

POWER MICRO-GRID HYDROGEN GENERATOR EEHA INSPECTION

The hydrogen energy sector is set to grow rapidly in Australia over the coming years. To enable this growth, high volumes of specialist equipment will be brought into the country, often from locations with different standards and regulatory requirements to Australia.

To remain compliant with Australian regulations, and to minimise the risk of explosive atmosphere ignition, hazardous area electrical equipment must be designed, selected, installed, inspected, and maintained in accordance with the AS/NZS (IEC) 60079 series standards.

THE CHALLENGE

A Western Australian state-owned power provider is aiming to implement small scale hydrogen power generators to support regional power micro-grids in a bid to eliminate diesel power generation by 2025. The innovative Australian hydrogen OEM developing the generators engaged Inlex as a hazardous area specialist to review area classification and equipment documentation and to conduct an inspection in accordance with AS/NZS (IEC) 60079-17 and AS/NZS 3000.

OUR APPROACH

It's our mission to eliminate risk, maintain compliance and create safety. Our engineering team and hazardous area electrical experts worked with our customer to assess the prototype unit and make recommendations for improving safety and compliance.

OUR SOLUTION

We conducted a desktop audit of the hazardous area documentation and an experienced EEHA technician inspected the prototype unit. Inspection and test reports were provided for each item of equipment on the unit and several minor equipment and documentation non-conformances were detailed in a final report. We provided recommendations to rectify the issues and conducted a final QA inspection to confirm non-conformances had been closed.

THE RESULTS

Using the results from our audit and inspections, the OEM was able to refine their prototype and improve safety and compliance – taking them one step closer to field trials, and moving Australia closer to a greener future.

We're proud to be working in Australia's burgeoning hydrogen industry and look forward to helping it grow safely.

