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The Regional Municipality of Durham Report

To: Works Committee
From: Commissioner of Works
Report: #2026-W-9
Date: April 8, 2026

Subject:

Extension of the Standardization of Emerson and GE Vernova Platforms and Associated Supervisory Control and Data Acquisition (SCADA) and Programmable Logic Controllers (PLC) Related Process Control Hardware; Approval to Enter into an Agreement with ElectroZad; and Approval to Enter into an Agreement with Gray Matter Systems Canada Required to Support, Maintain, Secure and Sustain SCADA Systems for Regional Water and Wastewater Facilities

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That the standardization of Emerson Programmable Logic Controllers (PLCs) and GE Vernova Platform and Control System software, the associated Controls Equipment, Change Management systems, Operational Technology (OT) Cybersecurity Software-Hardware, and Industrial OT Computing Platforms used for the integration, operation, maintenance, and upgrade of the SCADA systems supporting Regional Water Supply and Wastewater facilities, be continued and expanded, as required, until December 31, 2031, in order to maintain system reliability, operational resilience, safety, cybersecurity, and regulatory compliance, and to minimize operational risk to critical water and wastewater infrastructure; and

- B) That sole source agreements be awarded to ELECTROZAD for the Purchase of Emerson Hardware, Related Software, Training, and Associated Services and GRAY MATTER SYSTEMS CANADA for Proficy Industrial Software Suite, Associated Hardware, Maintenance Plan, Supporting Software, Training, and Other Related Goods and Services for a five (5) year term, ending December 31, 2031 at an estimated annual cost of \$850,000; and

- C) That the Commissioner of Finance be authorized to execute the negotiated agreements and amendment agreements.
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Report:

1. Purpose

1.1 The purpose of this report is to:

- a. Seek Regional Council approval to extend the standardization of Emerson Programmable Logic Controllers, GE Vernova Control Systems software, associated specialized hardware, process control equipment, and control system software used within the SCADA systems supporting the Regional Municipality of Durham's Water Supply and Wastewater facilities, until December 31, 2031; and
- b. Seek Regional Council approval to enter into agreements with
 - ELECTROZAD from May 1, 2026 to December 31, 2031; and
 - GRAY MATTER SYSTEMS CANADA from September 21, 2026 to December 31, 2031.

2. Background

2.1 The current standardization of PLC, SCADA Software, specialized hardware for both PLC and SCADA, and supportive process control equipment/software expires on April 30, 2026 and requires renewal.

2.2 The current agreement with ELECTROZAD (formerly SESCO and GESCAN) for Programmable Logic Controllers, related process control equipment, related Software, Training and Support expires on April 30, 2026 and requires renewal.

2.3 The current agreement with GRAY MATTER SYSTEMS CANADA for SCADA-related Software, related Hardware, Maintenance Acceleration Plan with Support (previously GlobalCare) and Training to Support this customized SCADA integrated controls system expires on September 20th, 2026 and requires renewal.

3. Previous Reports and Decisions

3.1 Works Committee Report #2010-W-21 approved Standardization of Programmable Logic Controllers, Related Process Control Equipment and Control

System Software and the Renewal of Agreements with GE Intelligent Platforms Canada, Gray Matter Systems Canada.

- 3.2 Works Committee Report #2014-W-58 approved the extension of the standardization of process control products for SCADA projects and expanded the Regional standard to the Region's 14 Water Supply systems.
- 3.3 Works Committee Report #2014-W-58 also authorized the negotiation of purchase agreements for software, support, training and hardware that support the SCADA systems that control the Region's Water and Wastewater facilities.
- 3.4 In April of 2016 the pricing for the purchasing agreement was extended for a period of 5 years and the agreement was executed by the Commissioner of Finance.
- 3.5 In the 1920's GESCAN Automation started out as a division of Canadian General Electric Co. Ltd. (CGE) and was re-named General Electric Supply Canada (GESCAN) in 1975.
- 3.6 In late 2019 GE Digital sold their line of Programmable Logic Controllers and hardware to Emerson Automation Solutions. Prices from the existing GE purchase agreement with the Region have been upheld since the transfer of ownership.
- 3.7 On January 1, 2024, GESCAN Automation Ontario joined the SESCO business, creating one consolidated Operating Company SESCO.
- 3.8 On October 30, 2025, SESCO officially become ELECTROZAD (A Sonepar Company)
- 3.9 [Works Committee Report #2021-W-5](#) approved extension of the standardization of Programmable Logic Controllers, SCADA Software/Hardware, Related Process Control Equipment and the Renewal of Agreements with ELECTROZAD (previously GESCAN) and GRAY MATTER SYSTEMS CANADA.

