

Case Study

AN **idom** GROUP COMPANY

Project

Easter Aberchalder Wind Generator

Date

2014

Client

Easter Aberchalder Estate

Turbine

Windflow 500kW Class 1A

Client's Consultant

Ecodyn Ltd

Foundation Contractor

Turner Construction

Roads Contractor

CR Construction Ltd

Electrical Contractor

G2 Energy Ltd

Overview

Windflow UK has installed the 101st Windflow 500 turbine at the Easter Aberchalder Estate, to the south west of Inverness, its most challenging site to date. The turbine is located at an elevation of 440m and is reached at the end of 3.6km of private estate tracks. This access was one of the main challenges given the 20% inclines and a weak bridge with only 3.0m internal width. Engineering solutions were developed to allow the construction of the works and the safe deliver of the turbine components.

The new 2.6km grid connection utilised directional drilling methods to cross under two streams in order to mitigate the environmental impact.

Idom Merebrook managed much of the design and construction of the balance of plant for this testing project for the Easter Aberchalder Estate.

Challenges

- Steep access route
- 2600m of underground HV cabling works for grid connection
- Construction of HV Switchgear, Transformer housing and client electrical system
- Fibre optic communication system, 2,900m
- Grid improvement works

Services Provided

- Project management
- Quality and design compliance checking
- Assessment of existing structures
- Contract preparation and contractor appointments
- Contract administration
- Grid connection coordination
- Health and safety advice
- CDM Coordination services



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