

Mozambique



Bridging Power for Large Mining Operation

Brazilian mining giant, Vale, needed a reliable source of backup power for the construction phase of its mining operation in the province of Tete, Mozambique. Their ideal power solution required transportable generating units and rapid mobilization for uninterrupted supply of power to cover peak demand. The proposed plant would fulfill demand requirements until Vale could construct a large permanent power station. In 2011, local subsidiary Vale Moçambique Limitada selected APR Energy to rapidly mobilize, install, and commission a 10MW turnkey plant. Using diesel-fired power generation modules, APR Energy created a customized solution that included a volumetric fuel measurement system and a 2-kilometer overhead line from the plant to a nearby substation. The plant was configured to operate in base load parallel with the grid and with capability to instantaneously switch into island mode in the event of grid failure. APR Energy's power generation units provided reliable, dedicated power to Vale's Moatize Coal Project throughout the critical commissioning phase of the mine site.



ISLAND MODE CAPABILITY

The plant was configured to switch instantaneously to island mode in event of grid failure.



RAPID INSTALLATION

APR provided rapid installation for the project to support mine construction.

Challenges:

- Inadequate power supply from local grid
- Permanent coal-fired power station still under construction
- Need for rapidly available supplemental power

LONG- TERM SKILLS TRAINING

APR Energy's site engineers worked closely with Vale operations staff to develop a training program for the operation and maintenance of the units. In 2012, after training the local workforce, APR Energy transferred operation of the power plant over to Vale Moçambique Limitada to ensure a reliable and long-term power solution for the mine site.

10MW

Diesel power modules

