



Case Study

The Power Transmission and Distribution Industry

Helping Scottish Power meet the nation's future power needs

Location:
Wishaw to Kaimess to Smeaton

Client:
Scottish Power

Contract:
Full refurbishment on 52km of 275/400kV overhead line, some 180 towers

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Babcock's construction activities range from one-off projects to fully managed turnkey construction programmes, depending on the individual needs of our clients. Whatever the size of the project, our staff strive to meet the required quality standards, stringent customer requirements and service level agreements at all times. In addition, you can expect us to adhere to the strictest Health and Safety guidelines from day one.

From 2008 to 2010, Babcock worked on a major contract located in central Scotland on behalf of our Client, Scottish Power. The project required a full refurbishment of 180 towers on 53km of 275/400kV overhead line, running from Wishaw through to Kaimess and finally on to Smeaton.

The process of installing the replacement earthwire was elongated somewhat due to requirement for telecommunications to be maintained throughout the duration of the works by the use of temporary OPGW and two

short sections of Fibre ground deploy cable. A temporary OPGW earthwire was installed within the tower body at the bottom cross-arm level, prior to removing the earthwire. There were a minimum of four short duration telecommunication outages to allow the necessary transfers between Skywrap to temporary OPGW to final OPGW.

As part of the smooth running of the project, Babcock had to interface with BEAR Scotland, the management company charged with the operation of main trunk roads in the East of Scotland. The issue was with traffic using the A702 Edinburgh City Bypass whilst the stringing of OPGW earthwire was carried out on the oversailing overhead line.

Early communication was key to success and applications were made and permissions sought with respect to road closures, rolling road blocks and diversions for the 24 hour period required to complete the works.

As a result of reviewing all of the options and relevant traffic data,

Main image: View of the overhead line
Above: Reinstatement and foundation works

BEAR Scotland granted closure of the A720 Bypass for a duration of 6 hours, commencing at first light on a Sunday morning, to minimise traffic disruption.

On the day of the works, the diversion was signed and manned by a Babcock approved Traffic Management contractor with the provision of breakdown vehicles to ensure the diversion remained free-flowing. The works went ahead as planned and were completed well within the window provided.

This illustrates, once again, how Babcock can be 'trusted to deliver'TM.

Summary of Core Activities:

- Replacement of fittings on the 275kV circuit
- Replacement of Lynx earthwire c/w 24 fibre Skywrap with Keziah equivalent 36 fibre OPGW
- Tower painting
- Deviation and undergrounding of under-running distribution lines