



PUBLIC INTEREST ADVOCACY CENTRE
LE CENTRE POUR LA DÉFENSE DE L'INTÉRÊT PUBLIC

May 3, 2019

VIA E-MAIL

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
Toronto, ON
M4P 1E4

Dear Ms. Walli:

**Re: EB-2018-0316 Independent Electricity System Operator, in its capacity as the Smart Metering Entity / Application for approval to provide access to certain non-personal data to third parties at market prices
Submission of the Vulnerable Energy Consumers Coalition (VECC)**

As per Procedural Order to please find attached the Written Submissions of the Vulnerable Energy Consumers Coalition (VECC) with respect to the above-noted proceeding.

We have also directed a copy of the same to the Applicant as well as all Intervenors via email.

Yours truly,

John Lawford

Counsel for VECC

Cc: IESO - Miriam Heinz - regulatoryaffairs@ieso.ca



PUBLIC INTEREST ADVOCACY CENTRE
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**Independent Electricity System Operator
In its capacity as the
Smart Metering Entity
EB-2018-0316**

**Application for approval to provide access to certain non-
personal data to third parties at market prices**

Submission
Of the
Vulnerable Energy Consumers Coalition
(VECC)

May 3, 2019

**Vulnerable Energy Consumers Coalition
Public Interest Advocacy Centre**
613-562-4002
piac@piac.ca

1.0 The Relief Sought

1.1 On December 4, 2018, the Independent Electricity System Operator (IESO), acting as the agent of the Smart Meter Entity (SME) filed an application seeking amendments to the SME licence to allow for the sale of certain customer information collected from the smart meters of residential consumers in Ontario. Specifically the SME seeks an order:

- approving the establishment of a new sub-account, the Benefits Account, under the Balancing Variance Account ("BVA") to track the net revenue generated from its proposed Third Party Access (TPA) program; and,
- to amend the SME's licence to allow it 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 requiring it to,
 - (ii) annually report the net revenue generated by TPA accumulated in the Benefits Account, a sub-account of the BVA.

1.2 The SME states it is seeking a licence amendment to allow it the flexibility to set the prices for third party access and to be able to adapt the Data Use Agreement it will require parties to sign, as required. The SME is not seeking OEB approval of the Terms of Access Principles or the Data Use Agreement¹.

1.3 The specific language of the amendments the SME is seeking are:

To add a new definition:

"De-identified Information" means information regarding Distributors, consumers, Retailers, or any other person where the information has been sufficiently de-identified such that the Distributors', consumers', Retailers', or other person's particular information cannot reasonably be identified.

To rename Section 9 to **Restrictions on Provision of Information and Third Party Access**

To delete the existing Section 9.3 and replace it with:

9.3 Notwithstanding any other term of this License, the Licensee shall provide access to De-identified Information to any person who:

a) meets the terms of access established by the Licensee; and

¹ Exhibit I, CCC-4

b) enters into an agreement with the Licensee governing access to the De-identified information.

To add a new section 15 **Third Party Access Net Revenues**

15.1 The Licensee shall annually report the net revenue generated from third party access to De-identified Information to the Board using a methodology and form determined by the Board.

1.4 Ontario ratepayer's electricity consumption hourly data along with the following identifiers are proposed to be offered for sale:²

- Postal Code;
- Distributor Rate Class: market segment to which a customer belongs - e.g. small general service <50kW;
- Commodity Rate Class: price plan associated to the customer - e.g. retailer; and,
- Occupant Change - not directly provided but offered as a binary choice for inclusion/exclusion of the purchased data set.

1.5 The data sets would be sold as one of three offering types: Public Offering, Standard Private Offerings and Custom Offerings. Public offerings would be a catalogue of aggregated reports. These reports may be provided at a Postal District level (K, L, M, N and P), by IESO Electricity Regional Planning Zone or Canada Census Sub-Division. Standard private offerings could be Provincial, Municipal, Regional data products for predefined recipients. These would be "pre-canned" extracts based on popular data requests. Custom offerings would be data requests that are developed based on specific user requests that require a specific assessment from a privacy or technical aspect. The example provided for this offering suggests that the SME would engage in additional data development not related to metering data. For example if the requestor would like the SME to acquire and link the data to another set (e.g. weather data) and provide additional insights or technical analysis.³

1.6 Though a form of a Data Use Agreement (DUA) was provided in evidence, no specific form of that document is being sought for approval. Instead the SME proposes to negotiate singular agreements with prospective purchasers.

1.7 As well no specific fees are being proposed to be approved for purchase of these data offerings. Instead the SME proposes to charge what it calls "market prices", though given there are alternative providers for the data other than the SME, a more accurate description of this proposal is that the offerings would be subject of "negotiated pricing".

