

## CASE STUDIES



## Case Study

## Brockaghboy Windfarm – Control & Automation – PLC and SCADA

| Contact             | Client | Obelisk      |
|---------------------|--------|--------------|
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|                     |        |              |

## Scope

Our Client, Obelisk, were required to provide a control & automation system to monitor and the HV infrastructure at Brockaghboy Windfarm.

The specification required the design, programming and commissioning of a SCADA/PLC system to monitor and control the equipment associated with the HV infrastructure. The PLC system was required to interface with the new HV switchgear, as well as various other infrastructure components and display this information on a new SCADA system.

Obelisk provided a comprehensive URS, from which a comprehensive FDS was created. Following dialog with the client this FDS was tailored and adjusted to produce a DDS. The PLC and SCADA programs were then programmed to reflect this DDS, being tested throughout. In-house testing them took place of the entire project to check it's correct operation against the DDS. The correct operation was documented against test sheets. Any corrections were applied and retested throughout this test process.

On successful completion of in-house test a full set of FAT (Factory Acceptance Test) documents were created and sent to the client for approval. Following approval the client was invited to the Laplace offices to perform a FAT. This FAT was carried out as per the FAT documentation and checked against the FDS, for correct operation. All FAT documents were signed off by the client and ourselves, as the test were carried out. All systems were then delivered to site. Following there

successful install, commissioning tests commenced, to ensure correct operation with the plant. All systems were tested to ensure the correct operation. All commissioning tests were fully documented, throughout the process. Following a period of proven testing the system was "handed" over the the client to allow for a full, documented, operation SAT (Site Acceptance Test) to take place. The system was monitored for a further two days before be handed over to the client to

allow them to continue their operational and performance tests.

The client tested the system for a further two weeks, following which any snags and/or improvements were corrected/implemented and tested.