A reliable system in a dangerous environment

A Hybrid, Cost-Effective Power Solution for a North Sea Oil & Gas Platform

"Morningstar's high-quality, reliable controllers make them JCE's No. 1 partner when supplying power to many of the world's most remote, harshest environments."

Lukas Geider
Business Development Assistant,
JCE Group

Summary

An oil & gas company sought to obtain cost-effective power on its unmanned platform in the Danish North Sea. Scotland-based JCE Energy supplied a solar and energy storage system using Morningstar components for a reliable solution in a dangerous environment.

Situation

JCE Energy's oil & gas client needed remote power for telecommunications systems, navigation aid systems, bird deterrent systems, foghorns, and other applications on its unmanned platform. Operating in a remote location at sea, the system had to fully operate long-term without any human supervision, and be sufficiently weatherized to withstand harsh sea conditions. JCE also had to consider Hazardous Location Zone 1 system compliance for safety, as well as the weight of the system to accommodate transportation and loading onto the deck.

Project

In 2016, JCE engineered a Zone 1 hybrid power system comprising a Zone 2 wind turbine, ~10kW of solar panels for an 800W continuous load, a 24V, 4800Ah battery bank accompanying Zone 1 battery isolators, and Morningstar TriStar TS-MPPT-60™ and TS-MPPT-45™ controllers. This system is fully autonomous, requiring minimal maintenance while providing significant cost savings.

Solution

As a world leader in the design and manufacture of electrical control systems and off-grid power solutions for hazardous areas, JCE Energy relies on Morningstar to help power critical applications in extremely remote, inaccessible, and dangerous environments.

"Morningstar's high-quality, reliable controllers make them JCE's No. 1 partner when supplying power to many of the world's most remote, harshest environments," said Lukas Geider, Business Development Assistant, JCE Group.

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