



Alcad batteries provide earthquake-proof backup to the largest Greek utility company

Alcad has won a competitive tender to provide the batteries installed at Megalopolis B power station - all thanks to Alcad's reputation for high quality and reliability in Greece, says the manufacturer. WIP has the full report.

Alcad has recently supplied and also installed an anti-seismic backup power system in Greece at the Megalopolis B power station operated by the Public Power Corporation of Greece (PPC), the largest electricity producer and supplier in Greece with approximately 7.4 million customers.

The new nickel battery system provides more than eight hours' backup time for mission critical equipment at the 300 MW plant, including switchgear, oil pumps & lighting. The battery ensures the safe shut-down of the different installations and controlled switching to backup power generation.

Alcad's new system comprises a total of 680 cells in two
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- Pavlos Kantoros, Semicom GP Hellas

identical arrays of MB765P batteries and has replaced an existing battery installed 27 years ago. Mechanical strength and robustness was an important factor for PPC as the major Megalopolis power station is in an active seismic zone, where earthquakes are common. Current construction and engineering codes are structured around earthquake intensity, measured by Peak Ground Acceleration (PGA).

The battery installation can

withstand an earthquake with a PGA of 0.2g (one fifth the force of gravity), compared with the Greek government's guideline of 0.16g maximum for the nearby town of Megalopolis.

Alcad MB batteries can meet this requirement thanks to a robust construction with a steel pocket plate and tough polypropylene casing to ensure a long life.

Another important factor of the batteries' performance is their ability to withstand extreme temperatures. The temperature at the power station can vary between 15 and +30 °C and although the battery room has ventilation, it does not have air conditioning so the batteries need to perform reliably even at +30 °C. Whereas the service life of lead-acid batteries drops away as the

temperature rises, the nickel technology batteries can withstand exposure to heat for longer period of time. This makes them ideally suited for the Greek climate.

As well as supplying the batteries, Alcad's Greek agent Semicom GP Hellas, which is an approved Alcad service station, has provided training to PPC's technicians to understand the best operation and maintenance techniques.

"We need backup batteries to demonstrate long term reliability to give the confidence that emergency systems will work faultlessly when we need them. We have a lot of installations in Greece where Alcad batteries have successfully served for more than 25 years," said Pavlos Kantoros from Semicom GP Hellas, Alcad's Greek agent.