




Challenges


- MOBILIZING AND INSTALLING 450MW ACROSS SIX SITES
- UNCERTAIN INFRASTRUCTURE AND LACK OF SKILLED WORKERS
- EXTREME CLIMATIC CONDITIONS: SOARING TEMPERATURES, SAND STORMS

At a glance

450MW
6 sites



+ Gas turbines
+ Diesel power modules



- LARGEST FAST-TRACK POWER CONTRACT
- MASSIVE EQUIPMENT MOBILIZATION
- AIRFREIGHT FOR IMMEDIATE AVAILABILITY
- OVERCAME EXTREME CONDITIONS
- LIBYANS TRAINED TO SUPPLEMENT WORKFORCE

Background

Libya's power generation and transmission system was unable to meet the acute and growing demand for electricity. In 2013, the hot summer season was approaching with expected peak demand far outstripping the available electrical generation, creating a critical need for supplemental power solutions. Libya's interim government, Ministry of Electricity and Renewables and the General Electricity Company of Libya ("GECOL") decided to explore fast-track power solutions to generate electricity during repairs and improvement of its infrastructure.

Solution

APR Energy proposed fast-track solutions that met GECOL's key requirements – environmentally sustainable and efficient turbine generation. Our ability to deliver state-of-the-art mobile gas turbines on a fast-track basis resulted in our largest single contract to provide 250MW over four sites in key areas of Libya. The collaboration with the Ministry and GECOL further strengthened a few months later, when APR Energy provided an additional 200MW of fuel-efficient diesel-powered generation at two sites power, after other generation vendors failed to execute on their proposed solutions. This expanded 450MW project became the largest single contract ever signed in the fast-track power industry and the largest fast-track, turnkey power project ever with a public utility. Given the scale of the project, APR Energy mobilized equipment from 23 countries using 37 ocean shipments and 71 flights covering 863,855 kilometers. Initial turbine shipments arrived direct from the manufacturer via Antonov cargo planes for immediate installation at one of the Tripoli sites. To supplement skilled workers awaiting entry visas, we conducted international and local training for more than 80 GECOL staff on maintenance and operations on the dual-fuel turbines and fuel-efficient diesel power modules.