



SIEMENS



Power and Gas

# Diamantina power plant – reliable power for North West Queensland

Two 121 MW power blocks for Australia's mining industry

# We are your most trusted partner, offering cutting-edge integrated power plant solutions of the highest quality

With Siemens, you benefit from over 130 years of experience in realizing turnkey power plant solutions.

As an OEM-EPC partner with more than 250 references worldwide, we offer you a global network of experts with extensive competence in integrating the mechanical, electrical and chemical processes of fossil power plants. At Diamantina, Siemens has helped to erect one of Australia's most efficient and environmentally compatible combined-cycle power plants.

## The challenge

In the Mount Isa region in North West Queensland, Australia, the successful mining industry is a major reason, why peak demand on the North West Power System network is approaching capacity and why projections indicate additional capacity requirements for the future. Since the Mount Isa region is not connected to the National Electricity Market (NEM), the region's power demand is supplied by a local distribution network. The new Diamantina plant (DPS), owned and operated by Diamantina Power Station Pty Limited, a joint venture between APA Group, Australia's largest natural gas infrastructure business, and AGL Energy Limited, the country's largest renewable energy company, supplies 242 MW of reliable, clean, and efficient power to this network.

## Our solution

The DPS facility is based on the partnership of AGL, APA and Siemens as the technology supplier. For this combined-cycle project, Siemens supplied the two power blocks each consisting of two 40 MW SGT-800 gas turbines, two heat recovery steam generators, a 40 MW SST-400 steam turbo generator together with the control systems and balance of plant (transformers and export high voltage switchyard of the equipment). Siemens also signed a long-term service agreement for the gas turbines, steam turbines and the SPPA-T3000 control system.





Mark Magnowski,  
Manager of Diamantina  
Power Station

*“It is a great example for eco-friendly power generation. It contributes to the government’s admirable efforts into making Australia a much greener and a more prosperous country.”*

#### Customer benefits

- Siemens turnkey power plant solution with an efficiency well exceeding 50%
- Installed base load capacity of 242 MW without significant “turn down” or efficiency loss in part load
- Highly flexible power station concept, operator can choose between open and combined cycle
- One of the most efficient and eco-friendly fossil fuel fired plants in Australia
- Inlet air-chillers for higher power output

#### Scope of supply

Outstanding EPC competence and project management, comprising:

- Four SGT-800 gas turbines
- Two SST-400 steam turbines
- Four NEM heat recovery steam generators
- SPPA-T3000 instrumentation and controls system
- Long-term service agreement for the gas turbines, steam turbines and the SPPA-T3000 control system

#### A wide range of offerings

We provide a broad range of in-house capabilities and a full array of services, including plant engineering, procurement, transportation logistics, construction management, technical field assistance, commissioning and operation & maintenance. All services are supported by stringent project, quality and EHS management.



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