

Commercial Powerprofile

Customer: Canary Wharf Contractors Limited

Location: New bank premises, London

Customer requirement:

Turnkey standby power generation system

Equipment:

4 x Cat® 3516B, 2000 kVA, 11 kV generator sets

Services: Planning, supply, installation and commissioning

Power Need

CWC, a leader in high rise building construction, has built a new UK headquarters for a North American bank, within a major new office tower. The requirements for their client were critical in respect of constancy of power supply: In the world of high finance, loss of power means loss of profit - without power a bank cannot trade.



Solutions

The plant room is on floor 14, which added its own logistical challenges in planning the installation: the programme of site deliveries had to be closely coordinated with site tower crane availability.

Due to the position of the plant room in the building, we were contracted to include a specialist floating floor design to limit noise and vibration transfer to the rest of the building structure.

The design requirements of the PLC system were particularly stringent, with the designers requiring a significant level of inbuilt redundancy. This important element of the installation featured the Finning LIMA PLC system: LIMA options can start with a simple generator control panel, but the sophisticated configuration on this project utilized a full PLC suite with dual redundant PLCs and input/output cards.

Finning's turnkey project solution included 4 CAT 3516B 2000 kVA 11kV Generator sets, complete with a full acoustic and ventilation package. Plant room fuel distribution and an intelligent PLC based control system which not only operates the generator sets but also monitors and controls a significant number of circuit breakers around the building. Its control system is commentworthy as being particularly impressive.



Results

Being on the 14th floor this was no ordinary project due to the logistics associated with the installation. Peculiarities of this contract demanded tight project management and technical skills, for example a need to crane equipment into a space with only 5cm clearance all round.

Environmental considerations were obviously very important.

The weights and size of the generators were 18,000kg each. Finning had to meet defined noise levels in order to comply with legislation.

CWC's project manager Steve Edouin Says: 'We need complete confidence in our suppliers, and awarded the contract to Finning on the basis of the Cat equipment's higher specification, and their competitive pricing. Our view was that they understood our brief, and went the distance to meet all our requirements. Certainly their good experience in power generation made this installation a success.'

