May 3, 2019

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

Dear Ms. Walli:

<u>Re: EB-2018-0316 – SME/IESO Application to Provide Third Party Access to Data at Market Prices –</u> <u>Final Argument of the Consumers Council of Canada</u>

We are representing the Consumers Council of Canada in the above-referenced proceeding. Please find, attached, our final argument.

Yours truly,

Julíe E. Gírvan

Julie E. Girvan

CC: IESO, Regulatory All Parties

FINAL ARGUMENT OF THE CONSUMERS COUNCIL OF CANADA

RE: EB-2018-0316

INDEPENDENT ELECTRICITY MARKET OPERATOR/SMART METER ENTITY

THIRD PARTY ACCESS TO DATA AT MARKET PRICES

INTRODUCTION:

On December 4, 2018, the Independent Electricity System Operator ("IESO") in its capacity as the Smart Metering Entity ("SME") applied to the Ontario Energy Board ("OEB") for an Order:

- a) Authorizing the SME to charge market prices for third party access ("TPA") to de-identified information;
- b) Approving the establishment of a new sub-account, the Benefits Account, under the Balancing Variance Account ("BVA") to track the net revenue;
- c) Amending the SME's licence, to allow the SME to:
 - i. Provide access to the data to any person who meets the terms of access established by the SME and enters into a Data Use Agreement ("DUA") with the SME; and
 - ii. Annually report the net revenue generated by the TPA accumulated in the Benefits Account, a sub-account of the BVA.¹

These are the final submissions of the Consumers Council of Canada ("Council") regarding the SME's Application.

BACKGROUND:

The IESO was designated as the SME by Ontario Regulation 393/07 made under the Electricity Act on March 28, 2007. The objects of the SME as outlined in the Electricity Act include, in addition to other objects and business activities, to facilitate the collection and management of information and data and to store the information and data related to the metering of consumers' consumption or use of

¹ Argument-in-Chief, dated April 18, 2019, p. 1

electricity in Ontario and to provide and promote non-discriminatory access by distributors, retailers, the IESO and other persons to this information and data.²

On September 30, 2016 the SME filed an application with the OEB to nenew its licence. A TPA Implementation Plan was included in that application. The OEB, in its Decision (EB-2016-0284), renewed the licence and required the SME to collect the following information associated with each smart meter (modified where necessary to sufficiently render it non-personal information):

- a) The postal code
- b) The distributor rate class;
- c) The commodity rate class; and
- d) Occupant change data³.

The SME began collecting the data on January 1, 2017, as required by the OEB and has worked with stakeholders on providing TPA to the data.

The SME has set out in its evidence that it will provide TPA to the data, on the appropriate terms, which will take two forms; the principled assessment of each request for access to the data; and the contractual terms upon which access to the data shall be granted. In addition, the SME has set the principles under which it will review requests for the data. These are:

- a) Privacy
- b) Security
- c) Ethical Works
- d) Compliance
- e) Ratepayer Value
- f) Accessibility
- g) Quality
- h) Technology

The IESO is not seeking approval of a DUA template, but has set out a list of provisions that will be included in the DUAs. The SME also intends to establish an Ethics Review Committee that will provide guidance and support to the SME, as needed, on issues affecting TPA in general and on a case-by-case basis, providing guidance as required, for specific requests for access to the data.⁴

The SME expects to initially have the following three types of offerings:

a) Public Offerings – high level aggregations (no further de-identification required, reports available at no cost to third parties);

² Ex. A/T1/S1/p. 1

³ Ex. A/T1/S1/pp. 1-2

⁴ Ex. B/T1/S1/pp. 1-4

- b) Standard Public Offerings predesigned extracts based on popular data requests, with standard, validated de-identification filters; and
- c) Custom Offerings unique (or first time) data requests that will require a custom approach to the provision of access⁵.

With respect to pricing the SME proposes to charge third parties market prices for access to the data. The proposed pricing model will generate revenue based on a formula which accounts for the depth and breadth of the data. This pricing model will, according to the SME ensure full cost recovery of all costs related to the data extraction and additional analysis, as required from third parties, such that the SME's ratepayers will not subsidize the TPA.⁶

The overall objectives of the TPA, over and above generating additional revenue for ratepayers, are to provide third parties with non-discriminatory access to electricity consumption data and to achieve the value inherent in a single provincial repository of electricity consumption data from over 5 million smart meters.⁷

SUBMISSIONS:

General Comments:

The Council acknowledges that the SME was established through regulation. In addition, the SME was required by the OEB, through licence conditions, to collect Ontario consumption data. The SME has undertaken stakeholder consultation in a number of ways regarding TPA. In addition, the SME has undertaken studies regarding TPA market analysis and costing, and the value potential of Ontario smart meter data.⁸ The Council also acknowledges that the program is intended to create value to ratepayers.

