

Control Valve in Pressure Reducing Station with ENVIRO-SEAL® Packing and Cryogenic Testing Provide “No Leakage” Service to New LNG Train



RESULTS

- Customized packing minimizes friction and fugitive emissions.
- Valve testing addresses stringent seat-leak and low-temperature requirements.

APPLICATION

Emergency depressurizing valves

CUSTOMER

Liquefied Natural Gas (LNG) train in Australia

PROBLEM

Natural gas is liquefied in an exchanger and then stored at cryogenic temperatures of –300 degrees F, when leaks are more likely. Each train requires between 10-12% of the feed gas for its own use. Total energy lost over the Liquefied Natural Gas (LNG) supply cycle may be 13% of the feed gas or more.

Because these energy losses translate into production costs and lost profit, the efficiency of the system is important. Control valves applied throughout the cycle, therefore, need to operate reliably, without leaks, and under severe-service conditions.

The EPC based in the United Kingdom invited Emerson Process Management and its Local Business Partner (Western Process Controls) to supply 76 Fisher® severe-service valves for a new LNG-Train V project in Western Australia. About 35 of the valves will be used in Emergency Depressurizing applications in the LNG Train.



Emerson personnel in Australia tested two large Fisher® FBT valves to meet low-temperature and tight-seal requirements. It took about 30 hours to get the 24X30 valves and trim to cryogenic temperatures, using 2.2 tons of dry ice and a spray of vaporized liquid nitrogen.



Severe Service

For more information: www.fishersevereservice.com



