



## DEIF VESTAS RETROFIT CONTROL SYSTEM SUPPLY AND INSTALLATION

### Key Benefits:

- Increased income
- Higher availability and less downtime
- Improved efficiency
- Increased Annual Energy Production and performance
- Reduced maintenance costs over the lifetime of the turbine through reduced wear and tear and by replacing outdated parts with new technology
- Extended turbine lifetime
- New management system (SCADA) interface
- Automatic reset of alarms
- Full control of turbine parameters
- New intelligent power and speed control
- Derating strategies to avoid stops
- State-of-the-art turbine control software



Realise Energy Services are wind energy specialists dedicated to delivering a comprehensive range of high-quality wind turbine operation and maintenance services and associated products and technologies to optimise the performance, availability and ongoing service and maintenance of our customers' wind turbines.

Many turbines Realise Energy Services visit are initially found to be operating below their optimal efficiency. This can be due to a variety of issues from site specific conditions, turbine equipment condition, parameter and control settings to blade pitch and electrical equipment design.



This means lack of availability and poor performance causing loss of production and reduced income for the customer.

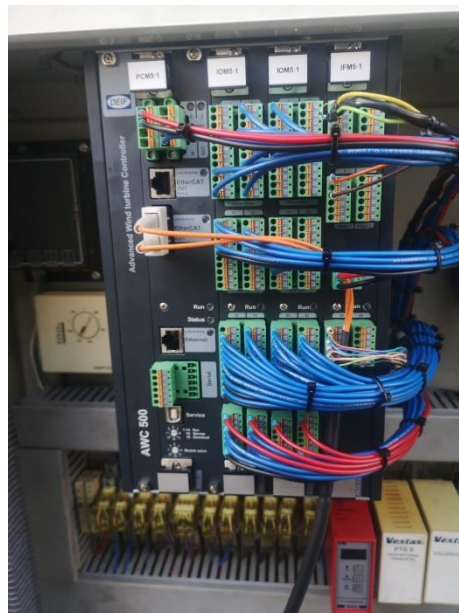
Realise Energy Services now offer a range of bespoke turbine services which are designed to identify and then rectify performance issues. Typical improvements have been found to produce between 5% and 15% increased output.

As part of this drive to improve turbine performance, Realise Energy Services have partnered with leading European control system manufacturer, DEIF Wind Power Technology, to offer a range of turbine retrofit solutions designed to optimise turbine efficiency, maximise turbine performance and increase production of your wind turbine.

With an impressive background in turbine control system design and manufacture, DEIF offer a comprehensive range of wind turbine retrofit control solutions including wind farm & pitch control technology and turbine control strategies.

As the authorised partner of DEIF Wind Power in the UK, Realise Energy Services' DEIF-trained technicians are now able to assess your turbine and design, model and install a bespoke DEIF solution tailored specifically to your turbine. This can optimise production with increased functionality and reduced wear and tear ensuring improved turbine performance and availability.

We can offer clients a range of cost-effective, yet high quality retrofit solutions manufactured by DEIF who have a proven track record across a global fleet of hundreds of Vestas turbines supported with our locally based operation and maintenance and turbine monitoring services.



DEIF Wind Power Technology is the **only** worldwide approved alternative for the original COTAS controller in Vestas and Vestas-derived turbines.

DEIF has a worldwide service organisation that supports its UK authorised partner Realise Energy Services with technical support, technological developments and upgrades, training and spare parts.

