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November 10, 2017

BY COURIER (2 COPIES) AND RESS

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, Suite 2700, P.O. Box 2319
Toronto, Ontario M4P 1E4

Dear Ms. Walli:

Re: EB-2017-0150 – Independent Electricity System Operator (IESO) Revenue Requirement

I am writing to provide the submissions of Environmental Defence regarding the IESO's proposed regulatory scorecard (issue 5.1). As detailed below, Environmental Defence requests that the Board direct the IESO to provide improved reporting on its work to drive greater energy conservation, reduce carbon emissions, and optimize Ontario's capacity to import inexpensive and clean power as part of its market renewal process.

Conservation Metrics

The IESO is responsible for overseeing the implementation of Ontario's Conservation First Framework, which aims to achieve at least 8.7 TWhs of electricity savings by 2020 and 30 TWhs by 2032.[1] The framework is based on the government's Conservation First policy, which requires conservation to be "the first resource considered, wherever cost-effective, in planning to meet the province's energy needs."[2]

As its first conservation metric in its proposed Regulatory Scorecard, the IESO has proposed to report its annual program cost ($/kWh), with a target of keeping that cost within 4 cents per kWh. However, this target is inconsistent with the Conservation First Policy and government directives to the IESO:

- **Inconsistent with Government-Mandated TRC Test:** In its Conservation First Framework directive to the IESO, the Government to Ontario requires that the cost-effectiveness of conservation programs be determined according to the Total Resource Cost Test (the "TRC" test).[3] This is an industry standard used in both

[1] IESO 2017-2019 Business Plan, p. 15.
[2] Government of Ontario, *Long-Term Energy Plan* 2017, p. 152.
[3] Directive to the IESO Re: 2015-20120 Conservation First Framework, March 31, 2014, s. 3.5 (v) ("The OPA shall ensure there is a positive benefit-cost analysis of each CDM Plan and each Province-Wide CDM

the gas and electricity sectors and is intended to capture all costs and benefits from a societal perspective.[4] In the enclosed interrogatory response, the IESO acknowledges that its proposed $/kWh metric is *not* government approved. The IESO's performance should be assessed in accordance with the government-mandated TRC test, not program costs per kWh.

- **Inconsistent with Conservation First Policy:** A target of 4 cents per kWh is inconsistent with the Conservation First Policy because it would exclude conservation programs that are cost effective according to the government-mandated TRC test. The IESO's proposed target could act as a "cap" on conservation programs that is contrary to the government's requirement that conservation be pursued wherever cost-effective.

- **Excludes key Costs and Benefits:** Unlike the TRC test, a measure of program costs per kWh does not account for the monetary benefits to consumers or the investments required by consumers to participate in conservation programs. By excluding key benefits and costs, the IESO's proposed metric is skewed and incomplete.

- **Arbitrary and Unscientific:** In the attached interrogatory response, the IESO was unable to point to any study or report to justify the target of 4 cents per kWh. It also acknowledged that this target is not government approved. It justified the figure simply by noting that "it is the performance level that has been consistently achieved by the conservation portfolio over a number of years."[5] In other words, the target is not a hurdle rate or other figure grounded in actual economic analysis. It is simply a performance level that the IESO has been achieving in recent years. The board should not accept this kind of arbitrary and ungrounded target.

In lieu of the $/kWh metric proposed by the IESO, Environmental Defence proposes that the IESO be directed to report the total net benefits ($) to consumers of the conservation programs it oversees as calculated by the government-mandated TRC test. This figure would represent the savings to consumers from electricity conservation programs after accounting for both utility and consumer costs. There are many benefits to this metric:

- **Best Performance Measure:** The IESO can achieve higher net benefits by (a) improving program design, (b) improving marketing, (c) improving cost control, and (d) seeking approval for larger conservation budgets where cost-effective

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Program and Local Distributor CDM Program utilizing the OPA's Total Resource Cost Test and the Program Administrator Cost Test found in the OPA's Cost-Effectiveness Guide").

[4] IESO, *Conservation and Demand Management Energy Efficiency Cost Effectiveness Guide,* March 2015, p. 9 (Exhibit I, Tab 5.1, Schedule 4.18 ED 18, Attachment 1, http://www.ieso.ca/-/media/files/ieso/document-library/conservation/ldc-toolkit/cdm-ee-cost-effectiveness-test-guide-v2-20150326.pdf?la=en); Ontario Energy Board, *Demand Side Management Guidelines for Natural Gas Utilities,* June 30, 2011, p. 16 (https://www.oeb.ca/oeb/_Documents/Regulatory/DSM_Guidelines_for_Natural_Gas_Utilities.pdf)

[5] Exhibit I, Tab 5.1, Schedule 4.18 ED 18

conservation potential exists. Using net-TRC benefits as a performance measure would capture all of these positive activities.

- **Alignment with the Public Interest:** The TRC net benefits would account for all costs and benefits from a societal perspective (i.e. the net present value of all the costs and benefits accruing to both the utility and the consumer). It best represents the ultimate outcome that the regulator is seeking to promote, namely, cost savings for consumers.

- **Encourages Cost-Effectiveness:** The metric will encourage conservation programs that are as cost-effective as possible. Only cost-effective programs (i.e. with more benefits than costs) will lead to an increase in this metric. The more cost-effective the programs are, the higher the metric will be.

