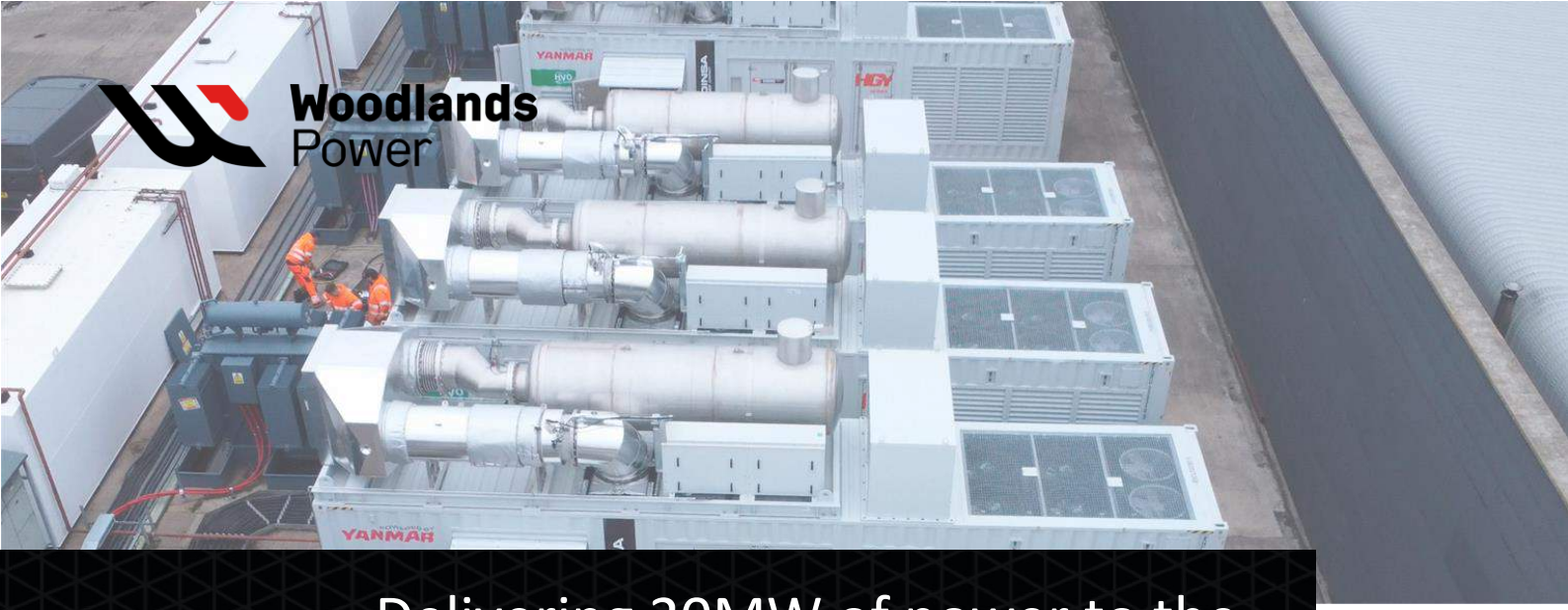

Woodlands Power

Delivering 20MW of power to the UK grid

Woodlands Power commissioned and delivered a fully installed 20MW Capacity Market power plant, supporting the UK's mission-critical grid supply with a low-carbon, high-performance solution.

The installation comprises ten HGY Series generator sets supplied by HIMOINSA, powered by Yanmar GY engines and operating on Hydrotreated Vegetable Oil (HVO) renewable fuel.

The plant operates in full synchronisation with the grid and is continuously monitored to ensure stable, secure and uninterrupted performance.

The challenge

The UK Capacity Market (CM) requires power generating assets that can:

- Respond instantly to grid demand
- Maintain uninterrupted reliability
- Meet strict emissions regulations
- Operate within defined acoustic limits
- Reduce environmental impact

The project also required compliance with the UK Mid Combustion Plant regulations, applying to installations between 1MW and 50MW operating over 500 hours per year, and set an ambitious sustainability target: to operate exclusively on HVO renewable fuel, while achieving ultra-low NOx emissions.

The solution

Woodlands Power provided installation and commissioning for the project, including mechanical and electrical installation, grid synchronisation and testing, and on-site commissioning coordination. Working alongside HIMOINSA's engineering teams, we ensured seamless delivery from arrival on site through to full operational handover.

