

EB-2012-0410

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15 (Schedule B);

AND IN THE MATTER OF a proceeding initiated by the Ontario Energy Board with respect to rate design for electricity distributors.

**SUBMISSIONS OF
ENERGY PROBE RESEARCH FOUNDATION
("ENERGY PROBE")**

June 6, 2014

Introduction

The Ontario Energy Board's (OEB) draft report on revenue decoupling for electricity distributors is a move in the right direction. Energy Probe believes that consumers should pay the true price for their electricity usage and, according to research from the OEB and other organizations, the cost to distributors is largely fixed and based on the number of connections, not the amount of power used by each consumer. Under the current billing system, consumers are charged a volumetric distribution fee (as well as a fixed fee), which does not align with the largely fixed costs borne by distributors.

Energy Probe has argued in the past that the fixed and variable (or commodity) costs of electricity should be as distinct as possible. Revenue decoupling for distributors is a step in the right direction.

Likewise, users that consume more power during periods of peak demand should be charged a distribution rate that reflects peak distribution costs, to deter premature expansion. Doing so would better align the usage of customers with the costs of maintaining and expanding the distribution system during times of peak demand. It would also promote conservation as it would help to avoid overinvestment in Ontario's distribution system to handle brief periods of high demand – similar to adding unnecessary lanes to highway to deal with rush hour traffic.

The OEB has proposed three scenarios for revenue decoupling. Energy Probe will provide its opinion and questions on the three different scenarios. Energy Probe supports a move by the OEB to a revenue-decoupling program that most closely resembles the third option presented by the OEB, as soon as practicable.

Proposal #1: A single monthly charge for the rate class

Under this proposal the distributor would charge all users in a rate class – residential in this case – a flat, fixed fee for distribution. Currently the distribution charge comprises of a flat fee plus a volumetric component, which each account for about 50% of the total distribution charge, although that figure varies between distributors.

A flat fee would be easy for residential electricity users to understand, as it would remain constant throughout the annual billing cycle – assuming that the distribution charge is adjusted annually for inflation and other cost drivers. More fundamentally, by eliminating the volumetric component in the fixed distribution charge, over which consumers can exercise no control, consumers will have greater control over the variable commodity portion of their bill, affording them extra incentives to conserve energy.

For distributors, the flat fee would ensure a steady revenue stream and promote efficient investment. Residential consumers have in recent years reduced the amount of electricity consumed (see the Navigant study), which in turn, has had a negative impact on the revenue of distributors. A stable revenue stream that is pegged to the number of customers better reflects the true cost of distribution. This should promote investment where warranted by the distributor, even if consumers continue to invest in energy efficiency and reduce their consumption. This, as the OEB has argued, would eliminate the disincentive to distributors to update their system in the face of a long-term decline in demand from residential customers.

Shortcomings and Questions of Proposal #1:

The flat distribution fee falls short in fully aligning distribution costs. As the OEB and distributors have pointed out, there are two cost drivers of distribution: the number of customers and peak demand. Implementing a flat fee will address the former, but not the latter. Without a price signal, consumers will have no way to understand that their consumption during periods of high demand has an impact on distribution costs – as higher peak demand requires greater investment by the distributor.

It could also lead to over investment by distributors. Rather than using prices to show the costs of peak demand, distributors (and regulators) would be forced to explain to consumers in other ways that their peak consumption is driving up bills by causing distributors to build for higher capacity for short periods of peak demand. Stripping out the impact of peak demand on investment and relying solely on a flat charge would promote conservation for most of the year but could work against conservation during peak periods.

The flat fee also sends a mixed message to consumers in that it moves away from the Time Of Use (TOU) pricing that they have become accustomed to. In the Distribution Charge Focus Group undertaken by the Gandolf Group, many ratepayers said they had “embraced” TOU pricing habits and “were aware of whether peak pricing impacted or benefited them or how they had changed their habits to conserve.”

Many respondents believed that the flat fee proposal would offset some of the conservation and efficiency investment they have adopted under the TOU pricing system. The flat fee proposal may undermine the TOU prices that are currently applied to the commodity side of a customer’s bill and add further confusion to ratepayers about their bill.

Many other questions remain about the flat fee proposal:

- Would the flat fee be based solely on customer numbers? Is there any room in the flat fee proposal to also consider the cost of peak usage?
- If peak usage is considered in the flat fee proposal, would it be based on an annual average? A three-year average (to handle spikes and dips between different years)? An average charge covering peak period months (June, July and August, for example)?
- Would there be a variance account for the customer, distributor, or both?

Possible change to Proposal #1:

One improvement to Proposal #1 would see the distributors charge a flat rate to customers, but would implement a surcharge during periods of peak demand. For example, the flat fee could be \$30 per month outside of the peak June-August (for southern Ontario) and then \$40 for those peak demand months. The surcharge would send a signal to customers that increased usage during periods of high demand is a primary driver of distribution costs. Distributors could also provide customers with the opportunity to eliminate that surcharge if they are able to keep their usage below a defined threshold.

