



Above Typical Feasibility Study Outputs

Feasibility Study for Open Cut Coal Mine

Drayton is an open-cut coal mine that began operating in 1983 and currently produces around 5 Mt of thermal coal each year for export and domestic markets. Drayton and the contiguous Drayton South deposit are situated in the Hunter Valley coalfields. Drayton reserves are estimated at 35 Mt.

Ausenco Rylson was contracted to assist the Drayton South feasibility study with OPEX cost forecasting and capability analysis of existing fleet in order to understand the viability of moving existing equipment to the new operation.

Equipment models were built using data from the existing operation and in consultation with site personnel. A comprehensive model was developed for both the mine and the processing plant and various operational scenarios modelled to derive maximum profitability.

A capability analysis was completed to determine the risk to the business of operating incumbent equipment beyond their economic life to minimise capital requirements for the new mine.

All outcomes were delivered using Ausenco Rylson propriety software Rylson8. Comprehensive reports detailing the analysis were delivered to the client.

Achievements;

Delivered:

- Equipment registers.
- Whole of life plans for each asset.
- Forecast maintenance and operational budgets for the life of mine.
- Labour requirements to support the operation.
- Material requirements to support the operation.
- A capability analysis outlining expected performance from incumbent equipment when operated beyond their economic life.
- Cost to achieve the desired performance.
- A live model on which further sensitivity analysis and scenario analysis can be completed as required.

Project

Drayton South Feasibility Study

Location

NSW, Australia

Business stream

Optimisation

Timeframe

2012

Contract type

Evaluate

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