The power solution was ten synchronised HGY Series generators, with a total critical output of 20MW. The machines were equipped with 24/7 remote monitoring and diagnostics. Each unit delivers Fast Frequency Response (FFR), ensuring immediate availability during Capacity Market

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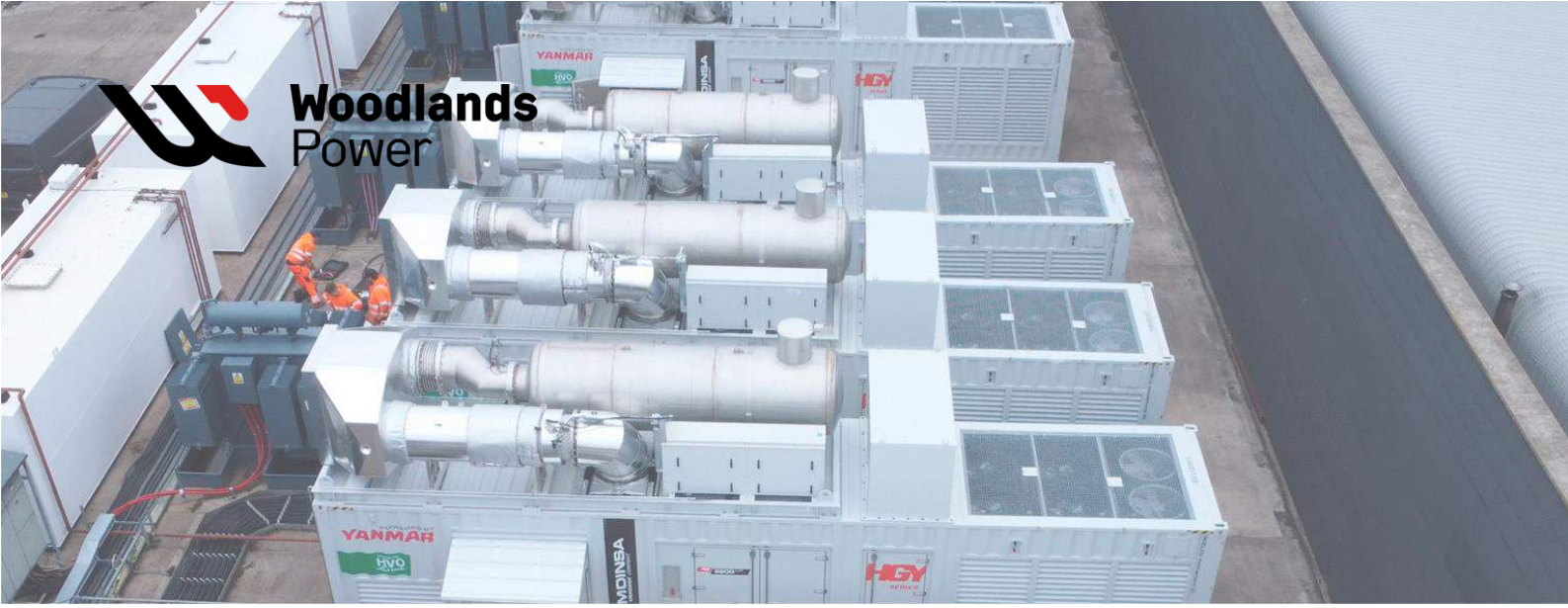

activation events. In addition, the plant operates exclusively on HVO - a renewable fuel that significantly reduces lifecycle carbon emissions compared to conventional diesel.

Each generator integrates advanced Selective Catalytic Reduction (SCR) technology, delivering:

- NOx emissions below 190mg/ NM^3
- Compliance with UK environmental legislation
- Real-time emissions monitoring via integrated ECU systems

This combination of HVO fuel and advanced after-treatment positions the site at the forefront of sustainable standby generation in the UK.

In addition, to meet strict UK acoustic requirements and to ensure minimal impact on the surrounding environment while maintaining full operational output, each generator incorporates multi-density acoustic insulation, integrated exhaust silences (30-45 dB reduction), configurable sounds levels of 80 dB(A) at full load, as well as optimised airflow and self-regulation cooling systems.

The HGY Series was selected for its durability and reliability, including:

- Start-up in under 8 seconds
- ISO 8528-5 Class G3 compliance
- Power density up to 37.9kWm/ L
- 500-hour oil service intervals
- 30,000-hour major overhaul cycle
- Plug & Play electrical installation

The result is a future-ready power plant engineered for high availability, simplified maintenance and long-term performance.

The outcome

This project resulted in a large-scale, low-carbon power solution successfully delivered to the UK Capacity Market - combining advanced technology, environmental responsibility and operational excellence in a fully integrated 20MW installation.