

AMPCO INTERROGATORY 28

5.0 Commitments from Previous OEB Decisions

Issue 5.3

Are the IESO's costs and savings to implement the Ontario Government Greenhouse Gas Cap-and-Trade Initiative and any new or changing requirements arising from Bill 135 appropriate?

INTERROGATORY

Reference: Ex C-3-1 Page 1

Preamble: The evidence states "The internal 2016 costs associated with the Ontario government's greenhouse gas cap-and-trade initiative is approximately \$500,000. These incremental costs were for external counsel and consultants that were retained to assist the IESO to review and negotiate amendments to supply contracts where appropriate.

- a) Please discuss the source of funding for the above costs.
- b) In 2016, the IESO did not estimate any specific costs as a result of the cap-and-trade initiative. Given costs occurred in 2016, on what basis does the IESO not foresee any costs in 2017?

RESPONSE

- a) These costs are funded through the IESO's operating costs, which are a part of its annual revenue requirement.
- b) Costs in 2016 were primarily related to contract negotiations that began in 2016 and have continued to evolve such that the IESO will be incurring cap-and-trade associated costs in 2017. The IESO estimates these costs to be approximately \$350,000.

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INTERROGATORY

Reference: Exhibit A-2-3, Page 1

Preamble: The March 21, 2017 letter from the Ministry of Energy states "In my recent letter of February 13, 2017, I requested the IESO to be prepared in supporting the establishment of a new entity, the Ontario Climate Change Solutions Deployment Corporation of the Ministry of the Environment and Climate Change (MOECC). I expect the IESO will seek to prioritize its core business plan activities while ensuring this joint initiative with the MOECC is well supported to realize the shared objective of ensuring low-carbon energy choices.

a) Please provide the February 13, 2017 letter referenced above.

b) Please discuss how the IESO plans to support the joint initiative with MOECC.

c) Please provide the financial and human implications to support the joint initiative.

RESPONSE

a) Please refer to Exhibit I, Tab 1.0, Schedule 9.22, Attachment 1.

b) Please refer to page 10 of Exhibit B-1-1.

c) Please refer to page 10 of Exhibit B-1-1.

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BOMA INTERROGATORY 10

Issue 5.3

INTERROGATORY

Reference: Issue 5.3; Assistance to GHG Policy Implementation

(a) The Ontario Climate Change Solution Deployment Corporation (the "OCCSDC") has been established with a Board of Directors. What steps is the IESO taking, and what step does it plan to take in 2017, and 2018, to collaborate and support the Corporation, in its mandate to ensure low carbon energy choices?

(b) Preamble - The Brattle Report states (p23) that:

The Working Group and Stakeholders have voiced consistent strong concerns about governance and interactions with environmental policy objectives, neither of which will be directly addressed by Market Renewal. Though Market Renewal would prepare the Ontario market to more efficiently accommodate and operate under changing policy objectives, Market Renewal does not currently include all elements necessary to achieve the new policy objectives.

(i) Does the IESO agree with Brattle's assessment? If not, please explain in which respects it disagrees.

(ii) Please provide an assessment of how each of IESO's strategic objectives, and how its proposed Market Renewal Project will contribute to the achievement of the government's low carbon energy initiative.

(c) More particularly, please explain for each of the principal work stream how the Market Renewal Project will include features that support and reinforce the government's carbon policy, as articulated in the Government's Greenhouse Gas Policy, and the recently enacted GHG legislation and regulation.

RESPONSE

(a) Please refer to page 10 of Exhibit B-1-1.

(b)

(i) The IESO agrees with Brattle's statement about stakeholder concerns and Market Renewal not including all elements to achieve new policy objectives. Market Renewal is a

program of six identified projects that will help the IESO to prepare for the future and to lay a foundation to meet policy objectives in a transparent and effective manner going forward. Furthermore, the IESO has enabled the Market Renewal Working Group (MRWG) to deal with these broader strategic issues, including governance and policy objectives. The MRWG has agreed to establish a sub-committee to examine issues related to non-emitting resources within Market Renewal. Depending on the work and outcome of this sub-committee, the IESO will assess if, what and when any additional changes, projects or mechanisms are needed to meet current and/or future policy objectives.

