

Automatic Genset Controller, AGC Plant Management

Fuel-optimised Plant Management for up to 992 gensets



Awarded Project/Initiative of the Year at the 2012 IPEE/Power Industry Awards in the United Kingdom, DEIF's ground-breaking AGC Plant Management solution controls systems of up to 16 grids and 992 generator breakers. Tried and tested at locations in Africa, Asia, and South America, AGC Plant Management solutions have been developed not just with an eye for safety but for fuel saving and optimised maintenance intervals. The system introduces fan control, black starts in both island and fixed power mode, and asymmetrical load sharing designs to cut running costs. Lifting genset control from single units to plant level, easily enabling comprehensive control and protection for large setups from one central point of intelligence, AGC Plant Management incorporates plant power and power factor control at connection points, load profile priorities routines and much more.

Cost-optimised design

The comprehensive AGC Plant Management solution uses the plant's generators to black-start large step-up transformers directly. With a proven ratio of up to 1:39 between the generator and the transformer, the solution cost-optimises black-start of plants in both island and fixed power mode, limiting the need for high voltage breakers. With a dedicated plant communication structure, SCADA systems are kept separate from the control system, limiting on-site installation to a minimum.

Reduced fuel consumption

Another key feature of the solution fixes the generators at their preferred fuel-optimised power set point. If an engine fails, the system will use the spinning reserve from operating generators until a new generator starts up.

Grid support

Designed to monitor and detect grid abnormalities automatically, the AGC Plant Management system can reduce the amount of power produced to the grid in case the grid frequency rises. These functionalities are also useful for reducing the amount of kvar passed on to the next upstream transformer: as the upstream transformer current declines, the transformer's load performance will improve.

AGC Plant Management features

- ▶ Fully scalable multi-master system of up to 992 gensets
- ▶ Simple graphical configuration
- ▶ Easy control from one central point of intelligence
- ▶ Cost-optimised design
- ▶ Reduced fuel consumption
- ▶ Grid support
- ▶ Monitoring and supervision
- ▶ Emulation Solution – uses and verifies the functions of the real system for test, production and design



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