

Renewables – Grimsby Power Inc.



Background

New Transformer Station Protection and Integration system supplied as subcontract to the Design-Build project. ESAC worked with general contractor and engineering group in a combined effort to supply turn-key integrated protection and control panels addressing all station requirements including 3rd party contracted central control provider. The emphasis was to supply a standard products solution tailored to applicable standards, local and central operating requirements. As with many utilities, DGs [Distribution Generation] applications and feeders reclosures were added over the years.

Approach and Methodology

ESAC expanded the original integrated protection and control system with DG SCADA and feeder protection. DGs required protection coordination including downstream reclosures, radio linked transfer trip and secure cellular integration all incorporated into the transformer station system. Pathloss studies to ensure radio system details and existing feeder protection additions for functional requirements. Distribution SCADA for both feeder reclosures and DG integration. All works complied with technical standards, review and commissioning processes providing an extension of utility engineering resources. A new distribution system panel was supplied to accommodate current with future DGs and numerous feeders reclosures.

Key Challenges

Addressing DG interface technical requirements and acceptable scheduling that permits a reasonable project execution. Ensuring DG compliancy that at times was challenging. Supporting utility work forces in construction applications not previously experienced. Completing works at DG to achieve quality results.

Ongoing Support

ESAC provides engineering and P&C technical support or service as required including budget development assistance for upcoming projects. ESAC advises on products and solutions market direction for long term planning.