

## Mobile underground Substations 1.5mVA, 13.8kV / 1000V / 480V International Purveyors Incorporated, Freeport Mine, Indonesia

Client: International Purveyors Incorporated

**Date:** 2019

## **SCOPE**

The scope for this project involves the design, manufacture and supply of two (2) Heavy Duty, Mobile Underground Substations.

These units have a 1.5mVA overall power capacity and utilise latest generation ABB or CCT brand, purpose built power transformers (13.8kV / 1000V / 480V). These purpose built substations are designed and manufactured to PT Freeport Indonesia's precise specifications and are used to provide reliable power delivery during mining and excavation processes.

The units feature an ABB, VD4 Vacuum Circuit Breaker, upstream from the Dual Output power transformer for each substation. Selco 751A protection relays are used in conjunction with the VD4's to offer a precise and tailored protection functionality on the high tension side.

The low tension sides (1000V and 480V) are the circuit connection / distribution points and provide safe and reliable power for fan, drilling and pumping operations when required. ABB SACE series Moulded Case Circuit Breakers are also incorporated to provide robust isolation and protection for all outgoing LV distribution circuits.

## A BRIEF OVERVIEW OF THE PROJECT INCLUDES:

A brief overview includes , 1.5mVA, 13.8kV Underground Mobile Substation incorporating either an ABB or CCT branded, KNAN Transformer options. All switch gear, transformers, protection relay systems and control options can be tailored to suit individual client requirements.

## **OUTCOMES**

i.Power completed timely delivery of the two units allowing for the customer to have additional substations at the ready for continued operation and expansion of the mine site.





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