WILSON TRANSFORMER

THE TRANSFORMER PEOPLE

TRANSPORTABLE MOBILE SUBSTATIONS

Transportable mobile or relocatable substations are a strategic option to maintain electricity supply during outages for repair/replacement of existing zone substation transformers as well as providing a short term solution for temporary supply.

A number of distribution utilities in Australia have included relocatable substations into their fleets as a necessary part of back up support to maintain reliability of supply and have the ability to respond rapidly when unplanned events occur.

Mining and heavy industrial sites have also benefited from the mobile solution with the full power requirement provided in regions where no access to power is available and would be an expensive exercise to supply a fixed traditional substation.

Wilson Transformer Company has supported many custom made design requirements in Australia where mobile and relocatable substations are typically sized between 4MVA to 35MVA rating with primary voltages 33kV to 132kV and secondary voltages 0.4kV to 33kV.

A fully transportable substation on the back of a truck with 10MVA+ requirements has proven to be a more costly option due to the ongoing maintenance of the trailer with compliance and regulations to road transport.

The more cost effective solution has been found to be the fully contained substation with the transformer, switch gear and protection built onto the steel skid mount base which is loaded onto a low loader trailer by crane or jack and skate method. Once at site a temporary bund wall is laid and the skid is placed into position.

If there are environmental concerns, FR3 fluid (natural ester) may be used as an alternative to the traditional mineral oil in the transformer. Options such as HV circuit breakers, surge diverters, metering, SCADA control, and CTs may all be incorporated into the design.

Relocatable substations are built to conform with AS/NZS standards, industrial and mining regulations as well as the road transport regulations nationally.