

## ARC ENERGY Ltd - XYRIS GAS PLANT FACILITY

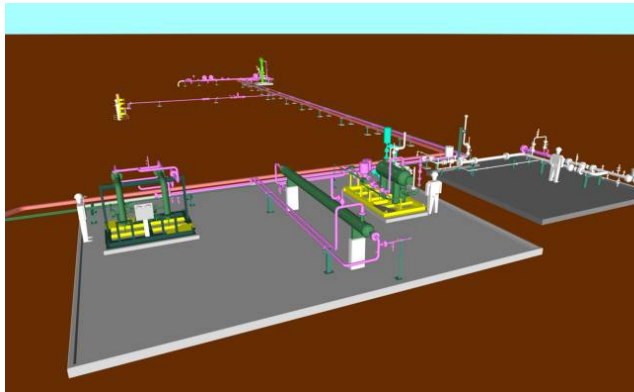
### Donqara, Western Australia

ARC Energy's Xyris Gas Plant Facility is located near Dongara approximately 380 kilometres north of Perth, Western Australia. Gas produced through the facility is piped to Perth via the Parmelia pipeline.

ICON Engineering was commissioned by ARC Energy to perform detailed multidiscipline engineering design and construction management for the facility. ICON prepared all design deliverables including process flow diagrams and P&IDs.

#### The scope of work included:

- Co-ordination of all equipment procurement.
- Construction management.
- Commissioning management.
- Liaised with independent design validator.
- Pipeline hot tap supervision.
- Pipeline design and installation.
- Operations support.



**3D CAD models were built using the AutoPlant software, from which AutoCAD format drawings were generated**

From concept to first gas, the Xyris field development project was completed in a record time of 4 months and was within the \$2.0m budget.

#### The Xyris gas plant facility consists of:

- A liquid boot skid for bulk liquids removal.
- A gas-gas exchanger for feed gas cooling.
- A JT valve and low-temperature separator for dew point control.
- A filter coalescer for gas quality improvement.
- A metering skid for gas flow and quality monitoring.
- A 400 metre long registered pipeline conveying gas from the meter skid to the Parmelia pipeline.



**Dew point control was achieved by use of a JT valve and Low-Temperature Separator, capable of handling 10 MMSCF of gas per day**

- Liquid storage tanks, gas breakout vent and load-out facilities to store production liquid.
- A diesel engine generator for provision of site power to load-out facilities, flow computers and the air compressor.
- An air compressor for instrumentation, valves and air-driven pumps.
- Provision for future expansion has been made to facilitate increasing production.



**Construction of the Xyris Lateral to the Parmelia Pipeline, conveying produced gas from Xyris facilities**

ICON's operations experience combined with project and controls know-how contributed to the delivery of the project on time and within budget.