(ii) With respect to how the IESO's strategic objectives meet the government's low carbon energy initiative, please see the following table:

Strategic Theme	Strategic Objective	How it Will Support the Government's Low Carbon Energy Initiative
Deliver superior reliability performance in a changing environment	Plan and manage the power system so Ontarians have power when and where they need it.	At the core of the IESO's mandate is a requirement to plan, operate and maintain the reliability of Ontario's electricity system. The IESO does this by responding and adapting to changing system conditions, including increases in renewable and distributed energy resources, smart grids, electric vehicles and other new technologies, to maintain reliability. The Market Renewal Project is putting in place the structure needed to ensure that the tools needed to adapt to these conditions are in place and that reliability can continue to be provided on a long-term basis. In addition, the IESO is evolving the regional planning process to better integrate conservation, distributed generation, storage and demand response, and to explore opportunities for local acquisition of these resources.
	Enhance reliability and efficiency through coordination of IESO- and LDC-controlled resources.	
	Promote robust cybersecurity practices across the sector.	
Drive to a more efficient and sustainable	Evolve the IESO markets to increase market efficiency and value for consumers.	The IESO strives to design, implement and administer a portfolio of competitive resource acquisition mechanisms for a

Strategic Theme	Strategic Objective	How it Will Support the Government's Low Carbon Energy Initiative
marketplace	Foster an open and competitive electricity marketplace with broad participation.	variety of services to address needs identified through bulk and regional planning. These mechanisms are designed to allow for broad participation while maintaining reliability needs and public policy goals such as sustainability and lowering carbon emissions. The IESO will also continue to promote competitive solutions for energy efficiency to inform the future of conservation.
Be recognized as a trusted advisor, informed by engagement.	Enhance public confidence in the IESO and the sector to facilitate informed customer choice.	A component of the IESO's strategic goal of being recognized as a trusted advisor is our effective working relationship with government to support policy development. We achieve this by providing unbiased expertise and advice, and effectively implementing initiatives that achieve government policy objectives.
	Work effectively with government to support policy development and IESO's excellence in implementation.	
	Seek out and respond to input from communities, customers and stakeholders to inform IESO decisions.	
Invest in our people and processes to meet the needs of the sector.	Strengthen the development and engagement of our employees	Developing a focussed and flexible organization that facilitates high performance and builds the appetite and capacity for change will enable the IESO's role in supporting policy development and implementing government policies.
	Attract and retain the best talent.	
	Be a focused and flexible organization positioned to support the ongoing transformation of our industry.	

1 With respect to how Market Renewal contributes to the achievement of the
2 Government's climate change policies, please refer to the response to part (c) below.

3 (c) Each workstream of Market Renewal has elements that are supportive and aligned with the
4 government's carbon policy:

- 5 • Energy workstream: The government's cap and trade mechanism is a market-based
6 approach to transparently price the cost of emitting carbon dioxide. For greenhouse
7 gas (GHG) emitting electricity resources, these costs are included within generators'
8 offer prices in the energy market. This means that the cost of GHG emissions should
9 be reflected in the dispatch of resources. The more efficient energy market
10 envisioned in Market Renewal will continue to reflect the carbon costs in the
11 dispatch. Improved generation commitment and dispatch in real time will also
12 improve and better optimize the dispatch of GHG emitting resources, lower the
13 amount of curtailment and spilling of low-cost non-emitting resources. Together,
14 this will help lower the carbon emissions of resources that would otherwise need to
15 operate under the current less-efficient system. In addition, the transition to a single-
16 schedule market with locational marginal pricing for suppliers will more readily
17 integrate potential future market-based clean energy policies.
- 18 • Operability workstream: Increased system flexibility and improved utilization of
19 interties will allow the system to better manage increasing amounts of variable
20 resources on the system. The effect is two-fold: targeted measures to operate existing
21 resources more flexibly may reduce the need to dispatch additional resources to
22 balance the system with variable energy resources, directly lowering carbon
23 emissions. In addition, the operability initiatives may attract more flexible resources
24 and new technology types, allowing for increasing penetration of intermittent, low-
25 carbon resources at lower cost.
- 26 • Capacity workstream: The capacity market is resource-neutral and its role is to
27 attract or retain capacity resources representing the least-cost approach to meeting
28 resource adequacy requirements. Alongside with cap and trade, and other potential
29 future well-designed carbon or clean energy policy mechanisms, together the
30 mechanisms can identify the least-cost means of meeting both carbon and reliability
31 objectives.