- **Room for Improvement**: A recent study commissioned by the IESO found that Massachusetts, Rhode Island, and Vermont were all achieving **twice** the conservation savings as a percentage of total sales when compared to Ontario.[6] This suggests that the IESO could be performing much better in implementing the Conservation First policy, and therefore better performance metrics are required.

As a second conservation metric, the IESO proposes to report on its achievement of the 2020 energy savings target of 8.7 TWh. However, the IESO declined to follow the advice of Elenchus that "appropriate annual milestones consistent with these long-term targets should be identified for reporting in the Scorecard."[7] Environmental Defence requests a direction from the Board that annual milestones be included.

Furthermore, the scorecard should not merely record whether or not the annual targets are achieved (i.e. yes or no) but the amount by which those targets are missed *or exceeded.* The target of 8.7 TWh is not and should not be considered to be a "cap" on conservation efforts or energy savings. If more than 8.7 TWh of cost-effective conservation is achievable, it should be pursued as required by the Conservation First policy. The IESO should be expected to maximize its performance in this regard, including by exceeding targets where possible.

Electricity Sector GHG Emissions

The IESO has a central role in ensuring that Ontario's greenhouse gas ("GHG") reduction targets are met, in implementing Ontario Climate Change Action Plan, and in fulfilling the aspects of the Long-Term Energy Plan relating to climate change. The current scorecard effectively ignores these important functions.

To fill this gap, Environmental Defence requests that the IESO be directed to include a climate change category in its scorecard and to include a metric tracking the electricity

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[6] Nexant, *Achievable Potential Study: Short Term Analysis*, June 30, 2016, Revised November 25, 2016, P. 115.

[7] Exhibit C-1-1, Attachment 1, Page 20.

sector GHG emissions (annual, megatonnes CO_2e) vis-à-vis the low emissions outlook in the 2017 Long-Term Energy Plan. This high-level metric would address the IESO's performance in relation to these critical functions.

Enabling Low-Cost and Clean Electricity Imports

The IESO asserts that market renewal, including a new capacity market, will generate billions of dollars in savings. However, the deepest savings and access to the cleanest energy may require expansion of the interconnections to Quebec where low-cost and low-carbon hydro-electricity is available. A recent IESO report entitled *Ontario-Quebec Interconnection Capability* found that Ontario's peak day transmission capacity with Quebec could be increased to 2,050 MW for approximately $220 million (using existing interties) and up to 4,050 MW for approximately $1.62 billion (by constructing new interties).[8]

Environmental Defence asks that the IESO be directed to complete a cost-benefit analysis of implementing the projects outlined in the *Ontario-Quebec Interconnection Capacity* report. As noted in the report:

> As part of its Market Renewal project the IESO is also considering what changes can be made to the existing market design to fully optimize the potential that interties can offer in meeting Ontario's operability needs. Opportunities to facilitate greater trading with Quebec need to be considered in light of these broader market reforms to identify any linkages and potential overlaps.[9]

Seeing as increasing capacity to 2,050 MW requires 5-7 years lead time and construction of new interties would require up to 10 years lead time, the IESO should be examining these options now so as to ensure the maximum benefits from market renewal.[10]

Conclusion and Request

For those reasons, Environmental Defence requests:

1. Regarding the conservation section of the Regulatory Scorecard, that the IESO be directed to:
    a. Remove the $/kWh metric and 4 cents/kWh target;
    b. Include the annual net TRC benefits ($) of the electricity conservation portfolio;
    c. Include annual milestones for the 8.7 TWh savings target; and
    d. Report against the annual TWh savings targets by indicating the amount that the targets are missed or exceeded.

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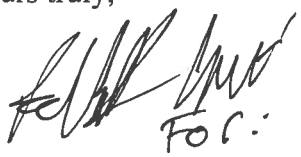
[8] IESO, *Ontario-Quebec Interconnection Capability – A Technical Review*, May 2017, p. 23-24.
[9] *Ibid.* p. 9.
[10] *Ibid.* p. 23 - 24.

2. That the IESO be directed to include a climate change section in its Regulatory Scorecard, including a metric tracking the electricity sector GHG emissions (annual, megatonnes CO_2e) vis-à-vis the low emissions outlook in the 2017 Long-Term Energy Plan; and
3. That the IESO be directed to complete a cost-benefit analysis of implementing the projects outlined in the *Ontario-Quebec Interconnection Capability* report.

Yours truly,



Kent Elson

Encl.

Cc: Parties in the above matter

ED INTERROGATORY 18

Issue 5.1 Is the IESO's proposed Regulatory Scorecard appropriate?

INTERROGATORY

Reference for the following interrogatories: Exhibit C, Tab 1, Schedule 1, p. 4

18. Please:

a. Explain in detail the basis for the proposed target of within 0.04$/kWh for the cost of conservation per kWh;

b. Indicate whether the government has approved that target, and if yes, include documentation indicating as such; and

c. Provide any studies, reports, or presentation prepared by the IESO in relation to that proposed target.

RESPONSE

a. Within $0.04 / kWh is not a target, rather it is the performance level that has been consistently achieved by the conservation portfolio over a number of years. Within $0.04 / kWh is he levelized cost of delivery, which reflects the acquisition costs of conservation investments divided by lifetime savings of the conservation measures. This calculation is described on page 15 of the IESO's CDM Cost Effectiveness Guide which is provided as Attachment 1.

b. Government approval is not required. Please refer to the response to part (a) above.

c. Please refer to the response to part (a) above.