1.8 The Board approved a list of 11 issues to be considered in this proceeding. Broadly speaking those issues list covers the following topics: (1) Is "market pricing" appropriate?

² Exhibit I, VECC-17

³ See VECC-17 for a detailed description with examples of the different data offerings.

(2) Are the terms for accessing the data appropriate? (3) Are the means of tracking the cost and benefits of the Third Party Access (TPA) program sufficient? (4) Is the data sufficiently protect and de-identified? and (5) Was the stakeholding for the TPA sufficient? We have organized our submission by these broad topic areas.

2.0 Are “Market Prices” Appropriate?

- 2.1 The Applicant makes broad use of the term “market prices” in this application. Yet as a matter of fact there exists no market of Ontario smart meter data providers except that offered by the SME. While the metering data is also held by individual electricity distributors there is no practical way for a prospective purchaser to collect that data from the roughly 70 Ontario electricity distribution utilities. Furthermore distribution utilities are not obligated to provide such data. In fact it is likely that if asked most distributors would respond they have neither the technical capacity, nor the regulated approval or the freedom from potential customer liability to do so. Making the point that LDCs are not alternative providers the SME has identified local distribution companies as one of the potential buyers of its data offering. The fact is that the SME would be a monopoly provider of the data. For these reasons the use of the term “market prices” is in and of itself oxymoronic.
- 2.2 Market prices are an outcome of buyers and sellers meeting and trading transparently. Price transparency is a key characteristic of a market price. Again this is axiomatic. The SME proposal differs in that in not only that it is a monopoly supplier but that it also proposes to keep the transaction it engages in secret as noted in this response to a VECC interrogatory⁴:
- The SME does not plan to make the names of parties purchasing the data public. As these parties will be purchasing non-personal data from the SME there is no benefit seen to publishing their names. Additionally, it is expected that some parties may require that their access of the data remain confidential.
- 2.3 Prices in a well-functioning market do not require regulating because price transparency means that price discrimination and rent seeking behavior is kept in check. This is clearly not the case for the sale of meter data. In the circumstances proposed by the Applicant it is easy to imagine price discrimination and a model built on the ability to pay. Given the SME’s quasi-governmental status it would be understandable for, for example, the SME to charge a lower rate to a government agency seeking data than say to an LDC or a profit making company like Alphabet.
- 2.4 More accurately what is being sought for approval is a form of “negotiated prices.” Prices negotiated by a monopoly should be subject to some form of regulation. In fact the Board does regulate negotiated prices for contract transportation services in the natural gas sector. For example the Union (new Enbridge) C1 Transportation rate provides for the

⁴ Exhibit I, VECC-3

ability to negotiate within the parameter of a standard form agreement approved by the OEB.

- 2.5 In our submission the model that should be adopted by the Board and applied to the SME should be similar to that regulation it uses for contract services in natural gas. Under that regime range rates and a form of contract are approved by the regulator. This allows flexibility of the monopoly service provider while also allowing for the flexibility to negotiate sale prices within the parameters set by the Board.

3.0 Are the Terms for Accessing the Data Appropriate?

- 3.1 The SME does not propose to have a Data Use Agreement (DUA) approved as part of the TPA program. The agency explains that it is not expected that a single DUA would be used for all customers and that terms and conditions may vary with factors including “*the nature of the data being accessed, the use of the information, and the specific needs of the requestor.*” The SME went on to state⁵:

The nature of the data being accessed will have different controls attached, for example, a highly aggregate publicly posted report will not need the same controls as a very granular request for electricity consumption information that may have a higher risk of re-identification.

- 3.2 However, the SME explained that the following terms and conditions would apply⁶:

- the permitted use of the data;
- restrictions on the use of the data for purposes other than the permitted use, which includes the obligation not to identify or attempt to identify any premise associated with the data ;the obligations to protect the data, through 1 physical, organizational and technological safeguards;
- restrictions on the disclosure of the data except to authorized persons, with the consent of the SME or as required by law;
- the obligation to comply with applicable laws;
- notice to the SME in the event disclosure is required by law, or in the event there is any unauthorized disclosure; and,
- the requirement for the counterparty to cooperate with the SME enabling the SME to comply with its legal obligations, audit rights and remedies.

The DUA would also include the following provisions:⁷

- (a) Set out the authorized purpose for which the data is to be used/ and make clear that the data shall only be used for such authorized purpose;

⁵ Exhibit I, BOMA Interrogatory 3

⁶ Ibid

⁷ Exhibit B, Tab 1, Schedule 1, pg.3

- (b) Make clear the respective parties' rights, title and interest in the data;
- (c) Require the person requesting the data to agree not to re-identify or attempt to re-identify the data;
- (d) Place appropriate safeguards and security obligations on the party requesting access to the data;
- (e) Require the person requesting access to the data to have in place sufficient policies and procedures to provide for the security of the data, including those relating to the retention and destruction of information;
- (f) Limit sharing the data to only those persons who have been granted access to the data in accordance with the DUA;
- (g) In the event of any security incident or breach/ specify that the data requestor must notify the SME;
- (h) Require the parties to keep the data confidential, except as expressly set out in the DUA; and
- (i) Make clear that the SME has the authority to assess and verify compliance with the terms of the DUA.

