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BY COURIER

October 21, 2019

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

Dear Ms. Walli,

EB-2014-0360 & EB-2015-0176: Hydro One Network's Request for an Extension to the Exemptions Related to Time-of-Use Billing, Estimated Billing and Billing Accuracy

Please find attached an application by Hydro One Networks Inc. ("Hydro One") for an extension to the exemptions received from the Ontario Energy Board ("Board") from provisions in the Standard Supply Service Code requiring distributors to offer time-of-use pricing for regulated price plan customers with eligible time-of-use meters and provisions in the Distribution System Code related to estimated billing and billing accuracy.

Sincerely,

ORIGINAL SIGNED BY FRANK D'ANDREA

Frank D'Andrea

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*;
AND IN THE MATTER OF an Application by Hydro One Networks Inc.

for an Order or Orders including an extension to the exemption from:

- (a) the provisions of the Standard Supply Service Code for electricity distributors requiring time-of-use pricing for regulated price plan consumers with eligible time-of-use meters, as of the mandatory date;
- (b) the provisions of the Distribution System Code limiting the number of estimated bills that can be issued to customers and requiring 98% billing accuracy

SUMMARY OF APPLICATION

1. The Applicant is Hydro One Networks Inc. ("Hydro One"), a subsidiary of Hydro One Inc. Hydro One is an Ontario corporation carrying on the business, among other things, of owning and operating electricity distribution facilities in Ontario.
2. Hydro One requests an extension of the exemption received from the provisions of the Standard Supply Service Code (the "SSS") requiring electricity distributors to implement time-of-use ("TOU") pricing for regulated price plan ("RPP") consumers with eligible TOU meters, as of the mandatory date. The subject exemption was granted by the Ontario Energy Board (the "Board") on January 13, 2011 (in proceeding EB-2010-0282 for approximately 150,000 customers), on December 21, 2012 (in proceeding EB-2012-0384 for approximately 122,000 customers) and on March 26, 2015 (in proceeding EB-2014-0360 for approximately 170,000 customers). This exemption request is for approximately 94,000 customers.
3. Hydro One requests an extension of the exemption received from the provisions of the Distribution System Code (the "DSC") pertaining to the issuance of estimated bills and billing accuracy, namely Section 2.10.1 and Sections 7.11.1 - 7.11.7. The subject exemption was granted by the Board on September 24, 2015 (in proceeding EB-2015-0176 for approximately 170,000 customers). This exemption request is for the same group of approximately 94,000 customers referenced above.
4. Hydro One requests that both exemptions be extended for another 5 years, from January 1, 2020 and until December 31, 2024.
5. Hydro One requests that all terms and conditions, including reporting requirements, established by the Board for the exemptions granted in the EB-2014-0360 and EB-2015-0176 proceedings continue to apply during the period of the extension, except for the following reporting requirements:
 - An assessment of the accuracy of estimated bills
 - How Hydro One will be improving its accuracy with respect to estimated bills and how it is mitigating future estimated bills to be as accurate as possible

6. Hydro One requests that this proceeding be conducted by way of a written hearing.
7. Hydro One also requests an interim extension for both exemptions, beginning on January 1, 2020, if the Board does not render a final decision in this application on or before December 31, 2019.

1.0 BACKGROUND

On September 16, 2010, Hydro One filed an application with the Board, under section 74 of the Ontario Energy Board Act, 1998, seeking an exemption from the mandated date for the implementation of TOU pricing date (the “TOU Exemption”). The exemption was sought for approximately 150,000 RPP customers defined as “hard-to-reach”, who would have to remain on 2-tier pricing. The Board found Hydro One’s request to be reasonable and granted Hydro One a two-year exemption from January 1, 2011 until December 31, 2012.

On September 21, 2012, Hydro One filed an application to extend the TOU Exemption for the “hard-to-reach” customers. While Hydro One was able to successfully migrate a net total of 28,000 “hard-to-reach” customers to TOU pricing during the exemption period through certain network improvements and tuning, there was no technically or economically feasible solution for migrating the remaining “hard-to-reach” RPP customers to TOU pricing. The Board agreed and granted Hydro One another two-year exemption from January 1, 2013 to December 31, 2014 for the remaining approximately 122,000 “hard-to-reach” customers. This extension of the TOU Exemption included a requirement that Hydro One report annually on its progress in transitioning the identified “hard-to-reach” RPP customers to TOU pricing.

