Date: 2017 to Present Client: Insulect Australia



## STEELWORK FOR DISCONNECTOR SWITCHES

## **Project Description:**

David Beneke Consulting has been commissioned by Insulect Australia for undertaking 3<sup>rd</sup> Party structural proof checks for steelwork supporting high voltage isolation switches (disconnectors). These isolation switches physically disconnect a circuit from a power supply allowing for maintenance and repairs and in the event of a short circuit. The disconnector range in voltage from 75 kV up to 145 kV.

We have checked and certified numerous steelwork structures for various disconnectors throughout New South Wales, Queensland and Victoria. Typically, these structures undertake a post disaster function and as such their Annual recurrence Interval is very high which increases the magnitude of applied wind and earthquake loads.

These structures are generally fabricated from both hot rolled steel and light gauge thus requiring adherence to both AS4100 and AS/NZS4600 respectively. For each steelwork structure type, our assessment included static and dynamic loads from the cables connected the terminal palms of the isolators plus both wind and seismic loads.

Typical Insulators for the disconnector

Terminal palms which transfer electricity.

Steelwork structure supporting a triple phase disconnector.

## Contact:

dbconsulting@live.com.au davidbenekeconsulting.com Ph +614 1257 5693 Unit 38/7 Sefton Rd, Thornleigh NSW