



Case Study

The Transmission and Distribution Industry

Helping EDF Energy Networks meet the nation's future power needs

Main image: Tower dismantlement and relocation

Below: Upgraded foundations

Location:
Sundon to Bedford

Client:
EDF Energy Networks

Contract:
Full refurbishment on
132kV overhead line, 111
towers

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Many of the UK's power lines need to be upgraded to meet both the nation's future demand and renewable-energy targets set by the EU for 2020. That is why Britain's major electricity companies are increasingly turning to Babcock.

To that end, Babcock has successfully forged a key alliance with EDF Energy Networks – the owner of three regulated distribution networks in London, the South-East and the East of England – to meet the design, procurement and construction demands of their 132kV and lower-voltage overhead lines.

EDF Energy Networks is constantly working to improve the performance of its electricity distribution networks and to meet future demands in power. As an alliance partner, Babcock is striving to help EDF Energy Networks achieve this goal.

During 2008 and 2009, as part of a capital works programme, Babcock successfully upgraded the 132kV overhead powerline along a 28km route from Sundon

Hills to the outskirts of Bedford, which provides electricity to the Bedford area.

As it was necessary to upgrade the conductor, an evaluation of new mechanical and climatic loads and existing structures were assessed of their residual strength.

The existing conductor was replaced and the original 'Malone' design foundations upgraded using a bespoke micro-pile technology system. This was necessary so that the foundations could sustain the increased loading from the larger conductors. Through using this method, Babcock made significant time savings in the project's programme.

This is the single largest project undertaken for EDF Energy Networks to date and clearly demonstrates Babcock's capability in the management of our client's assets.

In short, it illustrates, once again, how Babcock unfailingly brings its clients the reassurance that their requirements are in safe and highly experienced hands.

Summary of Core Activities:

This extensive project included:

Phase 1: Reinforcement of the foundations on the line.

Phase 2: Strengthening of the towers and re-conductoring.

Phase 3: The cleaning and painting of the towers between Sundon Grid and Bedford South Grid sites.

