

CASE STUDY

PROJECT DEMINERALISED WATER HIRE PLANT FOR LNG PROJECT

PRODUCT Product Name

INDUSTRY Oil and Gas

LOCATION Barrow Island, Western Australia



BACKGROUND

When Chevron started commissioning its Gorgon LNG gas train on Barrow Island off the north coast of Western Australia it needed additional demineralised water (high purity water) for pressure testing pipework, boiler feed water and other cleaning activities.

Whilst this was a critical application requiring very high purity water (Electrical conductivity (EC) required of <1 S/cm at 25°C) it was only required for a relatively short period of time during commissioning and therefore it made sense to hire water treatment plants from MAK Water's fleet of hire plants.

SOLUTION

MAK Water's proposed solution of a single stage Reverse Osmosis (RO) plant followed by Ion Exchange was selected as the simplest, most robust solution to provide demineralised water.

HIRE PLANTS READILY AVAILABLE

- The plants were supplied from MAK Water's hire fleet
- Lead time of approximately one month
- Plants set up and tested prior to despatch to ensure plug and play operation

HIGH QUALITY WATER WITH RELIABILITY

- Reverse Osmosis plus ion exchange
- Robust solution compared to other available technologies
- Guaranteed water quality

2 OFF 50% CAPACITY TRAINS

- Two off RO trains each with an independent ion exchange unit to ensure water availability
- Ability to off-hire one unit when demand reduced

RESULTS AND BENEFITS

- **Quick response.** Within less than two months $1,000\text{m}^3$ per day of demineralised water supply installed on site
- **Flexible Solution.** The client's requirements were met with no capital cost and flexibility to hire and off-hire units as required



Single stage Reverse Osmosis plant



MAK Water's water treatment plant on site.