

Benin



APR Conquers Unreliable Natural Gas Supply in Benin

Benin and its 11 million people have relied on power imports from neighboring West African nations. Many of its aging plants were inoperable and much of the plant equipment had been removed for other uses.

In 2016, Benin elected a new president who pledged a sufficient electricity supply for Benin's population and reduced reliance on power imports. To help attain those goals, the Ministry of Energy, Water and Mines contracted APR Energy to provide 50MW of power generation using two fuel-flexible TM2500 aeroderivative turbines. APR's solution was cost effective and flexible, depending on the availability of either gas or diesel. The turbines were connected to two electrical grids serving the West African Power Pool - one from Ghana, the other from Nigeria. Each grid operated at 132kV, but the Nigerian system was highly unstable and required APR Energy to successfully modify the plant turbine software and engineer solutions to compensate for dramatic voltage fluctuations.



POWERING PROGRESS

APR's plant reduced Benin's reliance on electricity imports and helped support economic growth and social stability with domestically produced power.



SUPPORTING COMMUNITIES

The Benin economy benefited from job creation, as most of the employees who operated and maintained the power were hired and trained from the local workforce.

2 **TM2500+**
gas turbines



connecting to two electrical grids
serving the West African Power Pool -
Ghana and Nigeria