



## ALLIANCE CH2M HILL / THIESS - Worsley Multi Fuel Cogeneration (WMFC) Project

**LOCATION**  
Collie, WA

**DURATION**  
Feb 2011 - Sep 2012

**VALUE**  
\$41.8 million

**MAN HOURS**  
330,000

### Project Overview

ECM was engaged by the WMFC Alliance on behalf of BHP Billiton, a subsidiary of Worsley Alumina Pty Ltd, to complete the Worsley Multi Fuel Cogeneration Project. The project added two new 57MW steam turbine generators and Balance of Plant (BoP) which increased the existing power and steam generation capacity on the Worsley Alumina Refinery.

The two units are capable of producing 550T/hr of process steam from the backpressure extraction steam turbines which met the increased steam demands of the refinery process. The multi-fuel units primarily burn coal but are also capable of burning gas and biomass (waste wood).

The power generated now supplements the refinery's power requirements with the balance exported into the state's electricity grid via the South-West Interconnect System.

### Scope of Work

ECM's scope of work included fabrication, supply, installation and commissioning as follows:

- Coal feed conveyors for units 1 and 2
- Lighting and small power, cable ladders, conduit and cable support brackets, instrumentation tubing, control equipment, HV, LV and control cables, instrumentation and communications cabling
- Transformers and Motor Control Centres (MCCs)
- Hazardous areas installations.