

Utilities – Grimsby Power Inc.



Background

Kitchener-Wilmot Hydro (now Grimsby Power Inc.) required an existing system upgrade as well as new system projects for large transformer stations. ESAC worked with the client's engineering, P&C and SCADA departments in a combined effort to design and implement integrated protection, control and metering systems. Throughout the project, there was an emphasis to develop a current solution standard that addresses the upgrades of both existing and any new transformer stations in order to achieve management's monetary benefits of automation and system reliability.

Approach and Methodology

ESAC took existing central controlled RTU with integrated protection relays on self-healing LAN, HONI (Hydro One Networks Inc.) and IESO (Independent Electricity System Operator) remote SCADAs. The design included soft control of feeder breakers open/close, block/reclose and low set block with RTU "watch dog" logic for operation fail alarming. ESAC implemented the project with minimal field wiring, design drawings and RTU/relays software logic standard models. Throughout the project design, development and implementation, ESAC worked with client technical staff to ensure technology transfer. Standard products with a consistent solution allowed for focused training to achieve system P&C support and maintenance.

Key Challenges

An "over build" approach was taken in order to perform upgrades on in-service existing products to have minimal outage time. As well, transferring integrated solution expertise into design and implementation groups ensured the technical understanding to achieve a reliable system, capitalizing on applied technology.

Ongoing Support

ESAC provides engineering and P&C technical support as required, as well as budget development assistance for upcoming projects. ESAC is able to advise on products and solutions market direction for long term planning.