



**PROCESS ENGINEERING SUPPORT**

Key Capabilities:

- Completions
- Pre-Commissioning
- PIMS CCMS

**Overview**

In November 2017, our Client, Australia’s leading energy infrastructure business, acquired a gas processing plant in east Victoria. This afforded our client remit to own, upgrade and operate the plant, which would process gas from offshore fields. As a fully operational plant, its capacity would be up to 68 terajoules per day of natural gas, which is equivalent to 12% of current demand in Victoria.

The Vecta Group were engaged to provide process engineering support during the critical phases of the gas plant upgrade, which were the mechanical completion, pre-commissioning and commissioning phases.

**Scope**

The scope of work included the following:

- Preparing and performing peer reviews of commissioning procedures, including plant master start-up and performance testing procedures
- Involvement in commissioning procedure HAZID reviews, including close-out of HAZID

- actions
- Identifying interfaces, reviewing plant systemisation and ensuring asset inclusion in completions & commissioning management software (PIM CCMS)
- Assisting subsystem walkdowns and performing commissioning verification and as-building of P&IDs
- Facilitating risk assessments as required, including pre-start safety reviews prior to introduction of hydrocarbons
- Preparing pre-requisite paperwork including JSEAs and PTWs
- Executing commissioning procedures

**Challenges**

- The timeframe for commissioning activities was compressed due to construction delays and environmental disturbances in the region
- Unavailability of engineering data for some existing equipment
- Requirement for planning and sequencing of commissioning activities due to subsystem interdependencies

**Solutions**

As the gas plant was a Major Hazard Facility, Vecta Group employed a methodical approach to executing

commissioning activities, adhering to the gated process in-place in order to minimise safety risks SFARP, while also performing a continuous risk-based analysis of commissioning requirements in order to meet compressed timeframes.

With the necessary background in gas plant engineering, Vecta Group was also able to rectify issues that had arisen during commissioning, including identifying and replacing high pressure components in a timely manner.

**Outcomes**

There were no incidents during the execution of commissioning procedures that Vecta Group was responsible for.

The Client was able to meet their Customer’s demands.

**Want to Know More?**

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