) the 2018 plan amount as set out provided in the EB-
6 2018-0143 application and underlying business plan, and b) 2018 actuals.
7 b. For each project, please explain all variances of +/- 5% between (a) and (b).

8 **RESPONSE**

9 a. & b. Please see the response to AMPCO Interrogatory 18, at Exhibit I, Tab 1.4, Schedule 13.18.

SEC INTERROGATORY 11

1.1-SEC-11

INTERROGATORY

[Ex. A-2-2, p.2; 2-AA] For each material¹ 2019 core operating capital project/initiative, please provide a copy of the business case, project plan, or similar document.

RESPONSE

Please see the response to AMPCO Interrogatory 18, at Exhibit I, Tab 1.4, Schedule 13.18.

¹ Materiality defined as \$954K. (0.05% of IESO revenue requirement (190.8M) consistent with Board's Filing Requirement For Electricity Distribution Rate for distributors with revenue requirement less than \$200M.

AMPCO INTERROGATORY 18

1.4 Is the IESO's Capital Expenditure budget for Fiscal Year 2019 appropriate?

AMPCO-18

INTERROGATORY

Ref: Exhibit A-2-2, Page 24 Appendix #3

- a) Please recast the table to include 2017 plan and actuals and 2018 plan and actuals.
- b) Please provide a capital variance analysis for 2018 capital projects (budget versus actual).
- c) Please identify any projects from 2018 that have been cancelled, completed or deferred.

RESPONSE

a)

Summary of 2017-2021 Capital							
Change Initiatives/Projects (in millions)	2017 Actuals	2017 Plan	2018 Actuals	2018 Plan	2019 Plan	2020 Plan	2021 Plan
Operations Readiness Initiatives	1.0	2.5	1.9	1.8	0.3	-	-
Conservation Demand Management Information System (CDM IS)	0.3	1.0	(0.7)	-	-	-	-
Consolidated Corporate Website	0.5	1.5		-	-	-	-
MACD Enforcement Support Tool and related projects	-	1.0	0.4	-	-	-	-
Wallboard Refresh	-	1.0	1.7	1.5	2.0		
Unified Communications	0.6	-	0.1	3.0	-	-	-
Enterprise Cyber Security Management Refresh (Advanced Malware)	2.8	2.0	0.3	1.0	-	-	-

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Change Initiatives/Projects (in millions)	2017 Actuals	2017 Plan	2018 Actuals	2018 Plan	2019 Plan	2020 Plan	2021 Plan
Infrastructure Refresh (building services, software licenses & computer hardware)	1.5	2.5	1.8	2.5	2.6	3.0	3.0
CRS Replacement & Migration (Replacement of Settlement Systems)	-	1.0		2.0	1.5	3.0	6.0
On-Line Limit Derivation (OLLD) Roll-out To Real-time Operations	-	-	0.5	1.0	-	-	-
Financial Systems Upgrade	0.3	1.0	0.7	1.0	-	-	-
FIT, microFIT and other upgrades	1.1	1.0	1.0	1.0	0.2	-	-
Aspen Refresh	-	-	0.6	1.0	0.2	-	-
IESO Portal	-	-		1.0	-	-	-
IESO Simulator Project – Phase 2	-	-	0.3	1.1	0.3	-	-
Meter Data Management (Upgrade)	-	-		0.5	-	-	-
Wide Area View Phase 1&2	0.1	-	0.3	0.2	0.5	2.5	0.5
PMU Integration Phase 2 & 3	-	-		-	1.0	2.5	0.5
Oracle Archetype Expansion, Oracle batch and Oracle Exadata Refresh	-	1.0		-	1.4	-	-
Tier 1 Storage Refresh	-	-		-	0.1	1.0	
SCADA/EMS Replacement	-	-		-	-	3.5	6.0
Control Room Refresh	-	-		1.0	1.5	-	-

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Change Initiatives/Projects (in millions)	2017 Actuals	2017 Plan	2018 Actuals	2018 Plan	2019 Plan	2020 Plan	2021 Plan
IT Service Management	-	-		-	0.2	0.5	0.3
Dispatch Data Management System (DDMS) Refresh			0.4		0.7	1.5	1.0
Access Switches					-	1.0	-
Market Information System Refresh	2.7	2.0	1.3	-	-	-	-
Identity Access Management	2.1	2.1	0.3	-	-	-	-
Capital (\$1M & above)	13.2	19.6	10.9	19.6	12.5	18.5	17.3
Other Capital Initiatives/Projects	3.1	5.4	3.5	3.0	4.8	1.8	0.6
Core Operations Capital	16.3	25.0	14.4	22.6	17.3	20.3	17.9
Market Renewal	0.2	-	1.4	4.0	38.0	43.3	40.8
Total Capital including Market Renewal	16.5	25.0	15.8	26.6	55.3	63.6	58.7

