



Surat Basin coal supply chain simulation model

Optimizing a Coal Supply Chain

Xstrata Coal Queensland engaged Ausenco to evaluate and optimize the Surat Basin Coal Chain.

This supply chain will take coal from the proposed Wandoan mine to marine terminals at the Port of Gladstone and Port Alma.

The key analytic tool developed for this analysis was a simulation model of the entire supply chain. The model included the proposed Surat Basin rail line, the existing Moura, Blackwater, and North Coast rail lines, eighteen mines, five types of trains, four coal export terminals, and two ship access channels.

The model reported the operating cost for several scenarios, quantified the benefit of extra infrastructure, and was used to determine the optimum expansion pathway over a multi-year ramp up of coal production.

The project was completed in five months by a team of bulk handling, rail, and simulation specialists using Ausenco's Transportation Logistics Simulator software.

Project

Surat Basin Coal Chain Modeling and Optimization

Location

Queensland, Australia

Business line

Process Infrastructure Mining and Bulk Terminals

Client

Xstrata Coal Queensland

Timeframe

2009 - 2010

Scope

Coal supply chain optimization

Services

Simulation modeling