32 A key feature of Market Renewal is to be resource neutral and create transparent market-
33 based mechanisms to meet system needs. This will create incentives for the innovative
34 business models and technologies needed to provide essential grid services that have
35 previously been provided by carbon-emitting generators.

BOMA INTERROGATORY 11

Issue 5.3

INTERROGATORY

Reference: Ibid

a) Where will the additional 25 FTEs for 2017 be deployed throughout the organization?

b) How many in market renewal?

c) How many in CDM?

RESPONSE

a) The additional 25 FTEs for 2017 are dedicated to the Market Renewal Program.

b) Please refer to part (a) above.

c) Please refer to part (a) above.

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BOMA INTERROGATORY 12

Issue 5.3

INTERROGATORY

Reference: Ibid, p13

(a) Please describe the current allocation of FTEs and compensation for those FTEs, and budgets, both existing FTEs, and (separately) new FTEs projected in this submission (25 in 2017, 75 in 2018) across the various functional parts of the organization, as outlined in the Business Plan's breakdown of the IESO functions, including:

- (i) planning;
- (ii) market renewal;
- (iii) generation procurement;
- (iv) CDM;
- (v) Cap and Trade;
- (vi) Market System Operations;
- (vii) Finance;
- (viii) Internal Audit, IT;
- (ix) Enforcement and Support;
- (x) Regulatory and Legal;
- (xi) Office of the President;
- (xii) First Nations.

(b) Please provide the allocation of consulting fees 17.8 (2016) and 17.7 (2018) across the organization's functions, listed in the previous question.

(c) Please provide the allocation of any other OM&A categories in the same manner.

RESPONSE

Filed: September 7, 2017

EB-2017-0150

Exhibit I

Tab 5.3

Schedule 2.12 BOMA 12

Page 2 of 3

- 1 a) Please see the table below, which shows the allocation of the 2017 Business Plan budget
2 compensation & FTEs by business area.
- 3 b) The allocation of the 2017 and 2018 Professional and Consulting expenditure budget is
4 provided in the table below.
- 5 c) The table below shows the 2017 and 2018 budget allocation of the operating & administration
6 expense by business area.

IESO 2017- 2019 Business Plan Budget by Division											
2017 Budget	CEO	Market and System Operations	Market and Resource Development	Conservation and Corporate Relations	Information and Technology Services	Planning, Legal, Indigenous Relations & Regulatory Affairs	Corporate Services	MACD	Corporate Adjustment	Market Renewal	IESO
Compensation & Benefits	1,759	31,267	13,267	13,566	20,315	11,006	12,613	3,076	2,285	8,263	117,417
Professional & Consulting Fees	887	956	6,305	2,918	715	3,394	1,996	583	0	3,330	21,083
Operating & Administration	4,612	793	450	1,107	24,753	1,787	1,790	175	1	408	35,876
Amortization	0	0	0	0	0	0	0	0	18,350	0	18,350
Interest	0	0	0	0	0	0	0	0	(1,362)	0	(1,362)
Total Budget	7,258	33,016	20,022	17,591	45,783	16,187	16,399	3,835	19,274	12,000	191,364
Total Budget FTEs	8	194	97	90	146	61	80	15	(4)	25	712
2018 Budget	CEO	Market and System Operations	Market and Resource Development	Conservation and Corporate Relations	Information and Technology Services	Planning, Legal, Indigenous Relations & Regulatory Affairs	Corporate Services	MACD	Corporate Adjustment	Market Renewal	IESO
Compensation & Benefits	1,785	31,059	13,837	14,537	20,539	11,139	12,740	3,159	1,945	8,685	119,425
Professional & Consulting Fees	887	956	6,288	2,918	715	3,394	1,996	583	0	4,131	21,867
Operating & Administration	4,612	793	450	1,107	24,877	1,787	2,038	175	(302)	1,184	36,721
Amortization	0	0	0	0	0	0	0	0	19,590	0	19,590
Interest	0	0	0	0	0	0	0	0	(1,500)	0	(1,500)
Total Budget	7,283	32,807	20,575	18,562	46,131	16,320	16,774	3,917	19,733	14,000	196,103
Total Budget FTEs	8	192	97	90	146	61	80	15	(4)	75	760

BOMA INTERROGATORY 13

Issue 5.3

INTERROGATORY

Reference: Ibid, p16

Do you expect the new responsibilities assigned to the IESO for Procurement of transmission will become operational in 2017 or 2018, given that last July, the Ontario government designated a transmission company to construct the line to Pickle Lake in Northwestern Ontario, in what had been, to that point, a competition between two transmitters to build the line. The designated transmitter is set to apply to the OEB for a Leave to Construct later this year. Did the IESO play any role in the designation, or provide some guidance after the designation was made?