4. Justification for Standardization of Equipment and Sole Sourcing of Software and Support

- 4.1 The primary objective of standardizing SCADA equipment and software across Water Supply and Wastewater facilities is to ensure seamless integration of all operational sites into a unified monitoring and control Human Machine Interface (HMI) environment. Standardization enables operators to view and manage any facility from any location, improving situational awareness and operational

efficiency, and supporting unified monitoring wherever technologically feasible across the Regional network.

- 4.2 Standardization of process control products mitigates the risks associated with using multiple manufacturers, including communication failures, interoperability issues, and reduced overall SCADA system reliability. A unified platform also strengthens security and data safety protections by reducing system complexity, minimizing cyber-attack surfaces, and ensuring consistent planning and application of security controls, thereby enhancing overall system robustness and resilience.
- 4.3 A common hardware and software platform ensures that operations and maintenance staff maintain strong working knowledge of the equipment, enabling efficient troubleshooting and supporting compliance with regulatory requirements. Standardization also reduces training needs, streamlines project delivery, and minimizes operational and capital risks. A unified platform further enables staff to keep pace with rapidly evolving Operational Technology (OT) and supports more effective planning and execution of system upgrades across all facilities.
- 4.4 Currently, this equipment is now in place at 45 sites, with ongoing deployments and upcoming projects scheduled to extend coverage to 104 Regional facilities. SCADA infrastructure in newly constructed or expanded facilities is upgraded to comply with these standardized requirements. Over time, the Region's objective is for all Water and Wastewater facilities to adopt this standardized platform, ensuring uniformity, reliability, operational and service excellence, safety including cyber security, and long-term lifecycle support across the Region.

5. Financial Implications

- 5.1 Section 7.2 of the Purchasing By-Law #16-2020 allows for the acquisition of goods and services through limited tendering (sole/single source) in specific circumstances set out in Appendix "C" where the required goods or services can be supplied only by a particular supplier and no reasonable alternative and substitute goods and services exist for reasons such as ensuring compatibility with existing goods or to maintain specialized goods that must be maintained by the manufacturer of those goods or its representative.
- 5.2 The extension of an existing contract would prove more cost effective or beneficial. All purchase agreement extensions will be executed by the Commissioner of Finance.

- 5.3 Section 3.1.5 of the Purchasing By-Law #16-2020 permits the standardization of goods wherever possible.
- 5.4 Financing for the purchase of the Programmable Logic Controllers, SCADA Software and related Hardware for each facility reconstruction/expansion is included within the applicable project budget.
- 5.5 Financing for the provision of equipment, software, hardware and services to support SCADA/Controls Systems, including an estimated value of \$850,000 per year covered under these agreements will be funded from the annual Water Supply and Sanitary Sewer Business Plans and Budgets.

6. Relationship to Strategic Plan

- 6.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
- a. Align Regional infrastructure and asset management with projected growth, climate impacts, and community needs.
 - b. Ensure accountable and transparent decision-making to serve community needs, while responsibly managing available resources.

7. Conclusion

- 7.1 It is recommended that the standardization of Programmable Logic Controllers (PLC), Supervisory Control and Data Acquisition (SCADA) software, and associated process control equipment hardware and software used to maintain and upgrade SCADA systems supporting Regional Water Supply and Wastewater facilities be extended until December 31, 2031.
- 7.2 It is recommended that sole source agreements with ELECTROZAD and GRAY MATTER SYSTEMS CANADA be authorized for the provision of software, hardware, support and training as follows:
- ELECTROZAD from May 1, 2026 to December 31, 2031 and
 - GRAY MATTER SYSTEMS CANADA from September 21, 2026 to December 31, 2031.
- 7.3 It is recommended that the Commissioner of Finance be authorized to execute the negotiated agreements and amendment agreements.

7.4 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the financial recommendations.

7.5 For additional information, contact: Tyler Wilson, Manager, SCADA, at 905-668-7711, extension 3117.

Respectfully submitted,

**Original signed by David Dunn, Director,
Transportation and Field Services
for**

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer