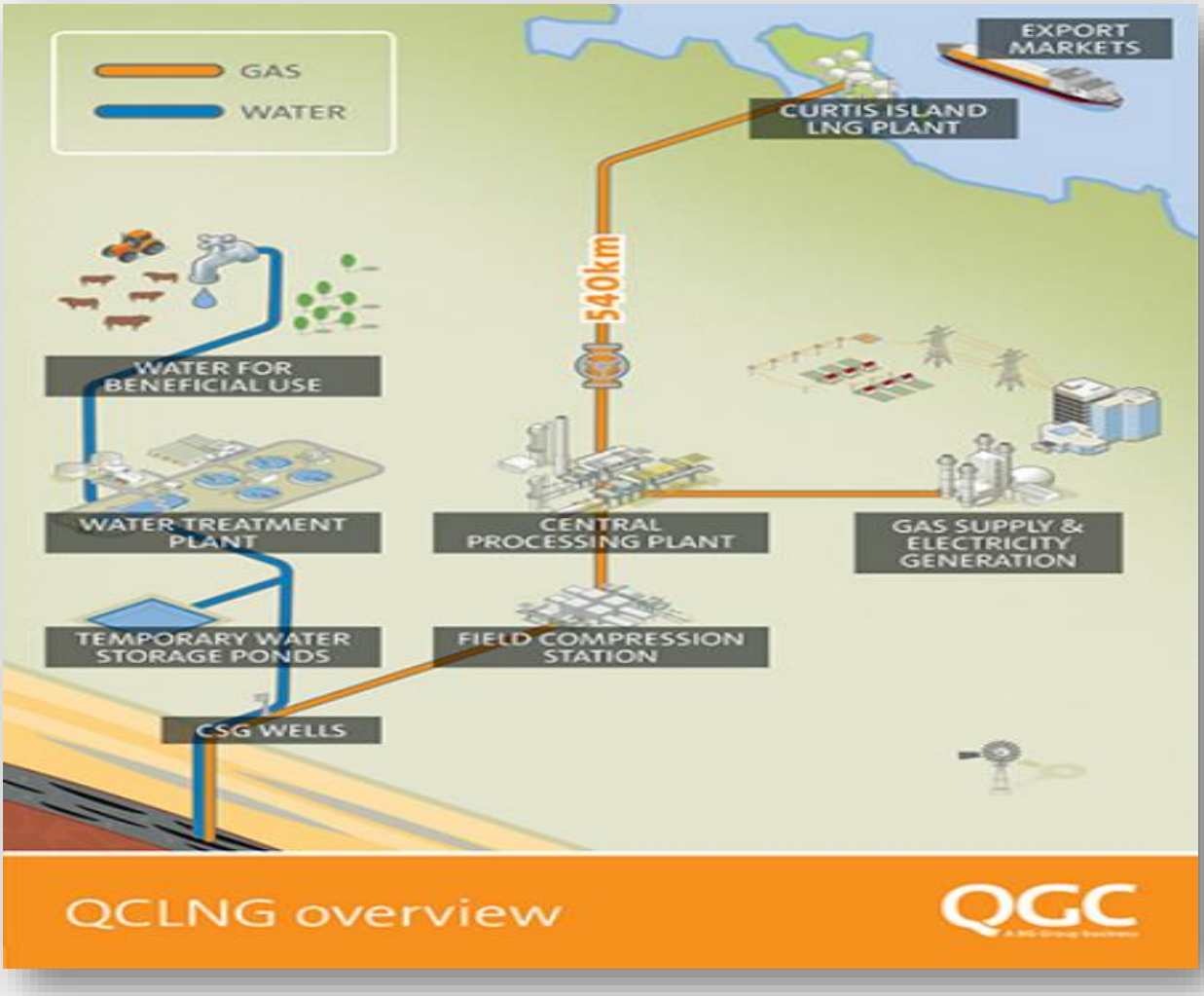
SPIECAPAG ENTREPOSE

QCLNG Upstream Trunklines



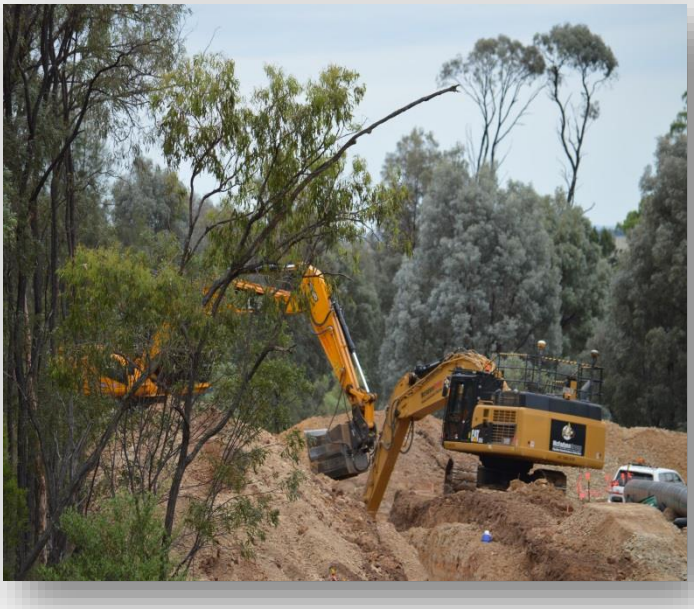
On the 17th June 2013 the joint venture of Spiecapag and a JV partner signed an $80 million contract with QGC for the construction of gas pipelines, buried high voltage cables and a water trunkline.

