

January 2, 2019

VIA Email, Courier and RESS



Independent Electricity System Operator
1600-120 Adelaide Street West
Toronto, ON M5H 1T1
t 416.967.7474
www.ieso.ca

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
27th Floor 2300 Yonge Street
Toronto, ON M4P 1E4

Dear Ms. Walli:

**Re: Independent Electricity System Operator - 2018 Revenue Requirement Submission
Ontario Energy Board File No.: EB-2018-0143**

In accordance with the approved Settlement Proposal in connection with the Independent Electricity System Operator's (IESO) 2018 Revenue Requirement Submission, the IESO agreed to file a baseline Market Renewal Program (MRP) schedule and budget with the OEB no later than January 2, 2019 and to copy all Parties in the EB-2018-0143 proceeding on this filing.

The IESO is hereby filing the baseline MRP schedules and budget in accordance with the Settlement on Issue 6.1, item b in order to fulfill the outstanding condition on which Issue 6.1 was settled. The baseline MRP schedules and budget are provided as Appendix A to this letter.

If you have any questions, please contact me at 905-855-6340 or by email at devon.huber@ieso.ca.

Yours truly,

Devon Huber
Senior Manager, Regulatory Affairs

cc: Mr. Fred Cass, Aird & Berlis (email)
Intervenors to EB-2018-0143 (email)
Case Manager, Ontario Energy Board (email)

EB-2018-0143
ONTARIO ENERGY BOARD

INDEPENDENT ELECTRICITY SYSTEM OPERATOR
2019 MARKET RENEWAL PROGRAM BASELINE SCHEDULES AND BUDGET

Background

The schedules and budget of the Market Renewal Program (MRP) are divided into two work streams – Energy and Capacity. The MRP is structured as multiple initiatives that will continue to evolve as the work streams progress from high level design to a detailed level design. In 2018, the Energy work stream focused on the high level design of the Single Schedule Market (SSM), Day Ahead Market (DAM), and Enhanced Real Time Unit Commitment (ERUC) initiatives, while the Capacity work stream focused on the Incremental Capacity Auction (ICA) initiative.

The IESO's high level design activities culminated with the publication of three high level design documents – one for each of the Energy work stream projects, SSM, DAM, and ERUC. The IESO also focused on the Capacity work stream's high level design activities in 2018, with a completed high level design document for the ICA expected in 2019.

In parallel with high level design activities, the IESO focused on planning activities for the detailed design phase. In 2019, the structure of the Energy work stream is evolving into the detailed design phase. This phase will be structured around the following design elements: Market Participation, Price Formation, Market Power Mitigation, Scheduling and Dispatch, and Market Settlements. As well, the IESO will develop plans for Market Rules, Procurement and Process design. The Capacity work stream's detailed design phase is scheduled to begin in the 2nd quarter of 2019.

Beginning in January 2019, the IESO will monitor and track project performance for both the Capacity and Energy work streams against the established baseline schedules and budget described below. The schedules and budget for the Energy and Capacity work streams will be tracked and will roll up to form the overall MRP schedule and budget.

2019 MRP Baseline Schedules

The IESO has established baseline schedules for the MRP in 2019. The schedule for the Energy work stream in 2019 is provided as **Attachment 1** and the schedule for the Capacity work stream in 2019 is provided as **Attachment 2**. These schedules provide a summary of the major pieces of work that will be undertaken during the 2019 timeframe. Underpinning these schedules are detailed activities carried out by individuals or groups on a monthly, weekly, or daily basis as applicable. These schedules form a time-based plan of what work will be

Appendix A

undertaken and when it will be performed. For 2019, the schedules show that design related activities will be ongoing throughout the year. The specific details for the subsequent implementation phase are not shown as they will not yet be known until the design is completed.

2019 MRP Budget

The budget associated with the 2019 MRP schedules is outlined below:

| | | 2019 |
|-----------------|------------------|-------------|
| Work Stream | Expense Category | Budget |
| Energy | Operating | 2.4 |
| Energy | Capital | 26.7 |
| Energy | Total | 29.1 |
| Capacity | Operating | 4.7 |
| Capacity | Capital | 11.3 |
| Capacity | Total | 16.0 |
| General | Operating | 4.6 |
| General | Capital | - |
| General | Total | 4.6 |
| MRP | Operating | 11.7 |
| MRP | Capital | 38.0 |
| MRP | Total | 49.7 |

The budget is broken down by work stream – Energy and Capacity, along with a category for general, and then further separated into operating and capital expense categories. The general grouping only involves operating expenses, and includes elements associated with overall program and project management (such as cost control, scheduling and risk management), stakeholder engagement and communication activities.

Schedule Performance Index & Cost Performance Index (SPI & CPI)

As described in the IESO's MRP Cost Report within its 2018 Revenue Requirement Submission (EB-2018-0143), the baseline schedules and budget form the foundation that will enable the IESO to begin tracking performance measures such as SPI and CPI beginning January 1, 2019 for both MRP work streams. The SPI and CPI values for the Energy and Capacity work streams as well as a total value for the MRP work performed in 2019 will be reported through the IESO's 2020 Revenue Requirement Submission. The SPI and CPI project performance measures are described below:

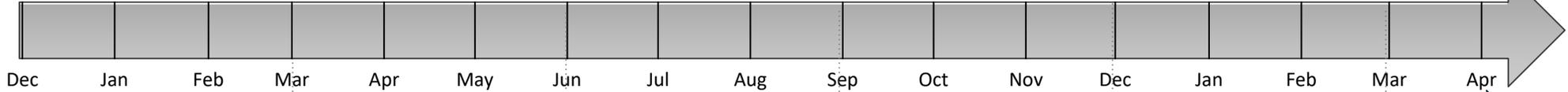
- 1) SPI: a measure of how efficiently the project is using its time, expressed as a ratio of earned value to planned value ($SPI = \text{Earned Value} / \text{Planned Value}$). SPI can be used to forecast schedule performance for the remainder of the task. The measure will illustrate how effective the IESO is performing according to its planned schedule.

Appendix A

- 2) CPI: a measure of the cost efficiency of budgeted resources, expressed as a ratio of earned value to actual cost ($CPI = \text{Earned Value} / \text{Actual Cost}$). CPI can be used to forecast cost performance for the remainder of the task.

The IESO will be using Earned Value Management as a tool to monitor and track performance. Earned Value Management uses calculations at the detailed activity and task levels of a schedule, and then aggregates that data and rolls it up into metrics for the project. For the MRP, the IESO will be calculating earned value at the work stream level. SPI and CPI will be calculated on a monthly basis for each of the Energy work stream and Capacity work stream to arrive at an annual SPI and CPI for each individual work stream and the overall MRP at the end of 2019.

2018 2019 2020



External Stakeholdering

HIGH LEVEL DESIGN



Detailed Design

Functional Design

Design Forum 1- Market Participation

Design Forum 2- Price Formation

Design Forum 3- Market Power Mitigation

Design Forum 4 – Scheduling and Dispatch

Design Forum 5 – Market Settlements

Design Documents Drafting and Review

Process Design

Overall Integration and Architecture

Analysis & Design - Processes

Procurement

DSO Engine Procurement Design

DSO Engine Procurement Execution

Market Rules

Market Rules Scoping & Inventory Development

Market Rules Drafting

2018 2019 2020