Recognizing that the SME has approached this initiative in a comprehensive and responsible way, the Council still has concerns regarding the current proposals now before the OEB through this Application. The Council's concerns are as follows:

- 1. Although the data is being "de-identified" there is a risk that the data could be "re-identified";
- 2. The overall costs and benefits for electricity consumers is not clear;
- 3. There is a risk that the data could be used for unethical purposes;

⁵ Ex. B/T2/S1/p. 1

⁶ ex. B/T3/S1

⁷ Ex. I – CCC-14

⁸ Ex. 1 – OB Staff – 2

- 4. The IESO is not seeking approval of a Data Use Agreement. At a minimum the OEB should be approving terms and conditions related to data access;
- 5. Despite a requirement in the SME's current Licence to inform distributors, consumers, retailers, and any other person of the conditions under which their information may be released to a third party without their consent, it appears that consent has not been granted.

The Council will address each of these concerns in the sections below.

Specific Submissions:

1. Re-identification of Data

To be clear the IESO has undertaken efforts to ensure that the data is "de-identified". The study produced by Privacy Analytics Inc. addressed "re-identification", but made it clear that there is a risk that is still there:

PAI determined that with the recommended risk mitigation techniques, the risk would be small that the information in MDM/R smart meter data could be used alone, or in combination with other reasonably available information to identify a dwelling that is the subject of the information.⁹

The Council was alerted to this concern through a letter of comment provided by Hydro One Networks Inc. on March 7, 2019. That letter has been attached to these submissions. Of particular note is the following excerpt:

In its application, the SME has also not provided any information or details as to how it plans to address customer complaints received regarding third party access to meter data. As mentioned on page 4 of Exhibit B, Tab 1, Schedule 1, the terms of access principles and provisions of the data use agreements entered into with third parties may not sufficiently "protect against the disclosure of attributes relating to groups of individuals that may lead to non-ethical uses of data".

Hydro One's main concern is that data obtained by third parties could be published in such a way that could inadvertently lead to "energy shaming" of a particular community or customer rate class. In one recent example, data was provided to a third party as part of a pilot project and they were able to clearly map out older subdivisions that were using more electricity than newer, more energy sufficient subdivisions. They were also able to map out where energy consumption was higher in richer communities that include larger homes. Hydro One received several complaints from customers who were affected by this situation. In general, there has been a tendency for Hydro One to receive complaints from customers in relation to social benchmarking studies that rely on energy use data.

⁹ Ex. I, OEB Staff - 13

The re-identification of customer information is a definite concern for the Council. The SME's proposal to allow for postal codes with three customers to be identified is concerning for the Council and in our view not sufficient in terms of deidentification. In light of Hydro One's letter the OEB needs to assess whether the SME is sufficiently ensuring that the interests of Ontario consumers are being sufficiently protected.

2. Cost and Benefits for Ontario Consumers

Without a clear indication as to the potential revenues that will flow back to SME customers the cost-benefit analysis of providing TPA at this time is unclear. In light of this the OEB may choose, at this time to take a more measured approach as outlined in our final recommendations set out below.

3. Data Used For Unethical Purposes

The SME has indicated that the unethical use of data is limited given the deidentification protocols applicable to the data that would be made available to third parties. However, the following unethical uses of date were identified:

- enabling stigma (for example, maliciously exposing a low-income population in a certain geography through studying electricity consumption patterns);
- discrimination (for example, an insurance company raising rates based on profiling a certain geographical area as high electricity intensity and therefore assuming higher propensity to pay higher insurance rates),
- unauthorized surveillance (for example, ongoing data feeds of high electricity consumers for establishing a correlation with unlawful activities);
- uses that conflict with IESO's Code of Conduct; and
- uses to damage the reputation of the IESO/SME or its stakeholders.

The Council is not convinced at this time that the unethical use of the data has been sufficiently mitigated by the SME.

4. Data Use Agreements

The SME is not seeking approval of the Date Use Agreements for TPA customers. The Council is of the view that if the OEB approves TPA, it should mandate a standard set of terms and conditions for use in developing DUAs with TPA customers.

5. Licence Conditions

The current SME Licence states:

The Licensee shall inform Distributors, consumers, Retailers, and any other person of the conditions under which their information may be released to a third party without their consent¹⁰.

The Council is not convinced that the SME has, in the context of the TPA initiatives, complied with this licence condition. As has been demonstrated by the reference to the Hydro One letter, there is the potential for considerable consumer backlash if customer information is "re-identified". That risk is not zero, especially in light of an ever-changing environment regarding data and technology.

