

About Us:

Automation Now Inc. has been a leading North American provider of high-quality industrial control and automation systems in the mining, forestry and municipal water/wastewater sectors for 23 years.

We deliver full-service turnkey solutions: design, build, programming and installation of heavy commercial, industrial and municipal projects all under one roof. Projects are completed faster and more efficiently by eliminating barriers between trades and between engineering and construction.

The company currently employs a total staff of 38 multidisciplinary instrumentation/electrical tradesman, technicians, engineering technologists and engineers. Our knowledge base diversity (Red Seal instrumentation and control technicians, technologists, and master electricians) allows us to solve any electrical issue ranging from PLC programming issues, to VFD drive setup, motor control panel, substation or distribution systems needing to be constructed, maintained or repaired.

Because of our centralized location in North America, Automation Now is able to offer complete services to clients from coast to coast and throughout the U.S. Midwest. Past project locations include Vancouver Island, Truro, Nova Scotia, Minnesota, Wisconsin, Michigan and Maine.

Field of Expertise:

- Control panel design, build and supply (electrical & pneumatic).
- Electrical and control systems design, drafting and construction.
- Electrical contracting, maintenance, troubleshooting and service.
- Instrumentation contracting, maintenance, troubleshooting and service.
- PLC programming, hardware specifications, troubleshooting and integration.
- SCADA/HMI configuration, hardware specification and troubleshooting.
- HVAC & building automation
- AutoCAD – design & drafting services.
- VFD specification, troubleshooting, installation, programming and supply.
- Low & medium voltage electrical troubleshooting and installation services.
- Infrared Thermography (IR Scans) 2 certified thermographers on staff.
- HVAC systems
- Custom E-Houses
- Power Systems Maintenance and Design

Accreditations Include:

- **Licensed Electrical Contractor** (Ontario) ECRA License #7000829
- **Red Seal** Instrumentation Technicians on Staff
- **Red Seal** Electrical Technicians on Staff
- **OPP and Ministry of Government** Services Security Clearances
- **OACETT** certified Electrical Engineering Technologists
- **OIT Certificates** on staff
- **CSA** Certified Panel Shop

Industry Partners:

Allen-Bradley (Rockwell Automation) - Recognized System Integrator

Inductive Automation - Ignition Registered Integrator

Johnson Controls - Authorized Building Control Specialists

Schneider Electric / FPE - Certified SI Alliance Partner

Toshiba - Local Authorized VFD Commissioning and Maintenance Representative

Licensed Electrical Contractor in the Province of Ontario ECRA License #7000829

Red Seal Instrumentation Technicians on Staff

Red Seal Electrical Technicians on Staff

Siemens RUGGEDCOM Mobile - WiMAX trained personnel on staff

OPP and Ministry of Government Services Security Clearances

OACETT certified Electrical Engineering Technologists

OIT Certificates on staff

Wonderware - Only Certified Systems Integrator in North Western Ontario and a recommended global System Integrator (three certified System Integrators specializing in Historian Server, Historian Client, InTouch and InTouch for System Platform). Automation Now has produced award winning applications.

Automation Now also brings a strong Health & Safety Commitment to all projects with zero lost time since 1998, Automation Now takes safety seriously and ensures everyone goes home to their family at the end of the day. Our safety record reflects our commitment and compliance regarding all legal requirements and industry health and safety practices.

Automation Now's success can be attributed to the knowledge, determination and commitment of its team to deliver Integration services that maximize uptime while minimizing costs.

Past Waterworks Projects:

City of Thunder Bay, Bare Point Water Treatment Plant

City of Thunder Bay set a goal to implement a 'lake-to-lake' water management system, including construction of a new facility using ultra filtration systems. Automation Now was contracted to design, supply, program and commission a plant-wide Allen-Bradley ControlLogix PLC Platform, Device-Net equipped MCCs, Ethernet process network and Wonderware SCADA system. The system—which supplies the City's 120,000 residents with safe drinking water—needed to meet unique challenges (including integrating an existing pumping station with new plan equipment and planning for future expansions). Automation Now created a versatile and future-minded system that has the capacity for real-time monitoring and controlling along with data recording—and successfully delivered the project

Within the aggressive project timelines. The Bare Point Water Treatment Plant SCADA system created by Automation Now was awarded "BEST WORLDWIDE SCADA SOLUTION 2006" by Wonderware Invensys. Upon completion of that project in 2008, Automation Now has been providing the City of Thunder Bay with ongoing services; since that time, and has been the sole service and support for all plant-wide electrical and SCADA services.

