

Fogler, Rubinoff LLP Lawyers 77 King Street West Suite 3000, PO Box 95 TD Centre North Tower Toronto, ON M5K IG8 t: 416.864.9700 | f: 416.941.8852 foglers.com

Reply To:Thomas BrettDirect Dial:416.941.8861E-mail:tbrett@foglers.comOur File No.161352

June 30, 2016

VIA RESS, EMAIL AND COURIER

Ontario Energy Board 2300 Yonge Street 27th Floor Toronto, Ontario M4P 1E4

Attention: Kirsten Walli, Board Secretary

Dear Ms. Walli:

Re: IESO, 2016 Revenue Requirement; Board File No. EB-2015-0275

Please find enclosed BOMA's Interrogatories.

Yours truly,

FOGLER, RUBINOFF LLP

luit.

Thomas Brett TB/dd Encls. cc: All Parties (via email)

ONTARIO ENERGY BOARD

Independent Electricity System Operator's Application for the Approval of 2016 Expenditures, Revenue Requirement and Fees

Interrogatories of Building Owners and Managers Association, Greater Toronto ("BOMA")

June 30, 2016

Tom Brett

Fogler, Rubinoff LLP 77 King Street West, Suite 3000 P.O. Box 95, TD Centre North Tower Toronto, ON M5K 1G8

Counsel for BOMA

Interrogatories of BOMA

Issue 6

1. Ref: Business Plan, Page 13

- (a) What are the six underlying strategic objectives identified for the IESO which were used to prepare the corporate performance measure targets?
- (b) Please explain/discuss each of the six strategic objectives.
- (c) Who developed the strategics? Please provide any document that describes the development of the three strategic themes and the six strategic objectives; using what process?
- (d) How were each strategic themes and each of the six strategic objectives used to develop the eight corporate performance measures listed on the table "Corporate Performance Measures"?
- (e) Please provide copies of the mitigation plans developed to deal with each of the business risks listed in Appendix 2. Who are the members of the corporate risk team?

2. Ref: Business Plan, Page 1

Please confirm that the nine percent reduction is from the combined usage fees of the IESO and OPA in 2015.

3. Ref: Business Plan, Page 3

Please provide a discussion of what the IESO does to provide Public Value. What are the different outcomes the IESO wishes to achieve? Are they prioritized? For example, is reliability the key public value? Please discuss each of the outcomes.

4. Ref: Business Plan – Energy Conservation; 2015 Annual Report, Pages 11-20, Enabling a Culture of Conservation - The Next Phase for Ontario; Appendix 1 – Corporate Performance Measures

"As noted above, the IESO has been directed by the Minister of Energy to implement a new Conservation First Framework focused on achieving 7 Twh of energy savings by the end of 2020 with a budget of \$2.2 billion" [and an additional 1.7 Twh of energy savings from large industrial transmission connected customers within a cost of \$500 million].

- (a) Please provide the milestones for each of the years 2017, 2018, 2019, and 2020,
 comparable to the 2016 conservation targets of 800 Gwh from LDCs and 524
 Gwh from direct-connect customer programs.
- (b) Please state whether the 7 Twh objective for the end of 2020 is cumulative, that is the sum total of the savings in the six year term of the Conservation First initiative, taking into account sustainability calculations, or the sum of the savings achieved in each of the six years 2015-2020, without any assumption about sustainability, in each case with respect to a 2014 consumption baseline.
- (c) If the former, please provide the sustainability assumptions/calculations for each year of the program.

- (d) Please provide a detailed breakdown of how the proposed 800 Gwh of savings will be achieved by program. Provide the savings from each proposed program or group of programs.
- (e) Please provide the same breakdown by year for the direct connect customer program (524 Gwh).

5. Ref: Business Plan, Page 2; 2016 Annual Report, Page 14

You state you have signed ECAs with every LDC, and approved each plan but one, of the forty-two CDM plans that have been submitted.

- (a) Which LDC plan has not yet been approved and why?
- (b) How many LDCs have not yet submitted plans? Why not? When will those plans be submitted?
- (c) Are all the LDCs (seventy odd) now operating under the new 2015 Framework?Please discuss.

6. Ref: Business Plan, Page 2

- Please provide annual project/production milestones for the 1.7 Twh target for the industrial accelerator program.
- (b) Please explain what project event is used as the milestone, the commencement of commercial operation of the project, the disbursement of the incentive funds, the execution of the project contract, or something else.

- (c) Please provide any IESO reports which have evaluated the savings achieved by that program to date.
- (d) Please provide the number of projects completed, the dollars spent by the company, the incentive provided by the IESO and the savings (kwh) per dollar of incentive provided for each of the years 2012 through 2015.
- (e) Please indicate whether any changes to the program design have occurred since 2012.
- (f) Please confirm that the energy savings results for each project are meter-measured to ensure performance.

7. Ref: Business Plan, Page 6

- (a) Please provide a document which describes LDC Innovation Fund, which includes program objectives, scope, and targets for implementation and the like.
- (b) Please provide a list, and brief description, of each of the projects funded by Conservation Fund over the last three years. Please provide any available report that describes the results of this program.

8. Ref: Business Plan, Appendix 1

- (a) Please describe the origin of the 7 Twh target for the conservation portfolio.
- (b) How does the cost of (a) the 2015 portfolio savings per kwh; (b) the average cost of the savings per kwh achieved through the 2011-2014 program; compare? What

was the cost of the energy savings achieved (\$ per kwh) by the 2011-2014 program? What was the average cost per kw of the demand savings achieved?

9. Ref: Business Plan, Page 8

- (a) To what extent does the IESO propose to measure actual savings achieved by the LDCs' and the IESO's own program, as opposed to relying on "deemed savings",
 "forecast savings", or other methods, over the Framework period (2015-2020)?
 Please provide answers on a program-specific basis.
- (b) To the extent that the IESO will not measure actual savings, how does it propose to validate the annual milestones or the achievement of the 7 Twh framework target. Please discuss fully.
- (c) Why is the IESO not proposing to measure energy <u>demand</u> savings for conservation programs, at least the commercial/industrial sector? Please describe the programs that will target <u>energy demand savings</u> (our emphasis).
- (d) Please describe the IESO's organization to oversee its energy conservation and demand response programs. Please provide an organizational structure, names and roles of key personnel, resources dedicated to the division. Please provide a breakdown of people and dollars into the various programs/functions/divisions of the organization.

10. Ref: Annual Report, Page 12

What is the source(s) for the numbers provided in the graph on the page? Please provide a breakdown of the results achieved by the LDC Business Program in the four years 2011-2014. Please describe each business program, results achieved, and how the savings results were measured as otherwise validated.

11. Ref: Ibid, Page 13

- (a) Please provide a document that describes the LDC Collaboration Fund. Please list, and describe briefly, the fourteen projects that have already been approved.
- (b) How many projects have involved LDCs working with natural gas companies to provide comprehensive energy management offerings? Please list and describe/highlight those projects.
- (c) How does IESO plan to measure the success of this program?

12. *Ref: Ibid, Page 12*

Please describe the proposed training programs the IESO/LDCs will deliver over the 2015-2020 period, the costs, the annual milestones, and the expected results. How does the IESO define success for these training programs? Provide a document, if available, that assesses training programs done previously.

13. Ref: Ibid, Page 14

The Business Plan describes the IESO as "the lead agency charged with delivering on the government's conservation agenda".

- (a) Please provide a detailed description of the "multi-channel media campaign", how
 it will evolve over the six year program, the budgeted cost, and how success will
 be determined.
- (b) Please provide any studies the IESO has done, or is aware of, which demonstrates the extent to which conservation can "defer investment in other potentially more costly infrastructure" (Page 14, Column 3).

