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Alice Richardson
Strategy Analyst Centrica Energy Power

Thanks to ECN we developed an Operation and Maintenance model

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“Centrica is the UK’s largest integrated energy company. We are active in every stage in the energy chain: from the sourcing to the saving of energy. Our aim is to meet customers’ needs and deliver long-term value for them. Centrica Energy Power is one part of the business and is responsible for the operation of three offshore windfarms, one onshore windfarm and a fleet of gas-fired power stations.”

The problem

“Within the organisation we didn’t have the skills, resources or experience to do complex mathematical modelling. This is the expertise that ECN brought to our business. Before the help of ECN we had some difficulties making decisions on our

Operation and Maintenance (O&M) strategy. For example we didn’t know whether to invest in new vessels, whether to increase the number of shifts or whether to hold more spares in stock.”

The solution

“Thanks to ECN we were able to develop an Operation and Maintenance (O&M) model. We collaborated with them, to make some changes to the existing model. They were great to work with, taking into account all our specifications and really taking the time to understand what we wanted out of the model. If we had any difficulties with modelling or were unsure how to model a particular complex scenario, we found that we could email the support team and very quickly get a helpful response.”

The impact

“There’s a general push to drive down the cost of offshore wind and being able to model different strategies. Using the ECN model is helping the industry do this. I have been to a number of conferences where ECN have presented and they offer insightful analysis and a great product. With their help we have been able to optimise our offshore operations and maintenance strategy, which has resulted in a number of availability gains. We also work together with ECN to forecast our availability for the five-year Operational Plan. This has enabled better reporting and an increased understanding of availability around the business.”

The collaboration

“The original collaboration with ECN came about a number of years ago, when we identified that we needed a way to model different operations and maintenance strategies for our offshore windfarms. A colleague of Centrica met someone from ECN at a conference. Shortly after that we purchased the first version of their Operation and Maintenance Cost Estimator software. We have been using the software ever since and 18 months ago commissioned a piece of work from ECN to add some improvements to the model. The service we received was very personal.”

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