

# Lightning Protection Compliance

Quartzelec delivers a fully compliant lightning protection scheme, installing an isolated system with three, 10m masts within identified compound

CCGT POWER STATION | LIGHTNING PROTECTION | UK

## Our Customer's Challenge

The owner/operators of a thermal power station in the South West of England with a total site capacity of 905MW were looking to ensure that the site maintained its high standards of Health and Safety, requiring a review of the complete site lightning protection systems.

## The Quartzelec Solution

With extensive experience in the Power Generation Sector, Quartzelec offers the high level of expertise the client needed to ensure site wide compliance with BS EN 62305:2011 for lightning protection. The complete project was split up into three stages of work.

### Initial Site Survey

Our experts reviewed buildings/structures for their construction, existing lightning protection and to establish whether present arrangements for lightning protection were satisfactory in relation to BS EN 62305:2011. The 4-day survey ensured relevant information was collected.

### Engineering Calculations and Design

All information was reviewed to gain a series of risk assessments on the "Risk of loss of human life" for each location and structure within the Power Station. These calculations confirmed the high pressure intake compound required additional lightning protection for compliance with British Standards. Due to its usage, designing an effective and compliant system was an interesting challenge, but an isolated lightning protection system requiring three, 10m stainless steel masts to be placed within the compound at specific locations was confirmed as meeting both safety and compliance and the most appropriate solution.

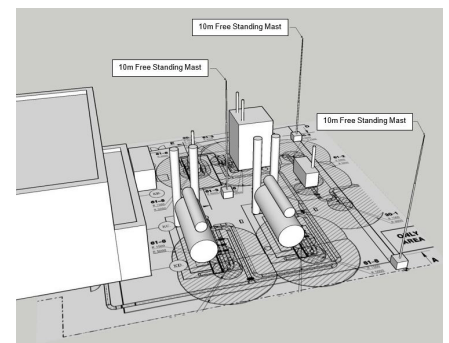
### Installation of Lightning Protection

Detailed method statements were produced to ensure the installation complied with the Institute of Gas Engineers & Managers legislations and in particular IGE/GL/5. Once approval was met the installation took place over a relatively short space of time.

## Key Benefits

The finished installation allowed for safe works to continue within the compound whilst providing the correct level of lightning protection

- Comprehensive survey of Power Station
- Calculations on the requirements for lightning protection
- Documentation in line with UK Legislation
- Detailed design to ensure correct lightning protection in place



Order Value  
circa £40k

Fully  
compliant  
scheme

4-day  
survey

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