14. Ref: Ibid, Page 16 "Race to Reduce"

- (a) What is the IESO doing to build on the results of the Race to Reduce program, described at Page 10?
- (b) How many buildings participated in the program?
- (c) Will the energy consumption in the buildings that participated in the program to be measured over the 2015-2020 period to measure suitability of the achieved savings?
- (d) How, specifically, will the IESO/LDCs use the results of the program to launch a broader program in the GTA and across the province, now that it has a "platform" of data? How will the IESO coordinate its efforts with those of the Government of Ontario, outlined at pages 25-26 and 56-66 of the Ontario Climate Change Action Plan?

15. *Ref: Ibid, Page 17*

Please describe the "early results" of the three residential social benchmarking pilots undertaken by LDCs. Please describe how they will enhance benchmarking for residential customers. Please provide references to any reports you are aware of that evaluate residential benchmarking elsewhere. [BOMA accepts any caveat about their preliminary status].

16. Ref: Ibid, Page 20, Pages 25-26, Demand Response Program

The government has stated, and the IESO has confirmed in its page 21 that Demand Response is expected to meet ten percent of Ontario electricity needs by 2025. What is the amount in MWs?

- (a) Given that the IESO recently completed an auction in which it received 400 MW for summer 2016 and winter/summer 2017 at reasonable prices, what are the IESO's plans to increase the amount to approximately 3,000 MW by 2025?
- (b) What is the IESO's target for acquisition of incremental (that is in addition to the amount acquired in the previous year, which is assumed to continue in the next year, etc.) Demand Response for each year 2017, 2018, 2019, 2020?
- (c) What was the range of prices per MW secured for the November 2015 auction for summer 2016 and winter 2016/2017?
- (d) What is the distinction between the 80 MW pilot project and the 400 MW amount achieved at auction? Please explain fully.

- (e) Please describe the IESO's plan to introduce residential Demand Response and what amounts of Demand Response do they expect to receive by 2020; in each year between now and then? Please discuss.
- (f) What was the breakdown of the auction participants by sector, and by end user/aggregator?
- (g) What steps will IESO take to expand the awareness of its Demand Response program, or is this task being left to aggregators? Please discuss.

17. Ref: Business Plan/Annual Report

- (a) What steps is the IESO taking to ensure it receives the information it requires on the nature, amount, location, and operating mode, of distributed generation across the province?
- (b) Please confirm that the IESO's overall approach is supportive of distributed generation, is prepared to remove technical barriers that remain, and that its quest for information described above will in no way inhibit the growth of distributed generation.
- (c) Please outline the various benefits distributed generation offers to the integrated grid.
- (d) What does IESO anticipate the total MW of installed embedded (distributed generation) in years 2016 through 2020, and the breakdown among solar, wind, cogeneration, gas engines, biomass?

(e) Does the graph at page 5 include cogeneration and other distributed generation at direct connect facilities? How many MW of gas-fired cogeneration does IESO anticipate in each of years 2016, 2017, 2018, 2019, 2020? Does the IESO have any targets for the growth of distributed generation as a whole?

18. Ref: Heat Pumps

Given that the Minister of Energy has directed the OPA/OEB to consider heat pumps a conservation measure, and given the importance assigned to heat pumps in the Greenhouse Gas Action Plan, what program has the IESO/LDCs developed to facilitate the expansion of heat pumps heating/cooling technology in Ontario? What savings in natural gas/electricity does it forecast from heat pump installation in 2016, 2017, 2018, 2019, 2020?

