

Port of Dover: Dover, United Kingdom

Providing Full Generator Cover for the Entire Ferry Terminal

Covering a 4 km area, the distance between generators was an unusual challenge solved using DEIF's AGC-4.

Great Britain's Gateway to Europe, the Port of Dover is recognised as one of the busiest passenger ferry ports in the world with over 12 million passengers and 4.5 million vehicles per annum requiring a passage to France for onward travel throughout the continent. The Port of Dover also handles £80 billion of trade each year.

Being a major transport hub, the requirement for a secure power supply at the port is essential. The risk of potential power outages lead to the decision to upgrade the existing embedded generation system to provide full generator cover for all areas of the ferry terminal with additional ability to export power on demand into the Local Distribution Network, benefitting other users of the STOR (Stand by Operating Reserve) scheme.

DEIF assisted with the application requirements, supplying AGC-4 Advanced Generator Controllers for local and remote control of mains connection, island operation, mains synchronisation and export control.

Honouring Unusual Challenges

The Eastern Docks site required a fibre optic communication connection between generators over an extensive 4 km area for remote monitoring and generator functionality. Using DEIF's patent-pending Emulation Solution, the project was fully factory-tested to comply with these distances prior to installation.

The distance between generators was another unusual challenge that DEIF was also able to honour thanks to the company's state of the art R&D and test centres at its manufacturing facility in Denmark. Although the solution was a DEIF standard, for the Port of Dover it was a more secure system, guaranteeing a safer supply for its power demands.

DEIF's AGC-4 features proven technology for a wide range of generation systems in critical power applications, including synchronisation to the grid, mains power export, and load take over where load is transferred from the mains to the generator as well as serial communication protocol via TCP/IP.

As opposed to more conventional master-slave configurations, DEIF uses its own Power Management Systems including a powerful M-Logic configurator tool for logic relay customisation.



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Data

- ✓ Backup power solution with dual CAN lines for Port of Dover
- ✓ Remote HMI interface to optimise daily operations of widely scattered generators
- ✓ Shift operational modes from island to power export for safe supply & revenue generation
- ✓ Fast onsite installation and commissioning using DEIF Emulation
- ✓ Close Before Excitation – get online in less than 10 seconds
- ✓ Hot Standby – Change to backup genset controller on the fly
- ✓ Multi-master system (system does not rely on just one controller)
- ✓ Compliance with G59/2 requirements

Product



Automatic Genset Controller, AGC-4

Diagram From Case

