
REPORT TITLE: Supply and Delivery of ION Energy Meters

FROM: Gary Kent, CPA, CGA, ICD.D, Chief Financial Officer and Commissioner of Corporate Services

RECOMMENDATION

- 1. That the contract (Document 2023-063N) for the supply and delivery of Schneider ION energy meters be awarded to Schneider Electric Inc. for the replacement of seventy (70) new ION energy meters over a five-year contract term, in the estimated award amount of \$441,000 (excluding applicable taxes), pursuant to Procurement By-law 30-2018, as amended; and**
- 2. That the Chief Financial Officer and Commissioner of Corporate Services be authorized to execute the Contract and all related ancillary documents with Schneider Electric Inc. on business terms satisfactory to the Director of the Office of Climate Change and on legal terms satisfactory to the Regional Solicitor; and**
- 3. That the Director of the Office of Climate Change and Energy Management and the Commissioner of Corporate Services and Chief Financial Officer be authorized to approve additional purchases from Schneider Electric Inc. for any future ION energy meter replacements after the five-year contract term for the lifecycle of the energy metering infrastructure, subject to satisfactory performance, pricing, and approved budget, pursuant to Procurement By-law 30-2018, as amended; and**
- 4. That authority be granted to increase the quantities, where actual ION energy meter replacements and purchases exceed the initial estimates, subject to satisfactory performance, pricing and to the limits of the approved budget.**

REPORT HIGHLIGHTS

- In 2004, subsequent to a rigorous proof of concept assessment and pilot project, the Region of Peel purchased and installed ION Enterprise Energy Management software from Schneider Electric Canada Inc and standardized the energy metering and monitoring solution for the Region as the Schneider Electric ION energy meter along with the ION Enterprise Energy Management software.
- The ION Enterprise Energy Management software is the primary tool for making informed energy decisions and quantifying facility greenhouse gas (GHG) emissions data, which is critical for tracking the Region's progress toward its 2030 GHG reduction target.
- There are currently one hundred seventy-six (176) active Schneider Electric ION energy meters connected to the Region's ION Enterprise Energy Management software.

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- In accordance with the Region's Energy Metering, Monitoring, and Software Strategy, the Region intends to replace the existing seventy (70) depreciated Schneider Electric ION energy meters with the latest version ION energy meters manufactured and supplied by Schneider Electric. This will maintain and ensure standardization of the Schneider Electric ION energy metering devices that are compatible with and form an integral part of the existing ION Enterprise Energy Management software. This progressive standardization approach maintains compatibility, improves long-term manageability, and optimizes the lifecycle cost of this equipment.
- Document 2023-063N was issued to Schneider Electric to obtain pricing for the supply and delivery of seventy (70) replacement ION Energy meters. The meter replacement opportunity with Schneider Electric Inc. is recommended by staff and is a non-competitive procurement process that requires Regional Council approval. The process to award this contract complies with the Procurement By-law 30-2018, as amended.
- Due to the significant volume of this purchase, and as the manufacturer of these meters, Schneider Electric Inc. has provided a customer loyalty discount of twenty-five percent (25%) per meter to the Region. The cost to replace approximately 14 meters a year for a total of seventy (70) ION meters over the five-year contract term will be an estimated amount of \$441,000 (exclusive of applicable taxes). Funds are available in approved Capital Project 22-7201.

DISCUSSION

1. Background

Schneider Electric is a leading global manufacturer and supplier specialized in digital automation and energy management systems. The company offers solutions for a range of applications including homes, buildings, utilities, data centres, infrastructure, and industries by combining energy technologies, real-time automation, software, and services.

In 2004, the Region of Peel purchased and installed the ION Enterprise Energy Management software from Schneider Electric Canada Inc. to integrate and read the electric meters installed at the main utility metering points as well as sub meters on larger load centres in the Region of Peel.

The Region has since standardized the energy metering and monitoring solution for Peel utilizing the Schneider Electric ION energy meters combined with the ION Enterprise Energy Management software as the standard system for on-site measurement and energy data collection after a rigorous proof of concept assessment process and pilot project.

