Independent Electricity System Operator
EB-2022-0137
Application by the Independent Electricity System Operator, designated as the Smart Metering Entity, for an Order approving a Smart Metering Charge for the period January 1, 2023 to December 31, 2027

Interrogatories of Environmental Defence

Interrogatory # 1-ED-1

Reference: Exhibit B, Tab 1, Schedule 1, Page 1

Preamble:

> The Ontario Energy Board has provided a report to the Minister of Energy entitled *Design of an Optional Enhanced Time-of-Use Price* (EB-2022-0074). It stated:
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> > Four stakeholders representing environmental groups, an industry association and an electricity distributor commented that net metering should be considered prior to implementation of an OETOU price plan.[1]
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> The submissions of Environmental Defence stated as follows:
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> > Environmental Defence recommends that the OEB ensure that utilities allow customers with net meters to participate in the optional TOU rate structure. As it currently stands, utilities switch customers to tiered rates from time-of-use rates when they provide a net meter.[2] This means that customers with net metering will not be able to benefit from the new optional enhanced TOU rates. This would rule out a number of proactive customers who might otherwise be interested in the optional rate.
> >
> > For example, customers with net metering are likely to have a solar installation or solar coupled with a battery. They are likely to be energy-savvy and environmentally conscious. They would therefore be prime candidates for the optional TOU rate. Excluding them would diminish the impact of the program.
> >
> > Furthermore, net metering customers could provide additional grid benefits by providing additional power to the grid at times of peak demand. For example, a net metered customer with a bi-directional electric vehicle charger or a solar/storage installation could be incentivized to flow power back into the grid when it is needed the most.

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[1] OEB, *Design of an Optional Enhanced Time-of-Use Price,* March 2022 (EB-2022-0074), p. 58.
[2] See, for example, Hydro Ottawa, Net Metering, https://hydroottawa.com/en/accounts-services/generation/net-metering.

In addition, it appears that the practice of switching customers off TOU rates when they receive a net meter is not entirely consistent with the applicable standards and regulations. Under the OEB's *Standard Supply Service Code for Electricity Distributors*, utilities are required to charge time-of-use rates to any customers with capable meters, which would include net meters (unless the customer requests tiered rates).[3] In addition, the formula set out in the net metering regulation (O. Reg. 541/05) requires that the rates for power conveyed from a customer/generator to the grid be "calculated on the same basis as the eligible generator's consumption of electricity." It is clearly worded to allow optional rate structures, including time-of-use rates for both consumption and generation. Instead, the practice is to take that TOU option away from customers.

The historical reasons for forcing net metered customers onto tiered rates is no longer applicable. The initial uptake for net metering was modest. As a result, it was easier to calculate billing manually rather than alter billing systems. This is no longer appropriate as there have been gradual increases in net metered customers over time and the number is likely to increase further with advances in distributed energy resources. Changes are required to the IESO's Meter Data Management and Repository (MDM/R) system and to distribution companies' billing systems. However, those changes are not onerous and would appear to be required or at least contemplated by O. Reg. 541/05 and the OEB's *Standard Supply Service Code for Electricity Distributors*. It is no longer appropriate in light of the needs of today's electricity system to prohibit net metered customers from participating in time-of-use rates.

Question(s):

(a) If the SME were directed to make the changes necessary to its Meter Data Management and Repository (MDM/R) system to facilitate time-of-use rates for net metered customers, could it do so within its proposed revenue requirement? Approximately how much would it cost to (a) initially implement the changes to the MDM/R, and (b) provide the additional data on an ongoing basis? How long would it take to implement those changes?
(b) Please confirm that changes would be necessary to the SME's MDM/R for it to provide smart metering data to distributors for customers with net meters who wish to have time-of-use rates.
(c) Would it be more cost-effective for the SME or each individual distributor to collect, manage, and store data on electricity conveyed into the distributor's distribution system by customers with net meters?
(d) In the SME's view, does the OEB have the jurisdiction to approve funding to the SME through its revenue requirement to provide smart metering data to enable time-of-use rates for customers with net meters?

[3] OEB, *Standard Supply Service Code for Electricity Distributors*, October 31, 2020 (s. 3.4.1: "Subject to section 3.5, the commodity prices for electricity payable by an RPP consumer that has an eligible time-of-use meter shall be: [formula for time-of-use rates]" Per s. 1.2.1, an eligible meter include any meter that records use data during the time-of-use periods. That includes net meters as they have that capability).

(e) In the SME's view, is an amendment needed to the *Electricity Act* required before the SME could collect, manage, and store data on electricity conveyed into the distributor's distribution system by customers with net meters? In our view, the answer is no because (a) this is "related to the metering of customers' consumption or use of electricity in Ontario" as described in s. 53.8(2) of the *Electricity Act* and (b) the objects set out in 53.8 do not prohibit this activity. Please address these comments in the SME's response.
(f) Does the SME receive consumption data from net meters in Ontario?
(g) Does the SME receive data from net meters in Ontario recording the electricity conveyed into the distribution system by customers?
(h) Is it cost-effective for the SME to continue to collect and manage consumption data for customers with net meters if the LDC must collect and manage the data regarding the conveyance of electricity into the distribution system?
(i) Is it appropriate for the SME to continue to charge $0.43 per meter per month for net meters when the distributor is required to collect and process electricity conveyance data from those meters regardless of the SME's role?
(j) Is it necessary for the SME to be involved in the collection and management of data from net meters? Is it possible for distributors to collect and manage this data and allow those customers to remain on time-of-use rates even?

Interrogatory # 1-ED-2

Reference: Exhibit B, Tab 1, Schedule 1, Page 1

Questions(s):

(a) Please provide a copy of all directives made under sections 28.3 or 28.4 of the *Ontario Energy Board Act, 1998*, relating to smart metering.

Interrogatory # 1-ED-3

Reference: Exhibit B, Tab 1, Schedule 1, Page 1

Questions(s):

(a) The SME is proposing to charge $0.43 per meter per month for five years. Please provide comparisons of this cost with those incurred by other entities for similar services, including costs incurred by distributors in Ontario and elsewhere who provide these services in-house.
(b) Please provide an estimate of what it would cost a distributor in Ontario to provide these services in-house without the involvement of the SME.

Interrogatory # 1-ED-4

Reference: Exhibit B, Tab 1, Schedule 1, Page 1

Questions(s):

(a) How many customers in Ontario have smart meters?
(b) What percent of electricity customers in Ontario have smart meters?
(c) Please provide a breakdown of the figures in (a) and (b) by customer type (e.g. residential, commercial, etc.).
(d) What are the technical requirements of a smart meter?
(e) Of all the smart meters that the SME collects data from, how many are net meters?
(f) Of all the smart meters that the SME collects data from, how many are capable of measuring bi-directional flow?
(g) Does the SME have any role with respect to generation meters, such as those for microFIT projects?

Interrogatory # 1-ED-5

Reference: Exhibit B, Tab 1, Schedule 1, Page 1

Questions(s):

(a) Could the SME play a role in reducing the cost of small-scale distributed energy resource connections? For instance, could the SME work with distributors to reduce the likelihood that a customer will need to swap out their smart meter for a net meter if they join the net metering project (e.g. by encouraging more smart meters to have built-in bi-directional capabilities?
(b) Is the SME capable of determining the quantity of electricity conveyed into Ontario's distribution system from customers with net meters?