



Reliable, sustainable, renewable — energy that works

VPI pushes forward on the path to net zero
with IBM Maximo software

by Josh Young
4-minute read

Renewable energy is the future. Avenues such as solar and wind offer cleaner, carbon-free alternatives to traditional fossil fuel sources. However, these alternatives do have limitations.

In particular, they depend on cooperative weather to generate electricity efficiently. And as nations across the world begin moving to a net zero — or carbon neutral — energy policy, they need to supplement these weather-dependent renewables with more consistent sources.

Filling this gap is a key focus for VPI, one of the largest providers of energy



from combined cycle gas turbine (CCGT) power plants in the UK. CCGT technology relies on natural gas to generate electricity, doing so much more efficiently than traditional methods by also capturing and repurposing heat energy created by the turbines.

“We know we need to take action to improve the environment,” explains

Neil Boreham, Planning Engineer at VPI. “And as the UK moves away from natural gas sources towards extensive renewable technologies, VPI is aiming to contribute to the niche non-renewable support that the country is still going to need to meet its 35 – 45 GW per day power demands. With the CCGTs, we’re helping to move the country towards net zero, so anything that we can do to make our plants

more efficient and to manage those assets in a reliable way lessens our environmental impact.”

And it was this efficient and reliable operation driven from a maintenance management perspective that VPI was particularly focused on for the four CCGT sites. In just a handful of years, the sites had gone through two acquisitions, becoming part of VPI’s energy portfolio in early 2021.

“It was the second big transition our sites had gone through in as many years,” Neil Boreham recalls. “So it was a big hit for us. We had to have continuity for our asset and works management systems to maintain the required reliability levels. Historically, our CCGT units would be dispatched by Traders and National Grid and run baseload operations for weeks on end. But in recent years the operational context has changed considerably.

VPI can generate up to 3.3 GW of electricity — enough to power

3 million

homes throughout the UK

The Maximo solution monitors

~60,000

assets across four sites

We’re in a situation where these plants are on/off in a day. Or they might come on for a day and not be called again for another week because the market doesn’t require it. Unit start reliability is key.”

To make these newly-acquired sites work effectively for VPI, the business needed an enterprise asset management platform that could streamline oversight and help keep the use of natural gas to a minimum.

Safety first

Joining with IBM Business Partner MaxLogic, VPI updated its four new CCGT sites to rely on [IBM® Maximo® Application Suite](#) software. The new solution provides a centralized platform for common asset, maintenance, safety, regulatory compliance and site uptime management. Altogether, the IBM software is tracking the status and location of roughly 60,000 assets across the four power plants.

“We helped with the initial data discovery and evaluation process that led to Maximo,” notes Ed Cohn, CEO and Co-Founder of MaxLogic. “They chose to invest in Maximo because of its enterprise pedigree. Because of what it could bring to the table in terms of development capacity, in terms of



the roadmap and the overall size of the network and community that sits around the product. And it offered them the ability to get on the journey to predictive maintenance.”

“We also oversaw the upgrading, configuring, testing and user training within the new system,” he continues. “We enabled a whole new tranche of people to improve not

just maintenance and asset-oriented functions, but also to become directly involved in procurement, finance and purchase-to-pay processes.”

“We’re closely tracking areas of planned maintenance compliance,” adds Neil Boreham, “specifically developing statutory areas — such as pressure systems safety regulations (PSSR) and pipeline safety regulations (PSR). We have dashboards in Maximo Start Centers that give an immediate, day-to-day view of where we sit in

terms of maintenance compliance — and it’s all automated.” Similarly, VPI creates team-based and office-based Start Centers that provide users with up-to-date visibility of where they stand in terms of work order and procurement management.

Alongside this general monitoring, VPI integrated the Maximo technology with its NiSoft Eclipse safety management software.

“All of our plants contain hazards,” notes Neil Boreham. “There are

always inherent dangers, but you can make them safe places to work by employing a robust and efficient maintenance strategy and safety systems of work. At VPI, one of our key process safety interlocks is driven through the Maximo/Eclipse interface, which ensures there is no printing of a workorder card until the requisite safety document has been confirmed in Eclipse. Until the system indicates that all necessary isolations and precautions are in place, no work order card, no work.”

“Maximo is the core driver for our maintenance strategies. ... And with the Start Center displays updated in real time, we have greater visibility and can deliver the right information to the right people at the right time.”

Neil Boreham, Planning Engineer, VPI

More visibility. Less waste.

With the updated Maximo software in place, VPI streamlined its asset management, maintenance and procurement efforts. In turn, the organization also reduced its administration burden and increased the productivity of staff — all while helping to create a safer work environment at its power plants.

“Maximo is the core driver for our maintenance strategy,” notes Neil Boreham. “Because we are a lean group of sites in terms of resources, our staff are involved across multiple areas — work planning, work



execution, contractor management, requisitions. And with the Start Center displays updated in real time, we have greater visibility and can deliver the right information to the right people

at the right time. We spend less time reacting at the end of month or end of quarter and can be more proactive in aligning teams, improving reliability and reducing risk.”

He continues, adding: “We need to have the most reliable, flexible and available fleet as possible to allow us to work in what is already a highly competitive market. If your plant fails to start when needed, you’re not in a good place. Wholesale gas prices are immense and still rising. Energy prices generally are staggering. And if you have declared that you will provide, say, 700 MW for Thursday peak, and you don’t make it, the potential penalties are huge.”

Alongside the capabilities that the IBM software delivers, Neil Boreham is also pleased by the overall convenience of

the solution. “It’s an easy application to use for a complex job,” he notes. “It’s very intuitive, and the consistency across the screens — just from a training point of view — makes it easy to onboard people. We don’t generally do formal training, preferring peer-to-peer with quick guides and SME back-up, which has worked well so far.”

Similarly, VPI is pleased with its choice to work with MaxLogic. “I’ve known a few of these guys for a number of years,” adds Neil Boreham. “And I know that when I ask someone from MaxLogic a question, I can be confident that I’ll get the right

answer because they understand the way that we work, understand our processes. And they understand Maximo inside out. They have never let me down.”

Looking ahead, VPI is planning to standardize the Maximo installation across all its sites. “Once we’ve integrated the final plant into the new Maximo solution, we’ll be able to drive forwards with predictive maintenance scenarios and leverage mobile solutions, providing a clear and concise picture of what’s going on across the plants for the senior management teams.”

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Neil Boreham, Planning Engineer, VPI



About VPI

An energy company committed to moving the UK towards net zero carbon emissions, [VPI](#) (external link) is a leading operator of combined cycle gas turbine (CCGT) power plants. The business is headquartered in Immingham and from its five sites can generate up to 3.3 GW of electricity — enough to power around three million homes. Alongside its generation efforts, VPI also focuses on decarbonization and sustainability measures.

Solution component

- IBM® Maximo® Application Suite

About MaxLogic

IBM Business Partner [MaxLogic](#) (external link) is a solutions and consulting company with a passion for digital transformation. With a focus on enterprise asset management, MaxLogic helps improve the day-to-day, while setting the tone for future innovation and scale. The company was founded in 2020 and operates from its main office in Leeds, UK.

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