CASE STUDY

In 2007, a gas field holding approximately 65 billion cubic metres of recoverable hydrocarbon reserves has been found in Ain Tsila, located in the eastern part of the Sahara Desert in south-east Algeria.
A gathering system, comprising 30 wellsites, flowlines, manifold stations and trunk pipelines to gather the produced fluids and transport them to the reception facilities has been engineered and built by ISARENE joint venture, creating one of the largest Central Processing Facility (CPF) in Algeria.
Electrical power generation was one of the major point for the smooth operation of the facility, including a powerful essential services power generation for the CPF, BdV and the main security camp.

The Emergency Diesel Generator was firstly foreseen by the appointed EPC contractor as one single Medium Speed unit of 3.5 MVA@5.5kV, operating under extreme environmental conditions at site (from -5°C to +55°C).
After the analysis of the entire project requirements, Ausonia proposed 1 unit, powered by 1000 rpm engine, installed into an IP55 container and rated 3.5 MVA in continuous power (after derating).
With this project Ausonia has confirmed its 40 years partnership with Sonatrach, with more than hundred gensets installed in several configurations and the complete satisfaction of all the EPCs involved in Oil & Gas projects in Algeria and in other Countries.

MAIN BENEFITS AND ADVANTAGES:

Higher Efficiency
- Continuous power at the worst environmental conditions
- Perfect fit with MV feeding line of loads
- Back synchro for no bumps at Mains return

Operation & Maintenance
- Easier recovery and intervention on site
- Long lifetime up to 30 years without downtime
- AC control room for operators during hottest periods

Handling & Transportation
- EDG container in modules for easier transportation to site
- Easy installation on site without special tools for handling
- No extra footprint for heat exchangers

Extreme Environmental Conditions
- Design temperature from -5°C to +55°C
- Sand filters for complete protection from frequent sandstorms
- Special design to resist the corrosive atmosphere of Sahara

Reliability
- IP55 container for full protection of internal items
- Full redundancy of Controller and AVR for almost zero stoppage time
- Double pneumatic starting system for reliable intervention

Redundant pneumatic starting system

IP 55 MV alternator

Fire and gas system

Safe access to container roof

Direct Medium Voltage Output
Lower Installation & Maintenance Costs
Suitable for Long-Distance Carry

The entire Ausonia portfolio of emergency solutions for MV plant is designed according to the highest market standards and requirements, satisfying any level of requests coming from the most demanding applications, including all the most advanced technologies in the market.