

APM Project Management Awards



WINNER'S

CASE STUDY



Category **Programme of the Year 2014**

Winner **Wylfa extended generation programme, Magnox Ltd**

Sponsor



Overview

Standing on the coast of Anglesey, North Wales, the Wylfa nuclear reactor began generating in 1971. Over 40 years and four extensions to its original life expectancy of 25 years later, it is still producing electricity.

It is the largest of the 10 nuclear sites managed by Magnox on behalf of the Nuclear Decommissioning Authority (NDA). In 1996, it was deemed that Wylfa could safely generate for a further 10 years. In 2006 the NDA announced that the station would be shut down in 2010, but in 2010 it was given an extension to 2012.

Wylfa then worked on a further project allowing

generation to continue until December 2015. Generation beyond that date is constrained by the re-processing of fuel at Sellafield.

Today, Wylfa has only one running reactor and two operational turbine generators, but with an output of around 460MW still supplies more than 20 per cent of Wales' electricity needs.

This has been possible because of an idea during a brainstorming meeting that developed into the innovative and ground breaking Extended Generation Programme.

Objectives

In 2008, Wylfa had begun the transition process of moving towards shutting down and removal of fuel in 2010. From this arose the idea which grew into a feasible opportunity to extend generation by moving fuel from one reactor to another and generate additional income.

A programme was broken down into individual projects looking at safety, maximising generation, make the case for approval from the regulatory bodies, modification of fuelling machinery to allow the transfer of fuel between reactors, other enabling and enhancement work and to look at the human factor

The programme manager was given the task of building a robust business case for the programme and the crucial Inter Reactor Transfer (IRX) project to gain the maximum generation possible and extend the operating life of Wylfa.

It all called for careful planning, early stakeholder engagement and finding the right people for the job.

Challenges

As well as solving the numerous technical challenges of moving and loading 1,300 channels of fuel, the programme team had to demonstrate a strong financial and economic case for the continued generation at Wylfa.

Regulators and stakeholders had to be confident that the plan would not compromise safety, security and environmental protection or affect business as usual and the overall operating plan for the site.

There was also the question of re-energising staff who had been expecting the site to close. Many already had their minds set on severance, retirement and were winding down.



Resources

The Wylfa site director was the programme sponsor, reporting to the site's strategic management board. An experienced senior project manager was given the role of programme manager, with a project manager appointed for each of the individual projects.

The overall programme team involved 50 members of staff from project managers to human resource personnel to production technicians.

Lessons learned

A lessons learnt workshop was held at the end of the programme lifecycle to identify what could have been done better as well as what was done well and should be replicated at other sites. This has been shared with other project managers across the sites and on the Magnox 'Lead and Learn' database.

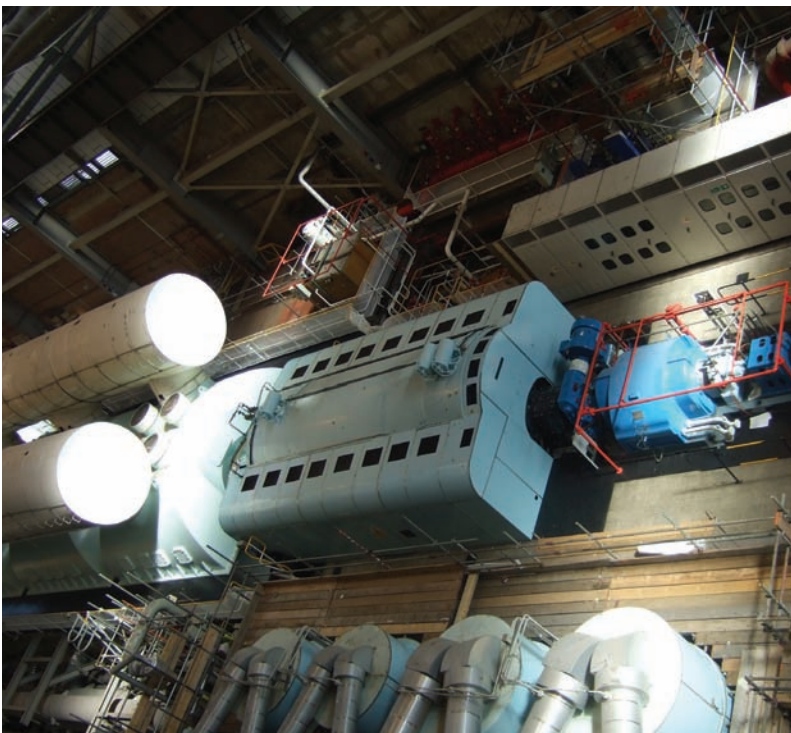
Among the main lessons taken from the Extended Generation Programme were the benefits of early engagement with key personnel involved, keeping the safety case simple to inspire confidence it could be delivered and relocating all team members into a common building for consistency and ease of communication.

Not using the internal mailing system proved effective, too. Instead, documents were physically delivered to engineers by the project team.

Results

Thanks to the innovation and quick thinking of the programme team, Wylfa not only managed to extend its generation life but has also generated an additional £1.2 billion for the customer, the NDA, which will go towards the cost of de-commissioning and avoid the taxpayers having to pay for that hefty bill.

It has been hailed a great success for Wylfa, the local community and the NDA. The programme has led to opportunities for the unemployed and up-skilling of operations personnel, and has been a win-win story for all involved.





The APM Project Management Awards have been celebrating project management excellence since 1993 and the broad range of categories is designed to make entry possible for projects and companies of all sizes and complexity.

The awards reflect the invaluable contribution project managers make in all sectors of society and the event provides an opportunity for industry professionals to meet with colleagues and entertain guests as well as celebrate at one of the year's most exciting events.

Highly regarded in the project management industry, the awards reflect the dedication and talent that helps to shape the project management community and the world around us. The finalists, winners and sponsors of the awards attract national publicity for their achievement and involvement. Winning an award provides invaluable recognition and kudos to the careers of winners.

For more details on the awards and how to enter or attend, visit apm.org.uk/awards or email awards@apm.org.uk

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