

Tarong Power Station

Fast-Track Water Supply Pipeline



Project Need

Seasonal droughts are one of the problems faced by Queensland's farming and rural communities, but Tarong power station is equally reliant on water in order to generate about 40% of Queensland's electricity needs. So when storage at nearby Boondooma dam dropped to 20% of full capacity, it was essential to find an alternative source if the power station was to continue operating.

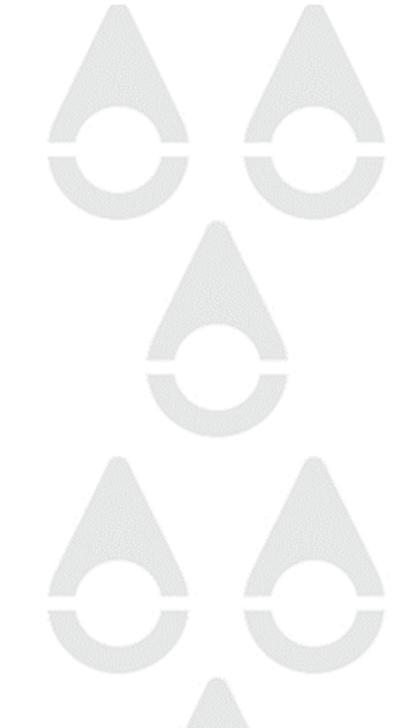
Solution

Station owners and operators AUSTA quickly identified an alternative water source in the upper areas of the Wivenhoe Dam. To connect with the source required the construction of a new 78km 900mm diameter pipeline to deliver the 880 l/s (76 MI/day) needed at Tarong, operating at pressures up to 4.4 MPa. Due to the critical nature of the pipeline, the system specified was Steel Mains' mild steel cement-lined pipe, with the unique SINTAJOINT[®] rubber ring jointing system.

Steel Mains supplied SINTAJOINT[®] Rubber Ring Joint (RRJ) pipes in 13.5m overall lengths. These long pipes saved the project contractor, Leightons considerable time in construction, reducing the number of joints to be made in the field by approximately 12%, or about 700 joints for a project of this magnitude. Special steel fittings were prefabricated to maximise the pipe laying construction advantages provided by the SINTAJOINT[®] rubber ring joint system and thus on-site minimise construction time. Wherever possible, all pipeline components were standardised, so that even on a project of this size and complexity, the range of different fitting types was kept to a minimum.

Achievements

With such a fast-track project, Steel Mains was able to work closely with AUSTA Electric and Leightons through all stages of the scheme. This partnership ensured that the tight schedule was achieved on time, providing the necessary security of water supply for Tarong Power Station and the energy needs of the State of Queensland.



Project: Tarong Power Station
Principal: AUSTA Electric
Location: Tarong, Queensland, Australia
Completion: November 1995
Supplied: 78km of 900mm OD Sintakote[®] high pressure Sintajoint[®] RRJ Steel Pipe, Fittings & Valves

