

## A Training Case Study

### Scenario

One of our customers has gas turbines packages installed in various offshore locations. The maintenance teams had wide ranging skills and experience. Our customer requested training that would, refresh their knowledge and establish a core understanding throughout the maintenance teams. Our course design below, was tailored to meet the established need.

### Course Structure: 3 Day duration at our works

#### Aim

- To provide the delegates with an overview of the Gas Turbine Generator package installed.
- To identify and have knowledge of the systems that form the package.
- To impart theoretical knowledge of the Gas Generator and Power Turbine.
- To have an understanding of how systems work, and the frequent problems encountered in real life situations.
- Working with schematic diagrams, to understand a variety of systems employed on the package.
- To give a guide on typical maintenance tasks for a variety of scheduled outages.

#### Scheme

- Workshop visit
- Package introduction, course overview
- Combustion Air Inlet System
- Gas Generator
- The Enclosure
- Starter System
- Power Turbine
- Cooling Air System
- Lubrication Oil System
- Governor and Fuel System
- The Alternator
- The Main Gearbox
- Exhaust System
- Inhibiting
- Compressor Washing
- Oil filters, identifying and correct fitting
- Service Bulletins, classification, actions, and providers

#### Outcome

- Explain the operating principles for the type of Turbine in use, at your location.
- Describe the operating parameters and the importance of maintaining performance within the limitations of each turbine at your location.
- Describe the function of individual Turbine components and auxiliary systems.
- Explain the reasons for maintenance and the controls in place to mitigate impact on equipment integrity.
- Explain the routine maintenance tasks to be carried out on Turbines and describe the tools to be used when maintaining individual components.
- Explain start-stop procedures for the Turbine.
- Discuss permit to work requirements for this equipment.
- Discuss the proper isolation activities prior to working with this equipment.
- Discuss the risks and hazards associated with maintenance of Turbines.

#### Assess

- Instructor observation
- Multi-choice quizzes
- Task completion
- Award attendance certification

#### Contact Us

 [turbines@greenray.com](mailto:turbines@greenray.com)

 +44 1522 503 300

 Greenray Turbine Solutions Limited, Greenray House, Lincoln Fields Business Park, Paving Way, Whisby Road, Lincoln, LN6 3QW, UK

