### CASE STUDY

# SGS IN ENGLAND: END OF WARRANTY INSPECTION FOR CENTRICA

ISSUED – MAY 2013

SGS was awarded a contract to provide in-service end of warranty inspections for 54 Siemens SWT-3.6-107 offshore wind turbine generators at a wind farm on England's eastern coast by Centrica Renewable Energy Limited.

In May and September 2013 respectively, SGS entered into two contract agreements with Centrica Renewable Energy Limited of the United Kingdom to provide in-service end of warranty inspections for 54 Siemens SWT-3.6-107 offshore wind turbine generators (OWTG) at a wind farm on England's eastern coast. Divided into two equal parts, 27 OWTG underwent end of warranty inspections for rotor blades as well as tower and

machinery to prevent major damage and reduce operations and maintenance costs in summer 2013 and the remaining 27 in autumn. The biggest challenge to 3 SGS on-site inspectors was keeping the tight time schedule offshore, especially in autumn when the weather became worse. Incumbent upon weather conditions, approximately 1 OWTG could be inspected daily.

#### **CENTRICA RENEWABLE ENERGY LTD.**

Centrica is a top 30 FTSE company with 40 000 employees worldwide and 31 million customer accounts predominantly in the UK and North America. Active at every stage of the energy chain, Centrica sources, generates, processes, stores, trades, supplies, services and saves energy.

As the largest installer of energy efficiency products in the UK, Centrica has significantly committed to developing renewables assets in order to secure energy needs in the UK amid growing concern about climate change.

Project leaders at Centrica selected SGS to conduct in-service end of warranty inspections at the English location due to its position as the world's leading inspection, verification, testing and certification company boasting a global network of accredited SGS inspectors offering unsurpassed experience in the renewable energy sector.









#### SGS END OF WARRANTY INSPECTION

Due to costly wind farm operation and maintenance, it is imperative that wind turbines operate efficiently for an extended period of time. Manufacturers are responsible for repairs of deficiencies found during regular inspection of wind turbines within the warranty period. SGS end of warranty inspection is crucial in determining all components defect-free before warranty expires in order to establish any last warranty claims. In England, SGS end of warranty inspectors helped Centrica:

- ensure wind turbines provide effective operation over the longest possible period of time
- identify critical component deficiencies and failures within the warranty period
- establish appropriate warranty claims to secure repairs carried out by manufacturers
- minimise cost of maintenance by implementing effective warranty claims

In addition to expert SGS inspection of wind turbine components, SGS end of warranty inspection includes a detailed report of all findings to support any necessary warranty claims.

#### THE ENGLISH PROJECT

Together with manufacturer Siemens technicians, SGS specialists provided Centrica with comprehensive end of warranty services.

One SGS inspector was responsible for the examination of the tower and machinery using:

- video endoscope inspection of the gearbox
- oil and grease analyses
- visual inspection of tower and machinery

The two remaining SGS experts performed:

- rotor blade inspection implementing rope access technique to provide perfect view of blades
- measurement of the lightning protection system

Upon completion of this particular wind farm inspection project, a very satisfied Centrica looked to SGS for more inspection services.

SGS is pleased to have assisted this prestigious partner in its commitment to provide clean, renewable energy to citizens of the United Kingdom.

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SGS IS THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