3.3 VECC submits that a standard form of the DUA should be approved by the Board. This would be in keeping with the “contract model form” of regulation discussed above. Again, similar to that used for C1 transport regulation a form of the contract is approved by the Board. In our view approval of the form of the contract is essential where there is a monopoly provider of a service. Otherwise it is left to the discretion of the SME to choose upon whom and how to apply and criteria – or indeed depart from or add new criteria as it sees fit. For example one can easily imagine how a well-resourced potential purchaser like Alphabet/Google might seek and gain preferential agreements at the expense of other potential users of the data. The SME would be tempted to agree to such terms because they offer the maximum revenue. However, such agreements are made at the expense of other parties and often consumers.

3.4 In our view the question the Board needs to consider whether it is acceptable to let a monopoly provider decide how to maximize revenues? If the answer is yes then unfair outcomes can be expected – though perhaps with the benefit of more dollars to the TPA program.

3.5 In VECC's submission the public should have access to DUA contracts with data purchasers to the greatest extent possible. It is, in our view, in the public interest to see what uses and what data is being used by and whom and for what purpose.

4.0 Are the means of tracking the cost and benefits of the Third Party Access (TPA) program sufficient?

4.1 The SME currently has no dedicated facilities or FTEs working on the TPA program. The proposed model is based on allocation of time by current SME employees (or contractors). The SME anticipates the costs to provide TPA will include the following categories:

- SME staff costs for employees dedicated to the SME (data analysts, developer, project manager/ management, others);
- costs for services from the IESO staff that are not dedicated to the SME (legal, regulatory/communications, others); and
- external legal, consultants or other costs incurred by the SME to review and assess applications and privacy requirements incurred in the development of products and pricing and applications for access.

Fixed costs would include the initial assessment of potential purchases, registration and legal costs and the costs of other administrative costs.

4.2 A “Benefit Variance Account” (BVA) is proposed which will use the current BDR allocation study methodologies to track the costs and revenues of the TPA program. It is the SME’s proposal that any year-end balance in the BVA exceeding \$2.5 million would be returned to the ratepayer groups whose data is offered for sales.

4.3 The potential costs and revenues of the TPA program are rather amorphous. In our submission the BVA account and proposed allocation methodologies are sufficient at least until (or if) the program matures. The Board should, in our view, closely monitor the program and revisit the business model its accounting as greater experience is garnered.

5.0 Is the data sufficiently protect and de-identified?

5.1 The SME addresses concerns about the privacy of data in three ways. First it points out that the TPA does not contain any personal information. That is, it does not identify any person individually or provide any information about a specific person. Secondly, it has taken reasonable steps to vet its proposal by employing data privacy experts (e.g. Privacy Analytics) and having its plan reviewed by the Privacy Commissioner. Finally the SME proposes to institute an internal “Ethics Committee” to vet potential data purchasers with an objective of weeding out “bad actors.”

5.2 It is clear that the SME has taken reasonable and prudent steps to address the issue of data anonymity and security. Unfortunately, notwithstanding this effort, it is nearly impossible to delink the data from its address source and to guarantee that re-identification does not occur. The SME proposal is to sell meter data at the postal code level. According

to Canada Post there is an average of 20 addresses per postal code⁸. The SME proposal is to limit of postal codes to three (3) addresses per data unit. Meaning that it will aggregate data if a postal code unit were to include less than 3 individual addresses. This still allows for geo-targeting of advertisements to individuals without prior consent.

5.3 A cursory review of the data services provided by even public companies like Canada Post illustrate how targeting marketing can be used with postal code information. Large information companies can and do combine multiple databases in order to target individual addresses. From there it a simple step to determine household individual characteristics such as owner names.

5.4 The risk that electricity distribution customers will find their electricity consumption is being utilized to target market or for other purposes that may offend Ontario citizens is not theoretical. It is a point also made by the largest electricity distributor in the Province. In its letter of comment of March 7, 2019 Hydro One makes a submission, which VECC endorses, that the SME has not provided any proposal on how it plans to address customer complaints received regarding third party access to data meter. The Utility states:

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.

5.5 As we discuss in detail below ratepayers are largely unaware of the potential for their meter data to be collected and sold to non-utilities for marketing or other purposes. In these circumstances the potential for consumer backlash is real and the role of the Ontario Energy Board in protecting consumers will come, we think, under particular scrutiny.

