

Case Study



Delivering Leading Outage Planning Services for EDF Energy at Hinkley Point

THE CHALLENGE

Inconsistency in outage planning through the use of agency contractors, and the introduction of new technologies, proved a challenge to the delivery of business critical engineering activities. Facing a busy schedule, they looked for a sustainable resourcing model to deliver outage services.

SOLUTION

An integrated team of Outage specialists to develop and implement high integrity plans in support of Outage programmes and other critical engineering projects.

CUSTOMER BENEFITS

A flexible and sustainable resourcing model allowing for greater knowledge retention and longevity of experience. This has resulted in improved planning activity leading to maintenance and resource optimisation.



BACKGROUND

EDF Energy is one of the UK's largest energy providers, generating around one fifth of the UK's electricity and supplying some 5.5 million customers.

In delivering these services, operational safety and excellence is seen as number one priority. To ensure the safe and effective operation nuclear generators, EDF Energy undertakes a strict maintenance regime which requires power generation to be discontinued for a sustained period. This outage process is a long and complex one, hugely demanding in both time and resources.

The planning process for outages can start anything up to 24 months in advance, and the details for future outages are known for a 15 year timescale.

Each day of outage overrun represents lost revenue, therefore ensuring each outage is meticulously planned, monitored and implemented is seen as both business critical but also imperative to the business' financial welfare.

PROBLEM

EDF Energy had historically used specialist contract agency planners to deliver outage support services. The nature of this engagement meant that EDF Energy experienced inconsistent outage planning capacity. Facing a busy schedule, the team recognised that they required a resourcing model that allowed them to train and build outage planning experience, retaining expertise for a sustained period of time.

The introduction of new technologies was similarly affecting the successful delivery of outage services.

EDF Energy recognised that to continue to deliver outage support services effectively they required specialist planners that could be embedded within the current team and that could build a comprehensive knowledge of the critical planning tools. This would help the



team to deliver outages more successfully, building on lessons learnt and retaining knowledge for the next phase of planning.

LSC GROUP'S SOLUTION

LSC Group was contracted to provide critical engineering planning support services to EDF Energy, initially to support the Outage planning process.

Understanding the knowledge retention objective, LSC Group through discussions with EDF Energy recommended that planning consultants be selected from a graduate pool – offering greater opportunity for longer term career development. The intention would be to initially deliver graduates to occupy Outage Planning roles, providing critical support to these programmes and building valuable experience that could be developed for future outage activities.

After a rigorous selection process, four graduates were embedded within the fully integrated Outage team. They were tasked to provide support to the management and coordination of equipment and plans critical to the outage programme, including:

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Achieving greater visibility of critical paths to improve planning activities

The introduction of Primavera as a Planning Tool had not been exploited because of a lack of understanding and a skills gap within the team.

LSC Group organised Primavera training for all Outage Planners ensuring that they could effectively use the system to deliver greater outage planning capability. The LSC Group specialists were immediately able to use the technologies to identify and improve the critical path schedule for Outage programmes, whilst ensuring that the interdependencies were visible to all stakeholders.

This dramatically improved the ability for the team to not only plan for Outages more effectively, but enabled them to create contingency plans for interdependent activities and improve resource allocation.

Awareness of risks and scenario testing

Greater understanding of critical path activities enabled the Planners to provide valuable information to help mitigate and manage any associated risks in delivering a successful outage programme. The planners used 'what-if' testing to demonstrate, prepare and plan for a range of forced outage scenarios. This helped to improve team understanding and allowed them to develop robust strategies and make more informed risk based decisions.

Fault identification and problem resolution

Aside from providing planning support to the Outage process, the planners quickly used their experience and knowledge to help identify equipment and system faults and further resolving these faults to ensure outage programmes remained on track.

In delivering these services, LSC Outage Planners were quickly considered to be specialists in a range of outage related activities and this was rewarded through a number of them being given responsibility in lead roles. With some of the LSC planners being deployed into Project Coordination roles, they were able to use their experience in delivering successful outage programmes across the entire life cycle of the programme and were also able to provide early visibility of critical path activities, interdependencies and risks at an earlier stage of the process. This has continued to aid future outage planning activities. This level of responsibility is testimony to the demonstrable value that the LSC Group planners have been able to deliver to the outage process.

Continued Development

With some planners occupying senior roles, and continued requirements for outage planning specialists, LSC Group has gone on to deliver a number of additional planners to the Hinkley site. Indeed, LSC Group planners now occupy a significant proportion of the EDF Planning Team, and LSC Group is seen as a leading provider of outage services at Hinkley Point.

BENEFITS

Potentially running savings into millions of pounds, the LSC Group specialists have already provided significant value since their introduction to Hinkley, and are continuing to deliver exceptional support across a range of Outage and related activities.

This robust, flexible, resourcing model provides EDF Energy with planners that are going on to deliver significant process improvement and adding demonstrable value to other engineering support activities, benefits include:

- Greater visibility and use of critical path data through use of key technologies
- Improved knowledge retention for Outage activities, enabling EDF Energy to build on experience, lessons learned and providing longevity
- Long term stability of outage planners leading to more refined plans delivered over time
- Improving visibility of key performance information during the Outage process, enabling improved decision making
- Significant process improvements across a breadth of Outage related activities driving efficiencies in terms of cost and time
- Creation of a well functioning and sustained team dynamic

FUTURE DEVELOPMENTS

LSC Group has established an enviable track record in delivering outage support services at Hinkley Point. Planners have already been deployed to other EDF Energy sites to offer expertise and support to local outage planning activity.



LSC CONTINUE TO SUPPORT OUTAGE PLANNING THROUGH THE SELECTION AND DEVELOPMENT OF PLANNING AND PROJECT MANAGEMENT RESOURCES TO MEET OUR REQUIREMENTS. LSC STAFF ARE CONTRIBUTING POSITIVELY TO THE QUALITY OF OUR PREPARATIONS AND IMPROVEMENT OF OUR PROCESSES THAT ARE RESULTING IN IMPROVED PERFORMANCE IN OUTAGE EXECUTION.”

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