CONCLUSIONS:

The Council accepts that there may be a potential benefit for Ontario consumers in terms of revenue resulting form the release of SME data to third parties at market based prices. The magnitude of those benefits are not yet clear, as the IESO has not provided any net revenue forecasts. Given the concerns expressed by Hydro One Networks Inc., the Council is of the view that the SME should proceed on a controlled and measured basis in terms of this TPA initiative. This could be done in the following way:

- 1. Have the OEB approve a standard set of Terms and Conditions that would apply to each Data use Agreement;
- 2. Require the SME to put into place an Ethics Committee to assess the potential use of data by third parties;
- 3. Initially, only allow access of the data to public institutions universities, colleges, municipalities etc.
- 4. Once experience can be gained by providing pubic institutions with the data, potentially allow access to private companies; and
- 5. Consistent with Section 9.4 of the current SME licence condition, require the SME to inform customers of the fact their information be released to third parties.

The Council accepts that there may be benefits to consumers of providing TPA, but believes that a measured approach is appropriate until the OEB is convinced the interests of consumers can be sufficiently protected. At this time the SME has not provided sufficient evidence to support its proposals and requests for relief.

COSTS:

¹⁰ Smart Metering Entity Licence, ES-2016-0284, dated November 24, 2016, Section 9.4

The Council requests that it be allowed to recover its reasonably incurred costs for its participation in this proceeding.

ALL OF WHICH IS RESPECTFULLY SUBMITTED

Hydro One Networks Inc.

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Jeffrey Smith Director, Regulatory Initiatives, Compliance and Support

March 7, 2019

BY EMAIL

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

Dear Ms. Walli:

EB-2018-0316 – Smart Meter Entity Fees for Access to Data by Third Parties

On January 10, 2019, a letter of Direction and Notice (the "Notice") from the Ontario Energy Board (the "Board") was issued requesting interested parties to comment on the application made by the Independent Electricity System Operator ("IESO"), in its capacity as the Smart Metering Entity ("SME"), to amend its license to be able to charge market prices for access to non-personal data in the Meter Data Management Repository ("MDM/R") by third parties. A draft issues list was included by the SME, along with the Notice, the Application and other supporting materials, to address the key issues of relevance.

In general, Hydro One Networks Inc. ("Hydro One") does not have any issues with the SME's proposal to charge market prices data based on the pricing model outlined, the terms and conditions upon which third party data access will be granted, the data products that the SME will offer or the proposed process for tracking and disposing the net revenues generated from the service of providing access to the data. That notwithstanding, Hydro One would like to provide the following comments on the SME's plan to provide third party access to the MDM/R data.

Customer Outreach Plan – Education and Awareness

While the SME has undertaken to ensure that access to only de-identified information is provided to third parties and established appropriate terms of access for the use of this information, the SME has not indicated how it intends to broadly communicate its plan for providing third party access to the MDM/R data with electricity consumers. The SME should not overlook the fact that electricity consumers have become increasingly more protective of their personal information and the data that is being recorded by their smart meters. To avoid potential backlash and further privacy concerns from customers, the SME should be requested by the Board to include a customer outreach strategy as part of its overall implementation plan to provide third party access to the MDM/R data. The strategy should explain to electricity consumers how their personal information will be protected under the proposed terms of access



principles and how providing third party access to the MDM/R data will also reduce the SME cost to customers. Hydro One believes that the IESO, in its capacity as the SME, should make available any materials related to the customer outreach strategy on its website.

Customer Strategy Plan for Responding to Complaints

In its application, the SME has also not provided any information or details as to how it plans to address customer complaints received regarding third party access to meter data. As mentioned on page 4 of Exhibit B, Tab 1, Schedule 1, the terms of access principles and provisions of the data use agreements entered into with third parties may not sufficiently "protect against the disclosure of attributes relating to groups of individuals that may lead to non-ethical uses of data."

Hydro One's main concern is that data obtained by third parties could be published in such a way that could inadvertently lead to "energy shaming" of a particular community or customer rate class. In one recent example, data was provided to a third party as part of a pilot project and they were able to clearly map out older subdivisions that were using more electricity than newer, more energy sufficient subdivisions. They were also able to map out where energy consumption was higher in richer communities that include larger homes. Hydro One received several complaints from customers who were affected by this situation. In general, there has been a tendency for Hydro One to receive complaints from customers in relation to social benchmarking studies that rely on energy usage data.

Given the strong likelihood of receiving customer complaints in regard to providing third party data access, the SME should be requested by the Board to develop a customer strategy plan for responding to complaints as part of its overall implementation plan to provide third party access to the MDM/R data. The plan should include a contact number for customers to make a complaint, the assignment of appropriate resources to handle customer complaints and agent scripting for distributors who receive complaints from their customers. Additionally, the SME's costs for providing third party data access should include the costs associated with implementing its customer strategy plan. Hydro One believes that the responsibility for dealing with any customer service issues that may result from providing third party data access should not have to bear the cost or responsibility of handling these customer complaints.

Hydro One would be happy to review and provide stakeholdering support on the SME's customer outreach and customer strategy plans.

Sincerely,

ORIGINAL SIGNED BY JEFFREY SMITH

Jeffrey Smith