



## RWE's experts successfully returned Hazelwood power station to full capacity

# CASE STUDY

RWE's experts returned Hazelwood power station to its full capacity after the major refurbishment of two boilers and turbines and a substantial overhaul of six other units, on time and to budget.



## The need for our expertise

Hazelwood, a brown coal-fired plant in Australia, was built in the 1960s and consists of eight 200MW units. In August 1996, Hazelwood Power Corporation was sold to a private consortium as part of the privatisation of the Australian energy market.

At the time of the sale, the operational capacity of the plant was 1,200MW, with unit 7 damaged and unit 8 mothballed.

Unit 7 was damaged in November 1993 when it failed on a run up, due to low water drum levels. The extent of the damage was such that the unit was considered uneconomic to repair.

The priority for the new owners of Hazelwood power station was returning the plant to its full capacity in a fast-track programme, by rectifying the catastrophic failure of unit 7 and carrying out extensive turbine and generator work on other units.

The project was described by subcontractors as the most intense refurbishment project in Australia.

## Putting our expertise into action

RWE's experts acted as the Owner's Engineers for Hazelwood power station with responsibilities that included the project management of all activities and acting as overall turnkey contractors.

RWE experts successfully led the consortium responsible for:

- undertaking refurbishment of unit 7 to tight deadline
- bringing out of mothballing and returning to service unit 8, following a major outage
- carrying out an extensive overhaul of the remaining six units.

Some of the challenges encountered during refurbishment of unit 7 required innovative and complex solutions. In July 1996, a team of over 300 on-site personnel started extensive refurbishment work, supported

by many off-site international engineers. Progress was helped by contractors air-freighting 50 tonnes of components from the UK and by transporting another 800 tonnes by sea from Europe.

More than a dozen of RWE's experts based in the UK were involved in different aspects of the project, including specialist boiler and turbine engineers and other key members of staff.

## The difference we made

The major refurbishment of two boilers and turbines, as well as the substantial overhaul of the six other units, returned Hazelwood power station to its full capacity: giving it more scope to increase market share, improve flexibility, reliability and further its life expectancy by up to 40 years.

Following this successful refurbishment, Hazelwood power station achieved annual availabilities of up to 90%. The operational capability of the plant was restored to 1,600MW, with a peak of 1,679MW recorded.

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