5.6 The expectation of citizens as to data management and privacy of information collected from individuals during transactions has changed significantly since the early 2000s when the notion of the SME and the collection of meter data was first contemplated. Consumers have expectation of ownership of their data and a say in how it is to be otherwise used. The Licence renewal EB-2016-0284 which contains the requirements to produce a "TPA like plan" was made by delegation by an employee of the Board⁹. Similarly the prior decision opining on the implementation of the provisions of s. 53.8 of the *Electricity Act* was

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https://www.canadapost.ca/web/en/kb/details.page?article=using_data_with_post&catttype=kb&cat=sending&subcat=dmcreationqualification

⁹ EB-2016-0284, Smart Meter Entity, by delegation before Peter Fraser, Vice President, November 24, 2016.

made by the same delegated employee of the Board.¹⁰ We urge the Board to revisit these decisions and to consider holding a public hearing as to how best to implement the relevant provisions of the *Electricity Act*.

6.0 Was the stakeholding for the TPA sufficient?

6.1 The simple answer to this question is – No. There has been virtually no stakeholding or public outreach for this program. What the IESO/SME has done is convened a number of individuals representing different interests to discuss their proposal. While there is nothing inherently wrong with this step of stakeholding, it is just that – a single, but a small step. We agree that consumer advocates, utility personnel, and privacy experts should be called upon to help develop a proposal. Once completed that proposal should then be fully stakeholdered and then communicated to consumers.

6.2 These are two separate steps. Comprehensive stakeholding would bring the current proposal to larger groups of local distribution companies and interested parties together to discuss the pros and cons of the TPA. As discussed above the optimum approach to this would be a Board public hearing of the matter. This would allow for public notice and the Board could, as it has advocated in other proceedings, make efforts to directly engage consumers.

6.3 Consumer communication is a different step. VECC agrees with Hydro One that a customer outreach plan which aims at education and awareness needs to be undertaken prior to customer data being sold to third parties. To do otherwise, we respectfully submit, is dismissive of ratepayer's rights with respect to their data which is being collected by the SME.

6.4 Without taking these prudent steps there is, we submit, real reputational risk to the OEB. That may ultimately be a risk of broad public negative reaction which would call into question not just the Board's regulation by the acceptance of the TPA program as a whole.

7.0 Conclusion

7.1 There are two fundamental questions that are not being explicitly addressed in this proceeding. The first is – who owns the data? The second is - "is explicit consent required to sell a customer's meter data".

7.2 The implicit answer to the first question by both the Board and the SME is that the SME is the owner of the data. We question this conclusion if it is indeed being made. In the first instance the data is being collected by local distribution companies. We don't think it

¹⁰ EB-2015-0297, Smart Meter Entity, by delegation before Peter Fraser, Vice President, January 26, 2016

unreasonable to conclude that the vast majority of ratepayers have never heard of the Smart Meter Entity. As noted by Hydro One in their letter of comment, local distribution companies are and will continue to be the frontline electricity service providers for consumers. As such they (and perhaps the OEB) will bear the burden of any backlash. In our view it would also not be unreasonable for ratepayers to claim ownership of their consumption data and seek to be excluded from participating in any TPA style program. This question we submit should be put to ratepayers.

7.3 In our submission, even if not required by law, explicit consent of consumers should be required for access to their data. Modern consumers are quite aware of the provisions in digital applications or for loyalty cards that give to other party rights to share their consumption data. In fact such data sharing provisions are widely controversial in today's environment. The expectation of customers is that they be provided with notification of, and the chance to opt out of, having their household energy consumption data sold to a third party. If this is not provided and this data is sold without consent and analyzed, combined with other data, and used to give insight to their household daily routines without consent they will, in our estimation, demand to know how this has happened.

7.4 Finally, we note that in contrast to Ontario, most U.S. jurisdictions have implemented strict limits on the dissemination of meter data. In response to the question: "*Who will have access to my information?*" The Smart Energy Consumer Collaborative states: "*Access to information is restricted to authorized utility personnel, who need that data to satisfy a business function, such as improvements in billing and customer service.*"¹¹ Many of these jurisdictions are passing laws to do precisely the opposite of the proposed TPA program.¹²

8.0 Reasonably Incurred Costs

8.1 These are our submissions.

8.2 VECC submits that it has acted responsibly and efficiently during the course of this proceeding and requests that it be allowed to recover 100% of its reasonably incurred cost.

ALL OF WHICH IS RESPECTFULLY SUBMITTED

¹¹ <http://www.whatissmartgrid.org/smart-grid-101/fact-sheets/data->

¹² See for example, Seattle City Council, August 2018 passed an ordinance to ensure utility consumers' sensitive personal data is not sold and is used only for utility service and related purposes. : <https://www.aclu-wa.org/news/seattle-city-council-adopts-nation%E2%80%99s-strongest-law-protect-utility-customer-personal-data>