

Valmec offers full turn-key project execution of hydrogen facilities including Engineering, Procurement, and Construction (EPC), project development support, feasibility analysis, detailed facility design, major equipment procurement, facility construction, commissioning, operations, and maintenance support.

HYDROGEN SOLUTIONS

- ✓ Hydrogen generation – PEM and Alkaline systems
- ✓ Hydrogen compression
- ✓ Hydrogen storage and gas blending
- ✓ Hydrogen dispensing
- ✓ Water treatment systems, storage, pumping and pipelines
- ✓ Hydrogen fuel cell power generation
- ✓ Operations and maintenance services
- ✓ Pressure testing, leak detection, acoustic emission testing



Valmec is an early player in the hydrogen industry, with its involvement in the Hydrogen Park South Australia (HyP SA), the largest, first-of-its-kind renewable gas blending project in Australia.



SIEMENS 1.25MW ELECTROLYSER



AERIAL VIEW OF HYP SA FACILITY AT THE TONSLEY INNOVATION DISTRICT

HYDROGEN PARK FACILITY (HyP SA)



Client: AGIG



Location: Tonsley, South Australia



BACKGROUND

Hydrogen Park SA (HyP SA) is an innovative energy project to produce renewable hydrogen, for blending with natural gas via the local gas distribution network.

The facility includes a 1.25 MW Siemens electrolyser for hydrogen generation, hydrogen buffer storage, controls, and gas blending equipment. This will enable the injection of hydrogen into the low-pressure gas network, supplying gas to nearby properties with up to 5% blended hydrogen as part of a five-year demonstration. The facility also includes provisions to supply hydrogen to third parties via hydrogen tube trailers.

SCOPE OF SERVICES

- Engineering, Procurement, and Construction (EPC) contract
- Works included the complete multi-discipline construction, pre-commissioning, commissioning, performance testing, initial operation, and handover of all associated systems to AGIG.

CHALLENGES

- The site, which is located in an urban infill area within Adelaide, required due consideration during design to potential impacts on neighbouring land use.

ADVANTAGE

- Valmec leveraged its experience in specialised gas processing facilities and electrical hazardous area installations, to deliver a high-quality and compliant installation.
- Ongoing project concept reviews with Client to improve constructability and fit-for-purpose design.
- Understanding of regulations, permits, and approvals to achieve construction and service connections with local councils and governing bodies.
- Winner of the Australian Engineering Excellence Awards 2020

