

# **ETEL Transformers Newsletter**

#### Engineering

The ETEL team combines a high level of technical knowledge and experience with a commitment to timely, efficient and professional service. The company has an Engineering team who are dedicated to the research and implementation of sustainable solutions, with a current focus on the development of system automation and remote data collection.

## **ETEL Pty**

ETEL Transformers Pty Limited is the Australian service and supply arm of New Zealand distribution transformer manufacturer, ETEL Limited. From a warehousing and service facility in Melbourne, ETEL supply distribution transformers to all parts of Australia. Maintaining a base in Tullamarine enables ETEL to provide a high level of service, and over 500 stock transformers, for delivery to any location in Australia. If you would like to discuss your transformer requirements, please contact us at:

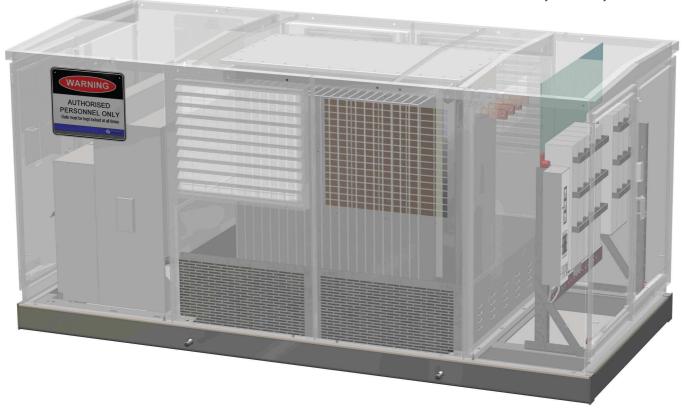
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### Arc fault containment in Kiosks

Recent changes to the international standards for prefabricated substations require kiosks to be intrinsically safe for operators and passersby in the event of an arc fault emanating from the switchgear compartment. In line with the international requirements ETEL kiosks can be designed to comply with IEC 62271-202

for arc fault containment if required, including a fabricated passage designed to prevent a rapid pressure build-up and to funnel the gasses away from personnel. 3-D computer modelling and pressure simulations have helped ETEL to engineer and optimize the kiosk designs to achieve compliance. The typetesting will be conducted at an independently certified laboratory later this year.



# ETEL

#### **Product Range**

Polemount, Groundmount and Kiosk Transformers from 1kVA through to 4500kVA, from 230V up to 33kV



# Mining and Industrial Products

Mining and Industrial transformers are a core product of our business. These units are designed to meet the customer's specific needs, but we also carry a range of standard products in stock at our Melbourne warehouse, including but not limited to:

- 1500kVA and 2000kVA mining transformers
- 1000kVA, 1500kVA and 2000kVA general industrial transformers

Please check with our Melbourne office (phone 03 9339 8300) for current available stock levels.

### **Boco Rock Wind Farm**

For a wind farm project like Boco Rock, a project designed to generate enough renewable energy to power 50,000 homes, the Wind Turbine Generator (WTG) transformer is a key element in the critical path to bringing that power to NSW. ETEL Transformers Pty Ltd were contracted to meet this need, through the design, manufacture and supply of 67 kiosk transformers.

Since entering the renewable energy sector in 2003, ETEL'S WTG transformers have been used in multiple wind farm projects, including the manufacture and supply of 63 x 2.6MVA kiosk transformers to Meridian Energy's West Wind wind farm in Wellington, 9 x 1MVA Kiosk Transformers to Pioneer Generation's Mt Stuart wind farm in Otago and 55 x 800kVA Transformers to Trust power's Tararua wind farm.

Having recently completed 66 x 2.5MVA WTG Kiosks for the Mt Mercer project 30km's south of Ballarat, ETEL were asked to supply a similar product for the Boco Rock development. Located 10km south west of Nimmitabel, Boco Rock stage one required the sourcing of 2.1MVA 33kV/690V



WTG Transformer kiosks complete with internal MV switching and full 690V LV frames. In less than six months the units were designed, tested, type tested and shipped to site, on time and in full.

# Fiji Generation Project

In April 2014 ETEL received an urgent request from Fiji for 17 x 3.5MVA Groundmount Transformers. As well as pricing, our offer was to include a detailed delivery schedule.

After a rapid initial design stage ETEL contacted various International suppliers to determine which components could be air freighted to our factory at short notice.

Within a week of receiving the order the designs had been finalised and General Arrangement drawings sent for approval. The transformers were in production 2 weeks after submitting our offer. Once we had our manufacturing and delivery schedule in place ETEL arranged a meeting at the customers head office to discuss the project, and to finalise any outstanding issues.



The first two 3.5MVA 33kV transformers were designed, constructed and dispatched 8 weeks from receipt of the order, and all transformers supplied within 16 weeks.