Our client QGC is wholly owned by the BG Group and has been extracting gas from coal seams in Queensland since 2006. Our project was part of the upstream works on the larger QCLNG project which will be the world's first project to turn gas from coal seams into liquefied natural gas, or LNG.

The project was located in central Queensland and was required in order to facilitate gas transfer from the numerous gas wells in the Surat Basin coal seam gas development to a central processing plant. The gas is then transported onwards to an LNG processing facility via an export pipeline.

The project was a brownfield development and involved the construction of 5 no. gas transmission pipelines ranging from 14” to 20” in diameter and with a total length of 54km, the gas pipeline scope also required the construction of 10 no. scraper trap stations. Additionally there were 9 no. direct buried high voltage cables trenches constructed totaling 84km in length and a 25km 26” diameter steel water main.

One of the main challenges on the project was the complexity of construction resulting from a large number of trenches in the same working width, one particular stretch of right of way had seven trenches running in parallel which gave rise to difficulties with work area management and simultaneous operations.



There was also a large number of roads, water courses and existing pipelines to be crossed, 155 in total, many of these were existing live pipelines and work was carried out under strict permit conditions and without incident. The numerous watercourses were constructed using open cut methodology but were subject to the strict licensing conditions of the Queensland Government.

There were also a number of other contractors working on other infrastructure in our project area and the numerous interfaces presented a constant challenge. These works included well development, gathering pipelines, roads and facilities.

Project schedule

Project was awarded in June 2013 and mainline gas construction was complete in December 2013, mechanical completion was signed off by our client for all aspects of the work in May 2014. In total 25 mechanical certificates were required for the various pieces of infrastructure.

Organization

Due to the remote nature of the project all personnel were housed in an on-site construction camp and worked on a fly-in fly-out basis. Before work could start an agreement was reached with local unions on pay and workers conditions. This set the ground rules for a harmonious working environment and no disruption during the project due to industrial relations.

There was one main site compound that provided logistical support to the gas, water and cable crews. The gas, water and cable work was executed by dedicated crews with a limited amount of resource sharing due to the different and specialist nature of the various elements work. A key factor to the success of the project was the cooperation between the various crews and this was achieved by putting in place a strong management team capable of managing the various interfaces and coordinating the simultaneous operations.

The single project management team (PMT) provided support to the construction crews in terms of safety, quality, engineering, procurement, transport and accommodation. This team was site based but was further supported by the offices of both partners.

Progress

A PMT was established in our partner's Brisbane office shortly after contract signature, the initial focus of this team was the development of safety, quality, environmental & construction procedures to the satisfaction of our client, this was successfully achieved and the PMT moved to site when the site establishment was ready for occupation in by mid-August.

Mainline welding commenced in early October with completion in early December, trenching operations also commenced in early October with completion in January '14 with an average daily production 2.0km of trench excavated per day across the project.

The various pre-commissioning tests were complete on gas, water, HV cable and fibre optic cable by March '14.

Site was demobilized and all personnel were off site by end May '14.

Quality

Work was executed under ISO 9001-2000.

There was a very rigorous quality management system implemented on site. To support the system 281 project procedures were developed and approved by the client that covered each activity.
The result of this attention to quality management was a quality product.

- Gas (54km):- weld repair rate 1.5%, hydrotest passed, caliper survey indicated zero defects, DCVG survey post hydrotest zero defects.
- Water (25km):- no failure in 7 test sections, DCVG survey post hydrotest one defect
- HV Cable (167km cable):- VLF test, 1 defect
- FOC Cable (84km cable):- zero defects

Safety

A strong safety culture was quickly established within the project group and effort and focus was maintained through to completion resulting in an award winning performance.

Project Statistics	
No of man-hours worked	**464,573**
Fatalities	**0**
Loss Time Incidents	**0**
Medical Treatments	**0**
TRIFR (Total Recordable Injury Frequency Rate)*	**0.0**

A number of safety initiatives were rolled out during the project that were recognized by our client and subsequently rolled out across the entire QCLNG project.

The following safety tools were implemented:

- Project golden rules / driving golden rules,
- H&S&E training for all personnel including subcontractors and visitors,
- Thousands of safety observation & intervention (O&I) cards issued and closed.
- Safety alerts issuance and discussions during Tool Box Meetings,
- Regular safety walkthrough driven by the project management, and issuance of safety performance on monthly basis (Safety map)
- Analysis of all near misses (NM) and incidents and particularly the high potential (HiPo) events to better prevent any reoccurrence,
- Safety awards given on fortnightly basis to grow motivation of all.
- Finish Strong program developed and implemented