In 2006, the Region, in collaboration with Alectra Utilities, installed over sixty-seven (67) Schneider Electric ION energy meters, which the utility had already qualified as revenue grade energy meters.

Upon proven success in terms of performance and reliability, the Region has continued to purchase similar ION energy meters from Schneider Electric and today the total number of active ION energy meters connected to the ION Enterprise Energy Management software is one hundred seventy-six (176) meters.

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The information collected by the ION Enterprise Energy Management software from the ION energy meters is used to verify the accuracy of the Region utility bills, load profiling and forecasting, verify energy savings on projects and facilities benchmarking and performance reporting as well as viewing and monitoring power quality performance of the Region's electrical grid. Moreover, this measurement and monitoring system is the primary tool for making informed energy decisions and quantifying facility greenhouse gas (GHG) emissions data, which is critical for tracking the Region's progress toward its 2030 GHG reduction target.

2. Findings

As part of its ongoing operations, the Office of Climate Change and Energy Management (OCCEM) replaces the energy metering infrastructure on a regular basis, and in early 2022, staff issued a Request for Quotation document to three authorized distributors of ION energy meters. For compatibility and standardization with the Region's existing energy metering infrastructure, staff required that the new meters be equivalent to or exceed the functionality of the existing Schneider Electric ION energy meters. Only one bid submission from Schneider Electric Inc. was received and they were awarded a Contract for the supply of seven (7) ION energy meters.

An extensive condition assessment of the Region's current energy metering infrastructure in late 2022 by staff identified that more than seventy (70) meters had depreciated and reached the end of their service life. To avoid equipment failures, minimize unplanned downtimes, and ensure optimum availability and reliability of the Region's metering infrastructure, staff identified a need to upgrade and revitalize the metering infrastructure by replacing seventy (70) ION energy meters over a 5-year period replacement plan.

In accordance with the Region's Energy Metering, Monitoring, and Software Strategy, the Region intends to replace the existing seventy (70) depreciated Schneider Electric ION energy meters with the latest version ION energy meters manufactured and supplied by Schneider Electric. This will maintain and ensure standardization of the Schneider Electric ION energy metering devices that are compatible with and form an integral part of the existing ION Enterprise Energy Management software. This progressive standardization approach maintains compatibility, improves long-term manageability, and optimizes the lifecycle cost of this equipment.

3. Proposed Direction

Staff approached Schneider Electric Inc. to obtain a quote for a larger scale, five-year comprehensive energy meter replacement program as a result of the exclusive rights held by this vendor in regard to its products and the need for compatibility with existing equipment used by the Region. Schneider Electric Inc. has offered Peel a discount of twenty-five percent (25%) per meter due to the volume purchase, which staff view as good value.

A five-year meter replacement program with Schneider Electric Inc. is recommended by staff and is a non-competitive procurement process that requires Regional Council approval. The process to award this contract complies with the Procurement By-law 30-2018, as amended.

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In accordance with and Procurement By-law 30-2018, as amended, section 5.2.1 and Amending By-law 4-2020, which authorizes the award of direct negotiation procurements for goods and services that are reasonably available from only one source by reason of the scarcity of supply in the market or the existence of exclusive rights held by any vendor or the need for compatibility with goods and services previously acquired and there are no reasonable alternatives or substitutes.

The pricing provided by Schneider Electric Inc. for the replacement of seventy (70) ION energy meters over a five-year period commencing in 2023 through to 2028, incorporates a cumulative cost savings of approximately \$147,000 (exclusive of applicable taxes), and staff have determined that this represents good value is beneficial to the Region.


FINANCIAL IMPLICATIONS

The cost for the replacement of seventy (70) ION energy meters is \$441,000 plus applicable taxes. Sufficient funds are available within the OCCEM approved capital cost centre 22-7201.

Future ION energy meter purchases required subsequent to the five-year contract term will be included in future capital and operating budget submissions.

CONCLUSION

Staff recommends that the Region enter into a contract with Schneider Electric Inc. (Document 2023-063N) for the supply and delivery of seventy (70) Schneider Electric ION energy meters over a five-year contract term, in the estimated award amount of \$441,000 (excluding applicable taxes).



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