SSE & Automation

Wind Farm – Planning Process

As part of the planning process to approve the construction of a new wind farm located in the sea, SSE used artificial intelligence technology to count the number of puffins that are part of the natural habitat in the area. Data was then used to indicate which areas would be most suitable for construction and not adversely impact puffins and other wildlife.

Renewable energy is a priority for SSE. Infrastructure needs to be delivered in a way that does not negatively impact the environment.

Artificial Intelligence for Hydroelectric power generation

Hydroelectric power generation is reliant on the force of water to turn turbines which in turn, generate energy. An increase in rain will increase the flow of the water, therefore, generating additional power.

AI technology has been used to help SSE decide when best to run the generators based on the weather conditions within the area. In addition, Ai has been used to analyse customer demand for electricity! If demand is high, the power station will need to work harder. Did you know that demand for electricity increases at half time of England football matches as customers put the kettle on!

SSE & Automation

Mobile phone application – Safety at Windfarms

To promote safety and wellbeing for staff, SSE developed a mobile phone application (app) to support employees at windfarms. As the job involves working in hazardous conditions, the risk of injury remains an ever present.

The app maintains a constant log of the whereabouts of the staff which is monitored by colleagues in a control room. Furthermore, if the member of staff falls and gets injured, a notification is sent to provide medical help.

AI technology has been deployed to benefit the safety of SSE staff.

Scan me!

Lightning Strike Protection

Scan the QR code to read how SSE partnered with an AI specialist to help protect customers from the negative impact of lightning strikes on the electricity network.

Questions to think about

(1) What are the benefits of an energy company like SSE adopting AI?

(2) Can you think of additional ways SSE might want to use SSE to help boost efficiency?

(3) Out of the examples listed, which one do you think is the most innovative?