## Inete Case Study: CSG Electrical

## Review \& Earth /

 Lightning Study
## The Project:

The Queensland Gas Corporation (QGC) operates numerous gas wells and gas plants throughout Queensland, including wells at Berwyndale South and the QGC Matilda John
 CSG Plant. Matilda John is one of QGC's Coal Seam Gas (CSG) projects which consist of four CSG wellheads. Each wellhead is powered by a 93.2 kW electric submersible pump (ESP) motor driven by a variable speed drive.

For the Berwyndale South wellheads Inete was engaged to provide electrical RPEQ review and sign off for three wellheads: BWS -WH-02I, BWS-WH-032, and BWS-WH058. Inete worked closely with the Mondora Group to produce detailed electrical reviews and reports containing key recommendations for each well head.

For the Matilda John CSG Plant Inete was engaged to provide a generic earthing design for QGC Matilda John CSG Plant typical configuration as provided and to provide a Lightning Protection System for the plant which is compliant with AS/NZS 1768. Inete worked closely with Performance Electrics to deliver an Earthing and Lightning Protection deign report for the coal seam gas plant.

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## Project Overview

## Project

 and lightning protection study.
## Location

 Queensland.
## Infrastructure

- Berwyndale South Wellheads; four CSG wellheads.

Coal Seam Gas Electrical RPEQ review and earth

At various sites near Chinchilla in South West

- Matilda John CSG Plant which consists of


## Project Scope

Major works included:

- RPEQ Electrical Review and sign off for Berwyndale South Wellheads;
- Design the earthing system for the QGC Matilda John CSG plant to ensure that the proposed plant complies with the relevant earthing standards;
- Design a general Lightning Protection System (LPS) for the described CSG plant infrastructure to ensure that the proposed plant complies with ASI768:2007 [2].

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