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1 b) & c)

Summary of 2017-2021 Capital					
Change Initiatives/Projects (in millions)	2018 Actuals	2018 Plan	Variance	Variance Notes	2018 Cancelled/Completed /Deferred
Operations Readiness Initiatives	1.9	1.8	0.1	The Operations Readiness Initiative (ORI) is made up of a number of interrelated projects. Initial design work for a number of the projects took longer than anticipated due to overall complexity and need for coordination with neighbouring jurisdictions and market participants.	Three projects out of seven projects have been completed
Conservation Demand Management Information System (CDM IS)	(0.7)	-	(0.7)	The CDM-IS Project is underway and is being funded through the market	
MACD Enforcement Support Tool and related projects	0.4	-	0.4	Work on the tools has been delayed to prioritize updating the associated processes. This work continues in 2019 however a forecast completion for the project is not yet established.	

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Wallboard Refresh	1.7	1.5	0.2	Gathering of requirements and the RFP process took longer than anticipated. The project is 'In-flight' and expected to be completed in Q4 2019	
Unified Communications	0.1	3.0	(2.9)	The Unified Communication RFP was cancelled due to a change in strategic direction. The	Cancelled

				cost of the video conferencing solution in the RFP did not justify the benefits for the IESO.	
Enterprise Cyber Security Management Refresh (Advanced Malware)	0.3	1.0	(0.7)	The actual hours spend by the IESO staff were materially lower than originally planned	Completed
Infrastructure Refresh (building services, software licenses & computer hardware)	1.8	2.5	(0.7)	This budget supports miscellaneous hardware, software and building service upgrades. The variance is due to delays in some upgrade work as well as upgrades being less extensive than planned.	
CRS Replacement & Migration (Replacement of Settlement Systems)		2.0	(2.0)	Work on the project was delayed and initial requirements definition and RFP development for the replacement systems is an operating expense. Work is continuing on RFPs, the project is forecast to be completed in 2023	
On-Line Limit Derivation (OLLD) Roll-out To Real-time Operations	0.5	1.0	(0.5)	This project is part of the Operations Readiness Initiative. Changes in approach to how we derive limits in real-time has resulted in the postponement and re-scoping of this project to upgrade the hardware and enhance the current power system analysis tool. Refer to the description under the Operations Readiness Initiative.	
Financial Systems Upgrade	0.7	1.0	(0.3)		Completed

FIT, microFIT and other upgrades	1.0	1.0	(0.0)		
Aspen Refresh	0.6	1.0	(0.4)		Completed
IESO Portal		1.0	(1.0)	Due to other high priority projects, this project was deferred to 2019 Portfolio. Work is currently underway in 2019	
IESO Simulator Project – Phase 2	0.3	1.1	(0.8)	Work on the project started later than anticipated and initial work to define requirements was charged to the operating expense	
Meter Data Management (Upgrade)		0.5	(0.5)	Work is currently underway in 2019	
Wide Area View Phase 1&2	0.3	0.2	0.1	Work is currently underway in 2019	
Control Room Refresh		1.0	(1.0)	Work is currently underway in 2019	
IT Service Management		-	0.0	Due to other high priority projects, this project was deferred to 2019 Portfolio	
Dispatch Data Management System (DDMS) Refresh	0.4		0.4	To mitigate the technology and security risk of operating on the existing infrastructure, an executive decision was made to expedite delivery of this project.	
Access Switches			0.0	Due to other high priority projects, this project was deferred to 2020 Portfolio	
Market Information System Refresh	1.3	-	1.3		Completed
Identity Access Management	0.3	-	0.3	Due to other high priority projects, this project was deferred to 2019 Portfolio	
Capital (\$1M & above)	10.9	19.6	(8.7)		
Other Capital Initiatives/Projects	3.5	3.0	0.5		

Core Operations Capital	14.4	22.6	(8.2)		
Market Renewal	1.4	4.0	(2.6)		
Total Capital including Market Renewal	15.8	26.6	(10.8)		

