

ElectraNet SA 132kV Low Conductor Clearance

Project: Remedy for Ground Clearance of Prioritised Spans - Stage 2.1

Client: ElectraNet SA

Location: South Australia

Contract Value: AUS \$1.5 - \$2 Million

In March, 1999, ElectraNet SA, contracted Electrix Pty Ltd, to undertake the assessment, design and construction of solutions to low ground clearance problems on their 132kV Stobie pole lines.

The initial contract was for 169 spans on nine lines between Port August in the North down to Murray Bridge in the South East. A requirement of the contract was that all of the work had to be completed without any line outages.

The field survey and assessment was undertaken by Electrix surveyors, Beca Carter Hollings, and Furner of New Zealand, provided assistance in the design process by performing the line profiling using PLS Cadd.

The final designs called for:

- replacement of 41 Stobie poles with 24m spun concrete poles;
- installation of 2 mid-span 18.5m spun concrete poles;
- erection of 84 riser brackets on existing Stobie poles, including replacement of crossarms and line hardware; and
- strengthening and repair of 35 existing Stobie poles.

Special Live Line procedures were developed for each task which used a combination of 'Stick' and 'Bare Hand' techniques. Dead-line trials were undertaken for the installation of riser brackets and the replacement of Stobie poles with concrete poles. This enabled the procedures to be further refined before any live line work was undertaken.

All work was completed live line without the need for planned outages on the network.



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