



Along the Somerset coast, where rolling green hills meet the Bristol Channel, one of Europe's largest construction projects is underway. Hinkley Point C (HPC) is the first nuclear power station to be built in the UK for three decades, and Abtec are providing an important element in this huge project.

HPC is expected to produce power from 2025. During its construction period 5.6 million cubic metres of earth will be moved; 4,000 Km of electrical cabling and 230,000 tonnes of steel will be deployed. At its peak there will be 5,600 workers on site. Many of these will be local residents, and to accommodate the visiting workers, two new Accommodation Campuses have been built. Our part in this project centres around the IT infrastructure delivered for the Accommodation Campuses in the build phase and continuing for the operating life of the Campuses.

Workers' Accommodation

Split across two sites, the two Campuses form one of the largest hotels in Europe. The sites are located immediately adjacent to the main construction site at Hinkley Point and in Bridgwater town centre. There were two contracts involved in making the Campuses a reality – the NEC3 ECC Deign and Build contract awarded to Laing O'Rourke and the NEC3 TSC Operations and Maintenance contract awarded to HOST 2 Ltd. The splitting of the contracts, and the nature of the continuity required for IT provision across both contracts provided an added layer of complexity.





Laing O'Rourke are a globally diverse engineering and construction group with a commitment to delivering exceptional value, founded on 170 years of experience.

HOST 2 Ltd provides specially designed accommodation for the teams working on the construction of the EDF Energy Hinkley Point C (HPC) project.

We were chosen by Laing O'Rourke to design and deploy the IT infrastructure for the design and build project.

As you'd expect from a project of this size precise planning and delivery would be paramount. Andy Beynon, Managing Director Abtec Network Systems, points out, "Any delay would have a severe financial impact for us and Laing O'Rourke; so we kept a tight control on the project."

The project presented several challenges:

- Controlling access to the network for other subcontractors providing IP services
- Delivering an exceptional IT service for guests and staff, securely

Removing the headache

Many construction projects now specify the provision of an IP network. Typically, this is for the client's corporate IT data and the multitude of systems that will manage the building's functions, such as access control, CCTV, heating and lighting. This can add complexity to a project.

We provided:

- Network Design
- Cisco switches and routers
- Wi-Fi survey and deployment
- WAN
- Server infrastructure
- Mitel communications system
- SIP trunks
- Microsoft Office 365
- Thin clients
- Network and infrastructure security
- Hardware maintenance
- Onsite IT support engineers



Traditionally, subcontractors provided their services on individual networks that they install. Now, those discrete networks are converging to a single IP based network. This IP network is often a project focal point, and from our experience, projects can soon descend into delay due to subcontractors incorrectly blaming the network for their devices not working.

Andy continues "We've got a successful track record of delivering large projects that include IP networks. We've delivered sophisticated IT infrastructure in many challenging environments. We wanted to relieve Laing O'Rourke of this management headache."

As well as designing the network Abtec seized the opportunity to manage its deployment too. This impressed Laing O'Rourke's Project Manager Scott Palmer.

"Abtec were the central administration point for contractors" says Scott. "They held many contractor conference calls which supported contractors with the deployment of their devices on the network, whilst keeping tight management of the network."

One example of this control was Andy's insistence that contractors used Abtec's virtualised server infrastructure to for their systems' head ends, rather than installing stand-alone management PCs. In a stroke, the building management systems were more resilient and had improved security.

"Abtec were essential to the smooth running of the project. By managing the IP network and supporting our contractors so well, we avoided delays and additional costs" advises Scott.

Delivering Exceptional IT, Securely

Prior to the project handover, HOST, the company running the accommodation, appointed Abtec to provide IT support over the eight year operation of the Campuses.

"It made sense to choose Abtec as they had devised the IT we were going to use" says Suzanne Carey, HOST 2 Ltd Commercial Director. We now have a team of four engineers on site managing the day to day IT issues. The team is backed up by a second and third line support team in our headquarters.

"Our aim is to provide exceptional IT support, securely, so that staff can work effectively and guests can relax and recuperate." states Andy.

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Scott Palmer

Laing O'Rourke





"Abtec translates our business needs into reality"

Suzanne Carey

Host 2 Ltd Commercial Director

Our onsite infrastructure includes the physical network, Wi-Fi, WAN, telephone system, computing and more. Security was at the heart of that infrastructures design. HPC will be an important component of the UK's energy production, and although the accommodation network isn't connected to the construction site network, it is equally important to ensure that workers are protected when using our services on the Campuses, especially when using the meeting room functions.

"We used a multi-layered security strategy, and our engineering teams are vigilant in assessing possible threats." adds Andy. The onsite team support HOST's staff, helping them get the most from IT and resolving IT issues. Suzanne points out, "We look after over 1500 guests and rely on our IT systems. Abtec's team are great, they deal with issues promptly and professionally, letting us focus on our guests".

That service extends beyond IT fault resolution. Abtec and HOST's management team meet regularly to plan ongoing IT strategy. "Abtec translates our business needs into reality" says Suzanne, "Their experience and knowledge helps us achieve our goals quickly and securely and in a cost efficient manner."

Making IT Work

This project demonstrates our capability to deliver IT services in complex environments, comprehensively. From helping the prime contractor's project run smoother, to enabling the client to focus more on their business, Abtec really makes IT work.

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