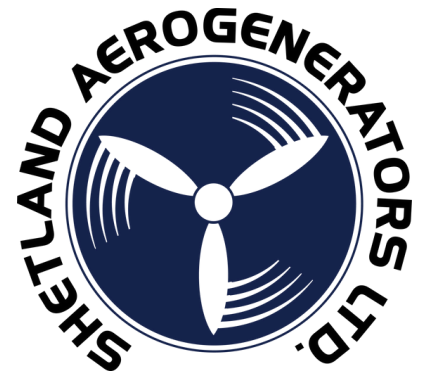


Luggie's Knowe Phase 2

Gremista, Lerwick, Shetland, UK



Extension of existing windfarm site in Lerwick, Shetland - more than doubling wind generation capacity and adding a 15MW Battery Energy Storage System

Existing project - Luggie's Knowe Phase 1

Shetland Aerogenerators Ltd. (SAL) developed the first phase of the Luggie's Knowe windfarm in 2015, with the erection of one Enercon E-82 3MW wind turbine.

Power is exported to the local electricity distribution system via SSEN's local Active Network Management system.



Extension - Luggie's Knowe Phase 2

SAL are extending the Luggie's Knowe windfarm site, with the addition of a 5MW wind turbine and 15MW BESS. Project details:

Project Details

- January 2024 - Full Environmental Impact Assessment and Planning Application submitted
- November 2024 - Consent granted for **149.9M tip height 5MW Wind Turbine** and **14.9MW BESS**
- **Grid Connection offer** from SSEN - earliest connection date November 2025 (export via ANM from March 2027)

- **Construction** from August 2026 - depending on technology and contractor availability
- **Component delivery** via Greenhead Base, Lerwick Harbour ~1km from site

BESS Use Case

SAL are currently exploring options for the BESS, which will be integrated with the new wind turbine. Current options include, but are not limited to:

Peak Reduction Generation Turn Up to help manage a local daily demand peak of 5MWh for three hours (AM and PM)

Arbitrage Storage of excess/curtailed power from wind turbine for sale at peak demand

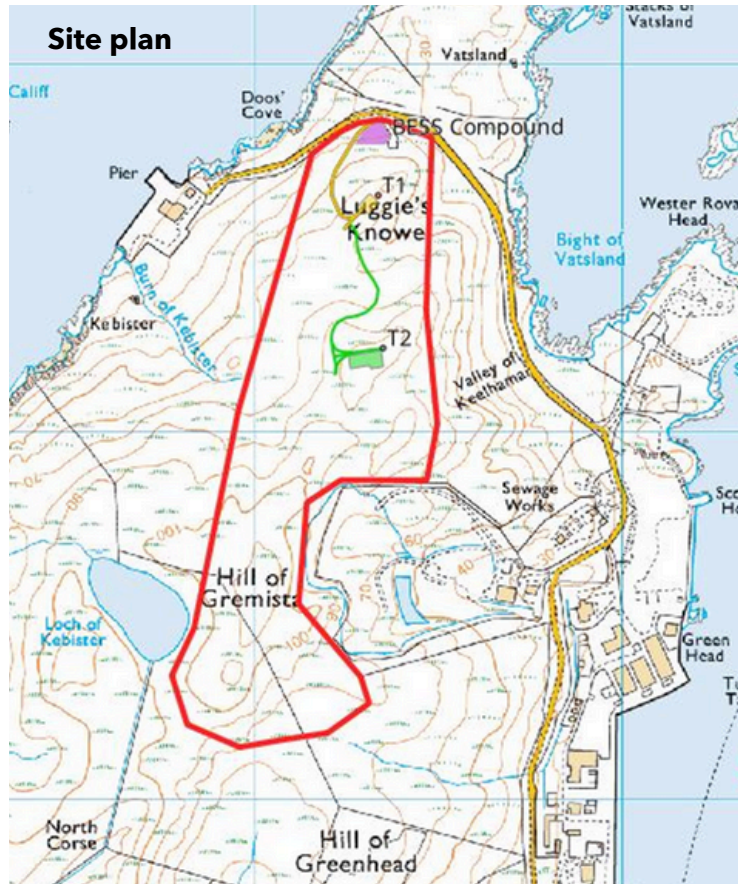
Facilitating Private Wire Using BESS to enable private connections to local high-energy-demand users, smoothing power supply and reducing costs

More info

See our website:
www.shetlandaero.co.uk/projects

Contact

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Visualisation of Luggie's Knowe site from the west - showing existing 3MW turbine (left) and consented 5MW turbine (right) with Dales Voe decommissioning base in the foreground