

UDCS Consulting Project Summary

The Company

UDCS Consulting provides

- survey and
- engineering consultancy

services to the

- electricity
- infrastructure
- mining
- commercial sectors

The primary works being undertaken are in reticulation, distribution and transmission of power, water and gas.

Our Clients

Domestic and foreign Utilities
Major construction companies
Government & Private asset owners.

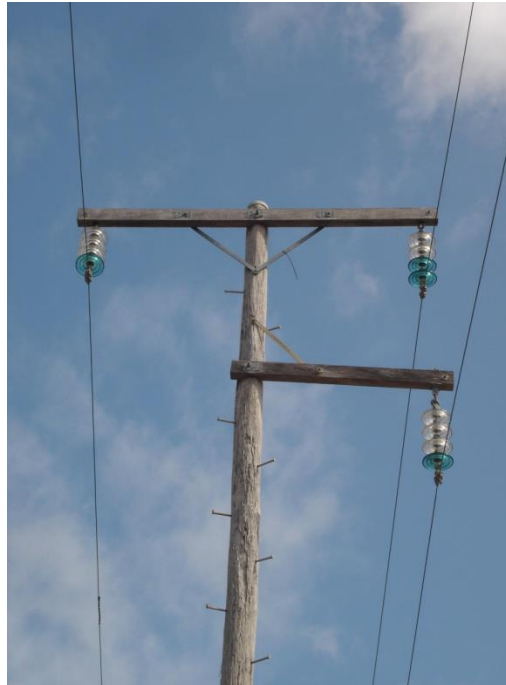
Services Offered

Engineering Survey
Electrical Distribution Design
Sub-transmission OH Design
Sub-transmission UG Design
Substation Design
Preparation of environmental reviews
Developer initiated Design
Solar Power and Lighting Design
Road Lighting Design
HV Auditing (QLD ESO)

Contact Details

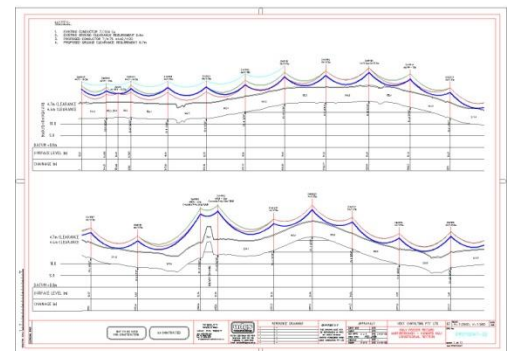
Ph (07) 3260 6009
Mob 0439 703 709
PO Box 235
Banyo QLD 4014

66kV OHL Rating Studies Maryborough to Howard 1 & 2



Key Staff

Surveyor: Phil Tebbutt
Design Engineer: Kerry Prickett



Project Scope

Ergon Energy engaged UDCS Consulting to provide detailed survey and design services to undertake rating studies on 66kV feeders supplying the area north of Maryborough.

Ergon Energy planning staff required an accurate assessment of existing network capacity and realistic options for upgrading the network in the short and medium terms.

The studies included the:

- detailed survey of approximately 50km of OHL utilising traditional and GPS techniques.
- Development of a digital terrain and conductor model in PLS Cadd™.

Rating Study Method

There are three main components to determining feeder ratings: 1) Data Capture, 2) Data Processing and Line Modeling and 3) Rating Analysis and reporting.

The studies were carried out to meet static operational design limits with digital terrain and conductor models established using PLS Cadd™. The studies were conducted inline with ESAA publications D(b)5-1987 "Current Rating of Overhead Line Conductors" and C(b)1 – 2006 "Guidelines for Design and Maintenance of Overhead Distribution and Transmission Lines".