During this exemption period, Hydro One reported that it was able to transition approximately 12,000 “hard-to-reach” customers to TOU pricing. However, despite these achievements and continued efforts to explore options for improving its smart meter network communications, there was still no feasible solution for transitioning the remaining “hard-to-reach” customers to TOU pricing. Hydro One also reported that during this period, the meters for some of the “hard-to-reach” customers who had been converted to TOU pricing were no longer communicating reliably with the smart meter network and would have to be transitioned back to 2-tier pricing. After also accounting for new “hard-to-reach” customers projected to connect in its service territory, Hydro One filed an application on December 1, 2014 to extend the TOU Exemption for another 5 years for approximately 170,000 “hard-to-reach” customers, whose meters will not communicate reliably with the smart meter network.

On March 26, 2015, Hydro One’s TOU Exemption was extended by the Board until December 31, 2019 for the “hard-to-reach” customers. The exemption included requirements, among others, to provide the Board with scheduled updates on improvements to telecommunication infrastructure, cellular network expansion and the progress made in transitioning the “hard-to-reach” customers to TOU pricing.

Subsequently, on April 15, 2015, the Board amended the DSC to include new requirements related to billing frequency, the use of estimated billing and billing accuracy. On May 6, 2015, Hydro One filed an application with the Board seeking an exemption from Section 2.10.1, which limits the number of bills that a distributor can issue based on an estimate, and Sections 7.11.1 – 7.11.7 of the DSC, which require distributors to issue accurate bills 98% of the time (the “Billing Estimate/Accuracy Exemption”). In the application, Hydro One cited the same technical factors and challenges in getting the meters of “hard-to-reach” customers to communicate reliably with the AMI network outlined in the TOU Exemption as the reason for its inability to comply with the new DSC requirements. For the affected group of approximately 170,000 RPP customers, Hydro One proposed to limit the number of bills issued to seasonal and non-seasonal customers that are based on an estimate.

On September 24, 2015, Hydro One was granted an exemption by the Board for the identified “hard-to-reach” customers until December 31, 2019. The exemption was granted on the condition that Hydro One restrict collection related activities based on estimated bills and included requirements that Hydro One report annually on the number of “hard-to-reach” customers receiving estimated bills, the accuracy of estimated bills and the ways in which Hydro One plans to improve the accuracy of estimated bills or reduce the number of estimated bills issued to customers.

Since the TOU Exemption and Billing Estimate/Accuracy Exemption were granted by the Board in 2015, the total number of “hard-to-reach” customers, who are not on TOU pricing and receive more estimated bills, has decreased from 170,000 to approximately 94,000. This decrease has been in larger part due to the expansion of Bell Canada’s Long Term Evolution (LTE) infrastructure within existing service areas and economical upgrades to the smart meter network infrastructure made by Hydro One to support the LTE conversion. That notwithstanding, there has been limited expansion of the cellular networks of private commercial carriers into the “hard-to-reach” areas and this is expected to occur at a slow rate. Without expansion, there are limited economical options available for improving meter communication reliability in the “hard-to-reach” areas that would enable Hydro One to offer TOU pricing to customers in these areas and reduce the number of estimated bills that they receive.

Given the technical factors and challenges that continue to impact meter communication reliability in the “hard-to-reach” areas and that Hydro One’s best efforts have only led to incremental improvements in the situation, Hydro One is requesting an extension of its TOU Exemption and the Billing Estimate/Accuracy Exemption in respect of these customers.

2. EXEMPTION REQUEST

Hydro One requests a five-year extension of its TOU Exemption and the Billing Estimate/Accuracy Exemption, from January 1, 2020 to December 31, 2024, for approximately 94,000 RPP customers.

As has been the case in the past, the exact number of customers impacted by this exemption request will fluctuate from time to time. The number of impacted customers will be affected by the number and location of new customers/connections in “hard-to-reach” areas, expansion of the cellular network infrastructure by private commercial carriers, enhancements and upgrades to Hydro One’s Advanced Metering Infrastructure (AMI) smart meter network and other environmental factors of Hydro One’s service territory.

The technical considerations and rationale for which this exemption is being sought are detailed in Section 3 of this application.

If the Board grants Hydro One an extension of the Billing Estimate/Accuracy Exemption, Hydro One requests that it no longer be required to report on the following:

- An assessment of the accuracy of estimated bills
- How Hydro One will be improving its accuracy with respect to estimated bills and how it is mitigating future estimated bills to be as accurate as possible

In the annual reports submitted to the Board since the Billing Estimate/Accuracy Exemption was granted, Hydro One has demonstrated that those customers impacted by the exemption have consistently received accurate estimated bills during that period and therefore Hydro One does not believe that it is necessary to continue reporting on the above details.