19. Ref: Business Plan, Appendix 1

- (a) Please explain the nature of the referenced NERC requirements, and the extent to which the IESO is not currently compliant with "NERC high voltaic risk factor requirements that are within the IESO's control". Please provide a document that outlines those requirements, and indicate the timing and steps IESO will take to become compliant. What are the milestones, 2016 through 2020 for achieving compliance?
- (b) What amount of renewable energy (number of MW) does the IESO target to acquire (signed contracts for) in 2016, and in each year thereafter to 2020? What amount was acquired in 2015? What is the average cost in kw, and in kwh per

kwh of (i) wind; (ii) solar forecast to be in 2016? What was it in each year from 2012 to 2015?

- 20. Ref: Ibid
 - (a) Please list the key recommendations from each of the provincial and regional plans that have made such recommendations and from the provincial plan (what "provincial plan" is being referred to; the 2013 LTEP?). Please explain.
 - (b) Please list and show on a map, the twenty-one electricity regions in Ontario, where:
 - (i) the regional plan is complete;
 - (ii) the regional plan is in progress;
 - (iii) the regional plan has not yet started.
 - (c) Please describe, for each plan, in which recommendation has been made:
 - (i) each key recommendation;
 - (ii) the timeline for the implementation of that recommendation;
 - (iii) the status of the implementation of the milestones to completion;
 - (iv) will it meet the original timeline? If not, why not?

21. Ref: Ibid

(a) What are the "baseline results" for the consultation? Please provide them.

- (b) What stakeholders and local communities will be surveyed and how? Please provide the consultation plan.
- (c) When will the consultation be completed and be available, as part of the performance measurement work?
- (d) Will the IESO undertake to file the document with the Board and parties, together with the measures, if any, it proposes to take in response, no later than the 2017 revenue requirement filing?

22. Ref: Ibid, Priority Projects

Given that we are now halfway through 2016, please describe each "priority project" referred to, and for each project, provide the budget and whether the original budget has been revised, the timeline for completion, whether the project will be completed on time. If the project extends beyond 2016, please provide a proposed completion schedule.

23. Ref: Ibid

Describe each of the deliverables referred to in its approved budget (with any amendments), the head count required to complete the deliverables, and any milestones for the completion, and whether IESO expects the milestone will be met, or not met.

24. Ref: Business Plan, Page 1, Paragraph 1

Please provide a detailed explanation for the underlined part of the quote that:

"The new organization will be challenged to support ongoing changes in the sector – the scope, complexity and pace of change over the next ten to fifteen

years is expected to exceed that experienced during the period when Ontario was eliminating coal from its supply max".

25. Ref: Compensation, Financial Statement 2016, Page 35

Please explain what measures IESO has taken, or can take, to reduce or eliminate the variable pay in the event milestones and other performance measures are not met.

26. *Ref: Page 34 of 40*

Will the IESO amend its performance measures and impact on compensation (its strategic priorities and performance objectives) to reflect the merger with the OPA? For example, its lead responsibility for meeting the government's Conservation First targets should presumably be reflected in the factors. Please discuss and provide a timetable for introducing the necessary changes.

27. Ref: Exhibit B, Tab 1, Schedule 1, Page 2

Please provide the basis for the forecast for revenue of \$1 million for 2016. What is the actual fee revenue received to date (June 30, 2016)? What was the actual fee revenue received in 2015?

28. Ref: Exhibit B, Tab 1, Schedule 1, Page 3, Line 9

(a) Why does the IESO think that changing its fee including the "OPA component" of its fee to all customers irrespective of the proportion of distributed generation within the distribution company service territory will treat customers more equitably than the "current regime"? (b) Would not the current practice under which the OPA charged its usage fee to distributors on a net basis? That is net of volumes produced by embedded generation, coupled with a requirement that distributors pass the savings (or a part thereof) along pro rata to its customers that have embedded generation provide an incentive for customers to invest in distributed generation, including renewable distributed generation, a result which is consistent with the government's renewable energy/GHG policies, and provides benefits to the grid.

I:\F\Fraser & Company_F1588\161352_IESO, 2016 Revenue Requirement; Board Fi\Documents\BOMA_IRs_20160630.docx