

## Utilities – Kitchener Wilmot Hydro



### Background

Existing and new Transformer Stations design, RTU panel supply, software application and commissioning services. Working directly as a project team with client engineering, technical and operations groups. Remote control was the existing central SCADA system. Completed design included a combination of ESAC panel and communications with client engineering addressing other interface details. Installation and commissioning collaborated efforts with technical and operations addressing safety and in-service requirement. Objective was to supply a standardized modular solution [Software, hardware and wiring] ensuring consistency over multiple sites permitting technical staff technology transfer for future support and maintenance.

### Approach and Methodology

Modular for sectional upgrades and commissioning considering an existing in-service Transformer Station. Outages coordinated with installation and commissioning requirements providing new system in-service portions. ESAC's design resulted in wiring and software application blocks of each station section. In this manner, quality assurance and required works time was improved. RTU panel with software application was shop fabricated and tested prior to shipping. Site installation technical support and commissioning leadership resulted in effective efforts aligning with outage schedules.

### Key Challenges

Existing Transformer Station required sectional approach with wiring rework having vintage devices and equipment. Achieving protections integration software module that accommodates different applications. Evolving existing central SCADA software interface to accommodate RTU logical control functions. Designing the overall system such that technical details of sections blocks supports an installation and commissioning procedure.

### Ongoing Support

With utility engineering and technical resources completing all works internally, ESAC assists on an as needed basis. Topics typically of maintenance support or current market products application design impact.