Proposal #2: Fixed monthly charge based on the size of the electrical connection

The OEB's second proposal for revenue decoupling would charge consumers a fixed fee based on the size of their electrical connection to the distribution system. While the proposal attempts to better link the impact that a consumer has on peak usage – as a larger connection would allow them to have greater throughput in times of peak demand – it leaves too many question marks and other issues to make it a viable option in the short or long term.

- The most important question is: do distributors have a thorough and comprehensive database of the electrical connections of all of their customers? If they do not, is it feasible to compile such a database and what would the cost of doing so be? How long would it take for distributors to either compile a database of electrical connections or ensure that the information they do have is up-to-date?
- Would distributors offer a grace period – a year, for example – for those customers who have inherited a large connection to downgrade their connection and avoid the higher fixed charge? Would distributors be willing to share some of this cost, as they would benefit from decreasing the level of peak load?

- If customers move into a new home will they be offered a grace period to downgrade their electrical connection?
- Do distributors have the legal right to investigate the electrical connections of their customers?
- Who would enforce and ensure that electrical connections remain at the level stated by customers? Are smart meters capable of conveying that information to distributors?
- Is the connection actually a good proxy for demand? Have the OEB or any distributors done any studies to show that there is a statistically significant increase in electricity consumption based on the size of a consumer's connection? For example, many new homes may be equipped with larger connections, as it may be cheaper when building a new home to have it installed then (rather than paying for an upgrade later). But are these users actually consuming the large amount of power available to them?
- Is there any relationship between the size of connection and consumption during peak demand? Two households with a similar size connection may have different peak demand habits. Because the cost of expanding the distribution system to handle peak demand is the real issue, would it not be better to focus on those users who consume more power during peak demand? If one consumer uses power in the evenings rather than mid-day in the summer, that consumer is having less of an impact than a household with the opposite characteristics. TOU pricing has already taught consumers to shift their demand to off-peak hours. If they have been successful in doing so, does the size of the connection have any connection to peak demand?
- Would such a proposal work against conservation measures? In the Residential Service Classification in section 4.2 of the Rate Design for Electricity Distributors draft report, those users over 250 amps would be charged the same even if they have dramatically different consumption patterns. Essentially, once a household hits the highest tier, they have less of an incentive to move their consumption out of times of peak demand.
- In general Energy Probe does not believe Option 2 is practical and requires a separate database to be created and maintained.

Proposal #3: Fixed monthly charge based on use during peak hours

The third proposal by the OEB, which would implement a fixed monthly distribution charge based on consumption during periods of peak demand, ensures that the revenue decoupling policy combines the largely fixed nature of distribution investment with the cost of peak demand. That said, there are many questions on the design and implementation of such a proposal that should be considered.

- Why did the OEB decide to split users into 20%, 70% and 10% categories? Would the OEB be open to more rate categories?
- If the grouping of customers is based on their consumption relative to other customers in that rate class, how would distributors change rates if all consumers adjusted demand lower? Higher? For example, what if the majority of consumers lowered their peak demand by 10% on the expectation that would push them into a lower grouping and decrease their bill? Under the OEB's proposal they would not receive a lower distribution charge, as their usage is compared to everyone else (who also happened to lower their charge). This may confuse ratepayers.
- How would peak demand be measured and allocated within customer classes? Annually? 12 CP, 4 CP or other and based on a two, three or longer average?
- How would distributors communicate to consumers about what group they are in? Would consumers be given a grace period to try and lower their peak consumption and qualify for a lower distribution charge?
- Will consumers be offered leniency if they are slightly above or below the threshold?

Conclusion

The OEB's move to revenue decoupling for electricity distributors better aligns the sector with the goals set forth in the Renewed Regulatory Framework for Electricity Distributors (RRFE). Under the RRFE the OEB's main goal is to protect "consumer interests" and promote the "economic efficiency and cost effectiveness within a financially viable industry."

Revenue decoupling accomplishes both of these goals, particularly the third proposal presented by the OEB.

By having customers focus their conservation efforts on the commodity side of their usage, the OEB is better aligning the costs of demand and supply in the electricity sector. Because the costs of distribution are largely fixed, ensuring that all consumers pay these costs and, in turn, allow distributors to make adequate capital investments, is the right decision. The current volumetric charge sends the wrong signal to consumers: that if they conserve energy, the cost to connect them to the grid – and maintain a reliable connection – is lower. It's in the interest of consumers that the distribution system is up-to-date and distributors are able to make the necessary capital investments.

But the OEB must also consider that there is a component to distribution costs that is related to peak demand and the revenue decoupling proposal should address this. Consumers should be given the right signal that their usage during periods of peak demands is costly, as it requires greater capital investment in the entire system. Just as TOU pricing provides clear signals on power costs vs use, so should the monthly distribution charge.

Energy Probe believes that the third proposal – though it needs to be refined – is most aligned with this reality.

Conservation programs should be focused on where they are most needed and economically efficient. A volumetric charge on distribution sends the wrong signal to consumers, whereas a volumetric TOU charge on the commodity component of the energy sector promotes the right – and efficient – kind of conservation.

But ensuring that consumers conserve power during times of peak demand is paramount to prevent overbuilding and other uneconomic investments in the distribution sector.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

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