3. EXEMPTION RATIONALE

As outlined in Hydro One's last TOU Exemption application (EB-2012-0384), submitted to the Board on December 1, 2014, Hydro One has a very unique service territory compared to other Ontario Local Distribution Companies. The unique aspects of its service territory create several challenges when connecting customers to its smart meter network and ensuring that their meters communicate reliably once they are connected. These challenges include:

- Private commercial cellular coverage, the backbone of the smart meter network's Wide Area Network (WAN), is not ubiquitous across Hydro One's service territory and therefore connectivity is not possible in many areas;
- Extremely low customer density in many parts of the service territory makes it impossible to economically build out the AMI network to make these meters communicate reliably based on the current technology;
- The extreme rugged nature and topography of many parts of Hydro One's service territory (hills, valleys, Canadian Shield) can both block and/or absorb RF signal impacting signal strength and range;
- Extensive tree coverage and growth across many parts of Hydro One's service territory impacts signal strength and range depending on type of tree, season, and other environmental factors. Wet trees absorb RF energy more than dry trees. Coniferous trees absorb more than deciduous trees. Snow on coniferous trees in winter will also absorb signals. These variations in absorption make the network reliability susceptible to changes in seasons and conditions; especially in sparsely populated areas that are typically heavily forested; and
- Medical concerns (RF sensitivities) from customers requiring non-communicating metering devices.

Overcoming these challenges has and continues to be an issue for Hydro One. Over the last five years, Bell Canada commissioned new macro cell sites in certain areas of Hydro One service's territory to improve cellular communication reliability. Bell has also continued to expand the reach of its network but as mentioned, this is occurring at a much slower pace than anticipated. Over the last five years, Bell's main focus has been on upgrading their existing Code Division Multiple Access (CDMA) sites to the LTE infrastructure. As Bell has built out the LTE network, Hydro One has replaced older CDMA equipment infrastructure with LTE compatible infrastructure to maintain the performance of the existing AMI network.

Bell's conversion to LTE has resulted in improved coverage, which in turn has improved meter communication reliability with Hydro One's AMI network. This has been an important factor in

enabling Hydro One to migrate customers, whose meters did not previously communicate reliably enough, to TOU billing. However, the LTE conversion has had minimal impact on improving meter communication reliability with the AMI network for the remaining “hard-to-reach” customers. This can only be achieved with the expansion of the LTE network into the “hard-to-reach” areas.

4. CONCLUSION

In the absence of technological advancements in automated meter reading infrastructure or cellular network expansion into the remaining “hard-to-reach” areas of Hydro One’s service territory, it is simply not possible to connect some meters to the AMI network or have some meters communicate reliably to be able to bill these customers based on TOU pricing and limit the number of estimated bills that they receive. The costs associated with options available to connect more meters and make more meters reliable are excessively high and would result in upward pressure on rates. Given that technological advancements and network expansion are not expected to occur in the near future, the situation for most of the customers who are the subject of this exemption request is unlikely to be resolved.

Hydro One is therefore seeking a five-year extension of its TOU Exemption and Billing Estimate/Accuracy Exemption for approximately 94,000 “hard-to-reach” RPP customers. These customers will remain on 2-tier pricing, as specified in Section 3.3 of the SSS, during the exemption period unless their meter is able to communicate reliably with the AMI network and they can be successfully migrated to TOU pricing. During the exemption period, Hydro One will issue a bill based on a manual meter read to non-seasonal Residential and General Service < 50 kW customers on a quarterly basis. All other monthly bills received by these customers will be based on an estimate, which Hydro One has shown to be very accurate based on previous reports submitted to the Board under the terms of the Billing Estimate/Accuracy Exemption. Similarly, for seasonal customers, Hydro One will issue one bill based on a manual meter read on an annual basis while all other quarterly bills received by these customers will be based on an estimate. To the extent that the AMI network provides remote reads within the billing window, Hydro One will use these reads to issue bills instead of a planned estimate. Customer-provided meter reads will also be accepted to generate bills based on actual reads. The aforementioned proposed approach is consistent with the approach taken by Hydro One under the current TOU Exemption and Billing Estimate/Accuracy Exemption.

Where cost effective for ratepayers, Hydro One will continue to invest in AMI network improvements and explore opportunities to improve compliance by transitioning customers to TOU pricing and reducing the number of estimated bills that they receive. However, this will only be done when Hydro One is confident that customer expectations can be met using options that are economically viable.