



CASE STUDY:

Guys & St Thomas Hospital

Bells Power Services was asked to provide technical advice on a 1250kVA Cummins / FGW emergency backup generator that had been out of commission for some time. The generator engine had undergone a rebuild / overhaul, as it had seized on a load test run. After the engine was put back together, it emerged that the bolts and plates that attached the main alternator to the engine had sheared when the engine had seized.

The hospital maintenance team were informed that in order to repair the generator, it would need to be electrically disconnected, taken to a workshop, removed from its canopy, repaired and then returned to site. This exercise would not only prove to be extremely costly, but would also require a lot of logistics planning and cause major disruption to the hospital parking areas.

After a brief site survey and discussions amongst our team of engineers, Bells Power offered an innovative solution that meant the generator could be repaired on site. Of all the generator companies that were asked to quote, we were the only one that suggested this cheaper and more efficient option.

Within a short time after receiving the instruction to repair the generator, our in-house team of mechanical engineers manufactured a bespoke sliding frame. This enabled our generator engineers to pull the 2.5-ton main alternator away from the engine, with the generator left inside its canopy, allowing the replacement pressure plates and bolts to be fitted.

Once the alternator was refitted, we also repaired diesel, coolant and oil leaks on the engine, and replaced an electronic PCB in the generator control panel. The generator was then tested under load using our own 1600kW resistive load bank package. The hospital was left with a generator that was in good working order and the repairs cost a fraction of all of the quotes that the client originally received.

