

Enbridge – Talbot Wind Farm Preventative Maintenance

CLIENT

Enbridge Ontario Wind Farm

LOCATION

Ridgetown, Ontario

PROJECT DESCRIPTION

Enbridge and Renewable Energy Systems Canada (RES Canada), an affiliate of RES Americas, have completed the 99 megawatt (MW) Talbot Wind Project. The project generates enough clean wind energy to power about 33,000 average Canadian homes and offsets about 106,600 tonnes of carbon dioxide each year.

B&M SCOPE OF WORK

Black & McDonald's (B&M) Field Service Division was contracted to perform the following services:

- Review design drawings including single lines, three lines, AC/DC schematics, logic drawings
- Point to point verification of all control and secondary cabling and provide as built
- Maintain the 230 kV switching station (Spence) and 230 kV to 34.5 kV substation, including motorized & manual disconnects, CVTs, circuit breakers, lightning arrestors, power transformers, protection and control, and AC/DC systems
- Maintain the entire collector system including pad-mount transformers, vista switches and underground HV cables
- Protection element testing, logic testing of all GE & SEL relays
- Teleprotection setup and verification
- Perform primary injection to verify phase angles and ratios
- Perform overall functional tests on entire electrical system
- Telemetry testing with IESO
- SCADA points testing
- Transfer trip testing with HONI TS
- Three terminal line differential testing with HONI