



Cable laying & jointing on vital Shetland SSE project

Overview

McGowan Infrastructure is an ICP-accredited contractor within the BRUSH Group, specialising in delivering environmentally conscious energy infrastructure projects across the UK.

The Shetland 33kV diversion project for SSE was a significant initiative aimed at connecting Shetland's local electricity network to the main UK grid for the first time. In October 2023, McGowan Infrastructure's team began the works to install 12.3km of 33kV cables underground as a diversion to accommodate 132kV transmission work. This route will allow the removal of existing overhead line poles, fittings and conductors. Project works included cross-bonding and intermediate earthing.

Project profile

Location:
Shetland, Scotland

Solution:
Cable laying & jointing on a 33kV diversion project connecting Shetland's electricity network to the UK grid for the first time.

Delivered by:
McGowan Infrastructure

Solution

McGowan Infrastructure successfully delivered this project using its innovative cable wrap technology - Eco Cable Protect UK – with the patented Rockshield RS1000 cable wrap. This proprietary wrapping technology is designed so that HV electricity cables can be laid without the need for a traditional fine fill surround of sand. This system has been proven to be more environmentally friendly - and cost and time effective - than traditional cabling methods as there is no requirement to quarry, transport and place sand on site - with the associated multiple HGV movements required. Further, ecological disturbance was minimised in a sensitive environment, with virtually no reinstatement works required.



Project benefits

- CO₂ emissions drastically reduced compared to traditional fine fill surround cabling method
- Safeguarding of local habitats - minimal reinstatement efforts needed after project completion
- Reduction in project costs & time
- Seamless manufacture, delivery & application
- Shetland connected to main UK grid for fibre

Result

This project, which was a significant milestone in Shetland's history, was delivered seamlessly. Time and cost savings were delivered to the client - not to mention the reduction in emissions versus using traditional fine fill surround methods of cabling. McGowan Infrastructure are proud to be part of the team delivering enhanced energy reliability to Shetland while doing its part in contributing to environmental sustainability.