

From the operations and maintenance of the Tasmanian Gas Pipeline (TGP) – extending from Victoria across the Bass Strait to Tasmania – to the innovative design and repair work for a high pressure gas pipeline, Zinfra has an intimate understanding of the gas industry.

Zinfra provides engineering, construction and maintenance services to the gas, power and water infrastructure sectors. The business was established in 2012 as part of the separation of Australian energy infrastructure company Jemena into an assets business and a services business. The services business began trading as Zinfra Group on 1 April 2012, and Zinfra is the primary delivery brand under the Zinfra Group banner. Having emerged out of Jemena – an entity that built, owned, operated and maintained many of Australia’s major gas transmission and distribution assets – Zinfra knows gas.



Zinfra’s core competency in relation to gas infrastructure assets is the technical operation and maintenance of gas transmission and distribution networks. Zinfra also has strong capability in the design and construction of facilities such as pressure reduction stations, compressor stations and secondary regulator stations.

Having emerged from a utility asset owner, and through various ownership changes, Zinfra has maintained capability and significant operational responsibility for the southern half of the NSW Jemena Gas Network and ActewAGL Gas Network.

Similarly, Zinfra has operational responsibility of the Multinet Gas northern network which incorporates AS2885 gas pipelines and facilities.

#### OPERATING THE TGP AND TASGAS NETWORKS

The Zinfra team operates and maintains the TGP under contract to the owner Palisade Investments Pty Ltd. Zinfra,

through its heritage, has been associated with the TGP for over 11 years.

The natural gas transmission pipeline system extends from the gas transmission system at Longford in Victoria across the Bass Strait to Tasmania.

“Zinfra is responsible for the day-to-day integrity management of the asset, which entails managing planned and reactive maintenance, technical compliance and encroachment detection and investigation,” says Zinfra Delivery Manager Greg Donald.

Mr Donald explains that as operator of the TGP for over 11 years, Zinfra’s highlights include going 11 years without a lost-time injury.

“Having maintained the TGP for so long, there are a number of challenges Zinfra has faced and overcome. The biggest threat to integrity of any gas transmission pipeline, including the TGP, is that from external interference from third party activity.”

Through its utility heritage, Zinfra was also responsible for a significant portion of the construction of the Tasmanian Gas distribution network across the state, along with the operations and maintenance thereof since completion of construction.

#### INNOVATIVE PIPELINE SOLUTIONS

Zinfra has also been recognised for undertaking innovative design and repair work for a key client with the maintenance of a high-pressure gas pipeline, having adopted and completed work under the new AS2885.3 methodology introduced in 2012. Using this methodology, Zinfra developed the unique solution of a stand-off sleeve as a repair option for a high-low weld defect on a DN250 pipeline.



Top and left: A Zinfra employee working on gas pipelines.  
Right: The Fyshwick Trunk Receiving Station (TRS).

Zinfra Group Engineering Manager Gas and Water Paul Grace explains that “The pipeline was being impacted by the development and construction of a duplicated road with two lanes in each direction and a speed limit of 100 kilometres per hour, on a busy road. An AS2885.3 safety management study, undertaken by Zinfra, identified the high-low weld defect, as a result of inspecting sections of the pipeline where the proposed road would cross.”

“The discovery of the non-compliant defect resulted in the development of the innovative, stand-off sleeve as the most suitable repair option for the weld.”

In 2013, Zinfra was contracted by APA Group to construct 800 m of steel gas main DN100, Class 600, API 5L X 42 pipe. The gas transmission line feeds the cities of Rockhampton and Gladstone. The new pipe had to be installed under an existing railway line that carries approximately \$5 million worth of coal per day, so it was critical that installation, hydro-testing and commissioning were completed to a strict program to ensure all works were completed within the window of time provided by a shutdown on the rail network, so the works did not impact on the rail schedule. Project management, logistics planning

and organisation were all key activities to the outcome of this project, which was completed successfully to the client’s requirements.

#### INFRASTRUCTURE DEVELOPMENT IN NSW

Zinfra Group General Manager of Gas NSW/ACT Richard Blagrove believes it is imperative that NSW’s current and future annual gas consumption requirements are maintained at a competitive landed gas price for industry and consumers alike, with the right mix of local production and further gas infrastructure development, to ensure NSW is regarded as a safe place for current manufacturing requirements and for future investment.

“I think the biggest challenge is to continue to maintain the right balance between the necessity to transport natural gas from various fields to the required markets and off take facilities. Ultimately it’s about getting the right balance of respecting both the environment, land owners and the need for new infrastructure. Historically the industry has a great reputation for doing this well, and it’s critical we continue to do this under the ever changing and increased expectations of our communities,” explains Mr Blagrove.