

CASE STUDY

London Array is ship shape with Sennen



WHO IS LONDON ARRAY?

London Array is one of the world's largest offshore windfarms based 20 kilometres off the Kent coast in the Outer Thames Estuary. It has been producing electricity since 2012 and has a peak power of 630MW and 175 turbines.

THE CHALLENGE

At any one moment, there are regularly more than 100 people deployed and, at peak times, this figure can be more than 250. These individuals can be either in-house staff or from multiple different contractor partners all working at the same time across the wind farm. Effective coordination of resources is key.

Many of the turbines are sited in shallow water and this means operational constraints are that bit tougher.

The control room needs to be able to direct the work happening on-site so that the wind farm produces as much energy as possible while being operated in a safe environment.

WHY DID THIS PROJECT COME ABOUT?

The sheer size and make-up of the London Array wind farm brings significant challenges.

They work with a large number of contractors and managing the relationships effectively and safely is mission critical.

London Array needed a system that acted as a control room to direct work happening on site.



"In my role, I have a responsibility across vessels, turbines, and technicians. There are multiple teams, often performing highly specialist work and doing so in confined spaces. Being able to run all of this from the control room, or even remotely from home, is key."

~

Mike Young

Operations Manager, London Array

WHY CHOOSE SENNEN?

Off-the-shelf software was ruled out because it could not be tailored to London Array's specific needs. Sennen approached the project differently, taking a collaborative approach underpinned by a flexible platform and with access to significant in-house development talent to create the system that the control room really needs to get the job done.



"Working with Paul and his team has been very productive, and has permitted rapid development of modern, flexible and dynamic control while maintaining excellent safety management.

Paul has developed a very good understanding of our business and is always on hand to discuss ideas of how we can refine our systems to improve functionality and ease of use and create value for London Array."

~

Graham Daws

Head of Asset Management & Operations, London Array

With Sennen, London array can co-ordinate vessels and manpower so that they know exactly where they are at any point and are ready to respond to anything including turbine issues, changes in weather, vessel breakdowns and emergencies.

London Array has confidence that personnel are only deployed if they have the correct qualifications. What was previously a manual task done through spreadsheets is now all incorporated into Sennen.



"Before Sennen, there were times that we would only find over the radio that an individual couldn't undertake a specific task, but by then it is too late to do anything about it. Now we can put that responsibility with the contractors themselves back at the planning stage."

~

Mike Young

Operations Manager, London Array



The Sennen system has been set up so that it can be shared and viewed by all our partner companies. Previously the control room spent up to 25 per cent of its time responding to questions about what was going on in the wind farm. Now, those companies can log in themselves, self-serve the information they need and remove this burden from the control room team.



"Knowing that the personal qualifications are correct, and that a given vessel can get to a given location, or that there is enough room on that vessel for all of the team – knowing all this without having to check and re-check spreadsheets gives us a significant advantage when planning operations."

~

Graham Daws

Head of Asset Management & Operations, London Array

Safety and planning have also been greatly improved. London Array is on top of hazard alerts and able to respond instantly to any emergencies. Potential issues are sorted at the planning phase and not once out at sea.

In 2020, while navigating the response to COVID19, Sennen has once again proved invaluable. London Array has been able to stagger teams and maintain small groups in separate bubbles to minimise contact risk but keep the work on track.

LOOKING FORWARD

Sennen is in regular contact with the team at London Array and working on a roadmap of iterative improvements and new feature requests. Recent updates have included custom dashboards, a revised marine map view and fully remote access when operators can't be in the control room.





Transforming infrastructure through technology, for a more sustainable world

For more information or if you'd like a demo of the
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