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Submitted via e-mail

RE:ERO 019-6521 Collection, management and improved utilization of smart metering data for behind-the-meter distributed energy resources

Mr. Frame,

Hydro One Networks Inc. ("Hydro One") is Ontario's largest electricity transmission and distribution provider, with approximately 1.5 million valued customers. Our team of approximately 9,300 skilled and dedicated employees proudly build and maintain a safe and reliable electricity system which is essential to supporting strong and successful communities.

Hydro One is supportive of the proposal to enable the Smart Meter Entity ("SME") to collect and process bi-directional smart metering data from distribution customers. Since many Local Distribution Companies ("LDCs") are reliant on the SME to provide billing and settlement information, Hydro One believes that it is imperative that the SME develop capabilities within the Meter Data Management/Repository ("MDM/R") to produce accurate billing quality data of generation quantities that matches what the MDM/R currently provides for load customers. It is important that the Independent Electricity System Operator ("IESO"), as the SME, finalize the technical specifications of the MDM/R solution with input from LDCs and implement a proper design and testing period to ensure minimal billing risks to customers. It is also important that the Ministry coordinate with its agencies, including



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the Ontario Energy Board ("OEB") when changes to the authority of the SME are associated with regulatory requirements.

In addition to implementing and validating the MDM/R solution, LDCs will need appropriate time to coordinate the changes that need to be made to their billing systems to support the MDRM/R solution. This could take upwards of 8-12 months due to other billing system changes that need to be performed to meet other regulatory compliance dates, including implementing Green Button and the Ultra-Low Overnight Price Plan (ULO). Therefore, while Hydro One is supportive of the proposed regulation, it is important to clarify that full enablement of customer choice for net metered customers, including the MDM/R solution, will require LDCs to complete complex billing system changes on their end and sufficient time needs to be provided to complete these changes.

Please see Hydro One's comments on the Ministry of Energy's feedback questions below.

Benefits and other considerations associated with collection and use of bi-directional smart metering data through the MDM/R in the context of Ontario's electricity system and supporting innovation and distributed energy resources integration

It is difficult to ascertain the future benefits of using bi-directional smart metering through the MDM/R. Currently the only customers associated with bidirectional data are customers currently equipped with a bi-directional meter. In Hydro One's distribution service territory there are approximately 17,000 customers of 1.5 million customers equipped with a bi-directional meter. Given the expectation that behind the meter small scale generation, including battery storage, is expected to grow in numbers collection and easy access to this data will become more important.

As Ontario's largest transmitter, having a collective repository of data feed into the Regional Planning process may improve the quality of



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data, rather than reliance on extrapolations. This solution, however, will not decrease barriers to visibility behind the meter on the distribution level, as this information would only be collected for customers currently equipped with a bi-directional meter. Investments into distribution side visibility of behind the meter DERs, such as storage and electric vehicles, would be needed to fully realize benefits associated with enabling bi-directional data collection through the MDM/R.

Costs and other impacts to local distribution companies related to updating their customer information systems, metering, billing practices and other activities as a result of the proposed changes;

Although Hydro One fully supports the utilization of the SME to collect bidirectional data, the majority of the complexity, costs and work associated with facilitating pricing options for net metered customers will fall on LDCs. An early forecast of costs associated with implementing bidirectional data for Hydro One would be approximately \$6-8 million CAD. This would be exacerbated if distributors would need to implement interim, manual or independent solutions before the SME was prepared to be fully utilized to collect billing quality data

Timelines associated with implementing these changes must account for the complex billing system changes distributors are currently making. Distributors are required to implement the Ultra-Low Overnight Electricity Rate and Green Button by November 1, 2023. Due to the work associated with these changes early Hydro One estimates for implementing bidirectional data and implementing the Regulated Price Plan ("RPP") for net-metered customers could not be met reliably earlier than April 1, 2024.

Hydro One would also like to note that, in January 2023, the OEB issued a Bulletin outlining the requirements for LDCs to accommodate net metered pricing conditions for Regulated Price Plan ("RPP") customers by May 1, 2023. Since many LDCs have built their billing systems to rely on the MDM/R for billing and settlement, Hydro One supports relying on



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the SME to enable the functionality within the MDM/R to bill and settle net metered customers. OEB compliance expectations should also appropriately recognize that LDCs would be reliant on the MDM/R to support billing and settlement of net metered distribution customers based on the customer's choice of price option and that LDCs would be limited by any functional limitations of the MDM/R.

Given that the Ministry is now providing this mandate and authority to the SME, LDCs will require the enablement of the SME to collect, process and manage bi-directional data, an outline of the final technical specifications, and a proper design and testing period to make changes to their billing systems to ensure minimal risk to customers, including risks of inaccurate billing of customers, in this process. It is also important that the MDM/R data collection, processing and validation capabilities provide accurate billing quality data. The IESO is currently working on a pilot with an LDC to allow the MDM/R to collect bi-directional data, however, the solution being tested would not meet Hydro One's accuracy standards of providing billing quality data for its net-metered customers.

Implementing manual and interim solutions separate from the MDM/R would pull critical resources from initiatives such as Green Button and ULO, putting those projects at material risk. As the MDM/R is paid for by utility customers across Ontario, it is important that customers receive the full value of a centralized system. If LDCs are required to implement independent solutions separate from the MDM/R, this will result in greater variance between LDC billing systems and would deteriorate the efficacy of a centralized data repository for utilities.

Considerations related to decisions about the SME having exclusive authority in respect to bi-directional smart metering data for the purposes of collecting and managing billing quantity data for local distribution companies

As most LDCs rely on the MDM/R for as part of their billing systems, it is important that the authority of the SME is protected. Hydro One is fully



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supportive of the SME having exclusive authority in respect to bidirectional smart metering data. The MDM/R is paid for by distribution customers across the province, and deteriorating the authority of the system could increase the cost burden to customers.

Conclusion

Hydro One thanks the Ministry of Energy for the opportunity to comment on this proposed regulatory change through the Environmental Registry. Hydro One is supportive of the proposal to enable the collection the Smart Meter Entity ("SME") to collect bi-directional smart metering data. It is vital that the MDM/R implements a solution that produces billing quality data that reflects the accuracy associated with the MDM/R on the customer load side of data collection.

Hydro One encourages the Ministry, the IESO, the OEB and LDCs to coordinate and develop a coherent plan to properly enable the MDM/R with bi-directional billing capability, introduce technical specifications, allow a proper design and testing period, and allow distributors time to meet compliance dates associated with complex billing system changes. Updating the MDM/R through a coordinated process will allow the system to maintain relevancy to LDCs and allow customers to unlock the full value of the centralized system.

Please do not hesitate to contact me if you have any questions.

Regards,

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