Venshore Mechanical, Atlantic Avenue WPCP – Plant Remediation Project

On May 27 and 28, 2012, an unpredictable and unprecedented storm event occurred resulting in flood damage at the Atlantic Avenue Water Pollution Control Plant in Thunder Bay. Immediately following the May, 2012 flood event, the City sought the emergency assistance of consultant, AECOM (Winnipeg), Venshore Mechanical Limited, and Automation Now Inc. The prime focus of our early efforts had been to re-start plant processes after the below grade areas of the plant were dewatered. Most plant processes had been re-started by the first week of July, 2012, at least in a manual mode.

Automation Now Inc. was responsible for all electrical systems repair and replacement of instrumentation and process control systems during that emergency event. Automation Now Inc. worked on site for Venshore Mechanical (General Contractor) and were responsible for the removal and replacement of wiring, cables, cable trays and appurtenances; refurbishment, or, replacement of electrical equipment; rebuilding, or, replacement of mechanical equipment; and, removal and replacement of process control systems. Capital budget work includes the electrical installation of two influent pumps in the main pumping station with the installation of a 600 hp VFD, replacement of all motors, the rebuilding of the electrical systems in the primary treatment, replacement of the blowers in the secondary treatment plant, the ventilation system controls and electrical in the screen and grit building, and the controls and electrical for the screen and grit bypass systems.

Since then, Automation Now has been working with the City of Thunder Bay to support electrical, instrumentation, and control aspects at the site, including upgrade, repairs and regular maintenance.

Township of Atikokan Sewage Treatment Plant:

In 2014, the Township of required upgrades to its sewage treatment plant, including a new SCADA system to allow for data logging, trending, operator interfacing to control set points and field devices, with these controls performed from two computer terminals in the main plant office. Electrical field wiring and instrumentation needed to be installed first, in order for the SCADA system upgrade to be completed. Automation Now specified the types of instrumentation, installation locations and procedures for all new analytical monitoring and the installation of metering pumps, plumbing, panels and heat tracing. To connect all of the newly installed instrumentation, electrical connections to the central PLC cabinet were installed. Automation Now created all interconnection drawings, cable schedules, burial routes and cable mounting plans. The electrical install was completed with all modifications to existing starters, MCC's and existing junction panels, installation of new marshaling cabinets and junction boxes. To verify all wiring and the calibration of each instrument, Automation Now Inc. completed all I/O commissioning and verifications with the PLC and SCADA computers.

The system provided the Township of Atikokan with a reliable solution that was suitable for a small municipality in a rural location—and took into consideration their future needs. Automation Now continues to support this facility through remote access and emergency on-site service when required.

The above situations are a sample of key projects that illustrate Automation Now's understanding of the complex issues facing the water and wastewater industry. In working with these clients, Automation Now has gained a solid understanding of a range of issues, including the capacity to understand the immediate and long-term needs of the clients, to customize unique solutions to meet those needs, and to deliver services within timelines and to respond to emergencies.

B.C. Hydro John Hart Generating Station Bypass System

Installation of 6 new bypass system control valve control panels with motor starters for 3 new bypass valves (redundant panels). Project Schedule: PO received February 2016, shipped to site May 2017 (panels assembled in 12 weeks) The panels were based on relay logic, with the relay logic being duplicated & configured for mirrored redundancy between the two control panels required for each valve.

Each panel allowed for local or remote control of the isolation valve. The redundancy was accomplished using relays (28 control relays), mirroring the control, status & alarms between the 2 panels, with the system being able to run in lead/lag, parallel or fail over modes in both local & remote control. The hydraulic system connection was designed to be redundant, with system pre-charging & post cooling / filtration being accomplished using timers & relay logic. The panels were designed, configured & assembled with a seismic rating. Included in the scope was the full electrical & control system design for the panels, as well as the complete assembly of the control panels, field installation drawings & instruction, & field start-up, testing & commissioning.

References

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