RESPONSE

The authority for the IESO to undertake competitive transmission procurement for expansion or reinforcement of transmission systems was established in Bill 135, the *Energy Statute Law Amendment Act, 2016*. The IESO is in the process of developing a process for procurement of transmission facilities.

The transmitter designation for the Line to Pickle Lake and Remotes Connection Project was executed by a Directive to the Ontario Energy Board from the Minister of Energy instructing the OEB to amend the conditions of Wataynikaneyap Power LP's ("Watay") license to include a requirement to develop and seek approvals for the Line to Pickle Lake. This Directive was issued with approval by Order in Council No. 1158/2016 dated July 20, 2016 and under the authority of the Minister of Energy set out section 28.6.1 of the *Ontario Energy Board Act, 1998*.

The IESO did not play a role in the transmitter designation for the Line to Pickle Lake and Remotes Connection Project. Following the amendments to Watay's license, and at the request of the OEB, the IESO submitted its recommended scope for the Line to Pickle Lake and its supported scope for the Remotes Connection Project to the OEB. The IESO's scope report has been included in conditions in Watay's license.

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1 BOMA INTERROGATORY 33

2 Issue 5.3

3 INTERROGATORY

4 Reference: Issue 5.3; Ibid, p10

5 a) Has the IESO completed an agreement with the OCCSDC pursuant to which it will be
6 reimbursed for the tasks that it will do for it, both listed on p10, or otherwise that may arise?
7 If there is an agreement, please provide it.

8 b) How many FTEs in the IESO are dedicated to that work, in whole or in part, in 2017 and
9 2018?

10 RESPONSE

11 a) There is a signed agreement between the IESO and the OCCSDC. Please refer to the
12 response to Exhibit I, Tab 1.4, Schedule 5.11 Attachment 1.

13 b) Please refer to the response to OEB Staff 3 at Exhibit I, Tab 1.4, Schedule 1.03.

BOMA INTERROGATORY 34

Issue 5.3

INTERROGATORY

Reference: Ibid

- a) What staff (dollar value) will be redeployed, and where, as a result of the termination of Market Renewal Project?
- b) Other than to reduce proposed 2018 usage fees, does the IESO have other reasons to retain excess revenue in 2017, assuming there are any? Why should the Market Renewal Project be treated differently from any other IESO program, with respect to the manner in which it is funded as part of the IESO's revenue requirement?
- c) When will the IESO be able to estimate with accuracy any 2017 underspend or overrecovery? What is the forecast as of July 31, 2017? How fair is that forecast (\pm %)?

RESPONSE

- a) As the Market Renewal program progresses, resources will be added and returned to core operations as needs arise. Essentially all resources supporting MRP are doing so on a rotational basis and would return to their home business units. There is only one dedicated MRP resource (Director, Market Renewal Operations - Program Implementation) that will need to be redeployed within core operations. Salary information of one individual will not be provided as the IESO has an obligation to treat private employee information confidentially.
- b) Please refer to the response to OEB Staff Interrogatory 10 at Exhibit I, Tab 4.3, Schedule 1.10.
- c) The IESO is forecasting to be on budget in 2017 presuming the OEB approves the proposed 2017 usage fees effective January 1, 2017. Please refer to the response to OEB Staff Interrogatory 8 at Exhibit I, Tab 4.1, Schedule 1.08. For actual spending to date please refer to the response to PWU Interrogatory 2 part (c) at Exhibit I, Tab 1.6, Schedule 6.02.

1 ENERGY PROBE INTERROGATORY 22

2 Issue 6.0

3 INTERROGATORY

4 References: Exhibit A-2-2, page 7

5 Preamble: IESO states that the province's cap-and-trade policies is requiring IESO "to assess the
6 impact on and negotiate amendments to a number of its major procurement contracts," while at
7 the same time "requiring new business processes to be developed and put in place to address
8 increased monitoring of emissions, manage transactions involving carbon costs, and develop
9 and manage, on an ongoing basis, new and complex settlement agreements including rebate
10 processes for various customer classes."

11 a) Can IESO breakdown or estimate the cost to electricity customers of these new amendments
12 to its major procurement contracts as a result of cap and trade?

13 b) Can IESO detail the various costs to the agency associated with cap and trade as detailed in
14 the preamble.

15 RESPONSE

16 a) The primary cost to electricity customers as a result of cap and trade policy is a function of
17 the amount of electricity produced by emitting generators and the cost of the corresponding
18 emissions allowances. This cost flows through to electricity customers based on how
19 emitting generators reflect this cost in their offers into the electricity market and not through
20 amendments to procurement contracts. Amendments to reflect the new cap and trade
21 regime in the workings of the procurement contracts of emitting generators are being
22 negotiated as necessary in accordance with the IESO's contractual obligations.

23 b) Since the evidence was filed, the IESO's scope of cap and trade related work has changed
24 and at present only costs associated with negotiating amendments to generation contracts
25 are anticipated for 2017.

PWU INTERROGATORY 5

5.0 Commitments from Previous OEB Decisions

Issue 5.3

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5.3-PWU-5

INTERROGATORY

Reference: EB-2017-0150, Exhibit A-2-2, Page 6 of 31 (Business Plan)

The publication of the IESO's 2016 Ontario Planning Outlook also marks a significant role for the IESO going forward. This technical report is the first step in a process that will move through a Ministry-led consultation phase, and development by the Ministry of a new Long-Term Energy Plan, with IESO support anticipated for both phases. Following plan approval, it is anticipated that the IESO may be required to develop an implementation plan, and upon its approval, proceed with implementation. The draw on IESO resources is expected to be significant throughout this process, particularly given the focus on increased electrification in meeting climate change objectives.

- a) Please provide examples of activities and describe the corresponding resource requirements (human and financial) arising from the implementation of the LTEP.
- b) Please explain how LTEP implementation costs are recovered and how they relate to IESO's revenue requirement.

RESPONSE

a) Examples of IESO activities likely to arise from the implementation of the LTEP include:

- The IESO expects to deliver an Implementation Plan (IP) for key initiatives identified in the LTEP and / or any implementation directive issued to the IESO. The IP is expected to include details outlining the scope of work for each of the key initiatives and the related work plans and deliverables with associated timing in 2018 and future years;
- Engaging with stakeholders and communities on LTEP initiatives which require further public input;
- Conducting technical and economic analysis to support implementation initiatives;
- Formulating and documenting recommendations; and
- Creating new processes/programs, and/or enhancing existing processes/programs.

1 The IESO has been supporting the Government of Ontario's development of the 2017 LTEP
2 by updating analysis contained in the Ontario Planning Outlook and conducting other
3 analyses in response to input received from the LTEP engagement efforts of 2016. These
4 activities continue today, as the government works to finalize the LTEP and related
5 implementation directive.

6 At the time of writing this response, the Ontario government has not published the LTEP
7 and the Minister of Energy has not issued an LTEP implementation directive to the
8 IESO. The final resource requirements for the implementation of LTEP will depend on what
9 is contained within the final LTEP, the implementation directive and the results of IP
10 development. These resource requirements will be reflected in the IESO's 2018-2020
11 business plan.

- 12 b) LTEP implementation costs will be part of IESO's core operating costs and will be recovered
13 through the IESO's usage fees.

1 VECC INTERROGATORY 5

2 EXHIBIT A

3 Issue 5.3

4 INTERROGATORY

5 Exhibit A-2-2, Page 7 of 31

6 a) Please explain how the Climate Change Action Plan (CCAP) is “*already impacting the IESO’s*
7 *current scope of work.*” What are the estimated costs of these impacts?

8 RESPONSE

9 a) At the time of its business plan development, the IESO anticipated that its scope of work
10 would be affected by potential areas of overlap with other parties with respect to
11 implementing proposed CCAP initiatives. Collaborative efforts undertaken since then
12 between the IESO, Ministry of Environment and Climate Change (MOECC) and Ministry of
13 Energy demonstrate an efficient and customer-focused approach in enhancing and serving
14 the goals of both the CFF and CCAP.

15 All costs associated with any activities to support CCAP programs are being passed through
16 to the Ministry of Environment and Climate Change (MOECC), as per the service level
17 agreement signed between the IESO and MOECC in April 2017.

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