

Case study: Power generators



Benefits

- Access to real-time data about the generator
- O Easier maintenance
- O Less travelling
- O Better control



"With Netbiter we spot potential problems beforehand which means improved uptimes and better service to our customers."

Jonathan Searby Director, JS Power.

Always ready to start

The whole idea of a backup power generator is that it always should be ready to start whenever it is needed. But how can you make sure that the generator is operational without having to physically visit it every day? UK-based JS Power found the answer to that question in the Netbiter remote management solution from HMS Industrial Networks.

JS Power is a British company selling, installing and maintaining backup power generators. The generators run on diesel or biodiesel and provide business-critical backup power for data centers, hospitals and commercial buildings — operations which need power at all times.

The problem

Although JS Power uses sturdy and reliable power generators based on engines from Scania and Sisu, the innate remoteness of backup power generators makes it hard to constantly keep track of critical operation parameters such as fuel levels, battery voltage, oil pressure etc.

With installations all over Europe, it is a great challenge to be sure that each generator always is ready to start. "One of the inherent problems of our industry is generator maintenance," says Jonathan Searby, Director at JS Power. "We are constantly working to reduce client maintenance costs, while always making sure that the generators are ready to start 24/7. This is where a remote management solution is a big help."

The Solution

A Netbiter communication gateway is installed in each power generator connected to the control panel via the internal Modbus network. The Netbiter monitors around 50 different parameters from the generator and sends these via a LAN/Ethernet connection to a secure server called Netbiter Argos.

JS Power can log into Netbiter Argos over the web and access parameters such as operation status, operating hours, fuel levels, oil pressure etc. It is also possible to remotely start and stop the power generators, which is critical to make sure the engine will be ready to start when needed. This is done once a week to make sure that

The Netbiter is connected to the generator's control panel using the internal Modbus network.



All relevant information is sent to a web interface.



The generator parameters can be monitored in a regular web browser.

each unit is operational. A surveillance IP camera ensures that JS Power sees the power generator starting up and that nobody is working on the generator at the moment.

A large screen at the office constantly displays the status of all generators, and operators go in every day to check that each generator is ready to start.

The Netbiter solution is not only used to monitor the actual power generator. It is also used to monitor, for example, the power in a building. This means that preventive maintenance becomes much easier since it is possible to detect a power failure before the backup power generator starts.

"I would say, that the issue of preventive maintenance is one of the greatest benefits of a remote management solution," says Jonathan Searby. "

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The effects

The obvious effect of a remote management system is not having to physically visit each site as often which generates savings in both time and money. There are also other effects such as more efficient maintenance and the ability to offer a more reliable service to customers.

"With Netbiter, we always know what we have to look at when we make a maintenance visit. This makes maintenance work much faster and easier," says Jonathan Searby. Getting started with Netbiter was quick. The recommendation to use the solution came from a generator builder, AJ Power, and JS Power was quick to adopt the new technology. "We have gained better control of our generator sets with Netbiter and I must say that the service back-up from the Netbiter team has been excellent. We have received answers to all our questions, and all issues we have encountered have been solved quickly," concludes Jonathan Searby.

