

CASE STUDY

FLEXGRID FIELD POWER WITH NO UP-FRONT COSTS

APPPLICATIONDBOOM Service

EQUIPMENTFlex Turbine
Units

LOCATIONMidland. TX

IMPLEMENT THE FLEXGRID FIELD POWER SOLUTION WITH NO UP-FRONT CAPITAL INVESTMENT

Flex Energy Solutions (Flex) offers Design-Build-Own-Operate-Maintain (DBOOM) services to clients seeking to eliminate up-front costs associated with implementing the FlexGrid field power solution. DBOOM is a methodical, comprehensive process and business model offering substantial benefits, including improved capital efficiency, ease of implementation and operating costs aligned with production.



FLEXGRID IMPLEMENTATION PROCESS

1. Design. Flex first considers whether the application is intended to power existing operations with limited development or if the deployment is for new asset development.

In the case of new field development, the power demand need is assessed from initiation of field development, ramp-up, peak production, and eventual decline. The operator's Field Development Plan (FDP) is a critical element for consideration. Flex application engineers work side-by-side with the operator's asset management team to evaluate the FDP, including pad development sequence, anticipated production modes and equipment requirements, production forecasts, and operational footprint.

In collaboration with the operator's technical team, Flex engineers then create a proposed FlexGrid plan to match the power needs across all stages called for in the FDP. The FlexGrid Design Plan includes detailed requirements for the number of Flex Turbine® units, fuel source type and quality, switchgear, transformers, distribution network, maintenance regime and other critical factors to ensure that the power needs of the FDP are met. Once finalized, the Design Plan becomes the FlexGrid requirements blueprint for build-out and is incorporated into the operator's final FDP.

In the case of designing a FlexGrid solution to power existing operations, which may include producing wells, salt-water disposal (SWD) facilities, gathering systems, natural gas and crude oil processing and other field systems, scoping the power need is simpler. Flex application engineers work with the operator's production team to assess the overall power need, define solution equipment requirements, choose the generation site, and identify any risk factors that need to be addressed.

ABOUT FLEX ENERGY SOLUTIONS

Flex Leasing Power and Service provides reliable, clean and simple field power solutions to the oil and gas industry. Our high-performance, lowemission and high-uptime gas turbine power solutions deliver the lowest cost of field power over the life of the asset. Customized leasing packages for the Flex Turbine help operators secure reliable power, reduce flaring, methane venting and air pollution at oil and gas facilities and industrial plants without major capital investments.

2. Build. In the second phase of the process, Flex professional staff collaborate with the operator's asset management team to build-out the solution approved in the Design phase. The first step is to build the generation site, where the FlexGrid will be located, which is usually located on the production pad that is expected to have the most reliable source of fuel gas.

Switchgear and transformers are installed first, followed by the initial Flex Turbine units, which are connected to the system. Simultaneously, the distribution network of power poles and line is installed in the area of operations to serve the operation at full field development. Flex manages the entire construction process in collaboration with the operator's asset management team and onsite personnel.

- **3. Operate.** Once the generation site has been completed, the power distribution network has been installed and operations are ready for power, the Flex Turbines are commissioned and started. Upon FlexGrid operation, Flex assumes operation of the power system. This approach is taken so the operator does not have to incur the expense of making additional full-time hires not directly associated with asset development. In the DBOOM model, Flex is an operational partner with the operator, sharing data, coordinating activities, and responding immediately to any unexpected events that impact uptime.
- **4. Own.** Flex maintains ownership of the on-site FlexGrid solution, the Flex Turbines, and associated equipment, including the power distribution network. The operator pays a monthly lease fee that varies with production, as new Flex Turbine units are added or subtracted to/from the FlexGrid during the life of the system. A flexible lease payment aligns power costs with operations, which enhances well economics and reserves. Additionally, Flex ownership improves an operator's capital efficiency, ensuring all of the E&P's capital investment is allocated to core asset development activities (i.e., drilling, completion and facilities) instead of ancillary power generation.
- **5. Maintain.** During the life of the FlexGrid, Flex field staff provide ongoing maintenance and repair services. Many operators choose FlexCare service contracts which generally last the expected life of the system, typically between five and 10 years. Each Flex Turbine is monitored remotely to ensure performance and power availability. Although the Flex Turbine is a robust, durable piece of equipment that requires only one 8-hour scheduled maintenance interval per year, unexpected maintenance and repair needs may arise due to inclement weather or other environmental factors. In these cases, locally placed Flex crews are deployed as soon as the monitoring system indicates a down or underperforming unit, reducing downtime.

SUMMARY

Benefits of the DBOOM process for implementing the FlexGrid solution:

Provides a proven method for implementing the cleanest, most reliable field power solution available to the industry.

Site-specific modular power solutions that are sized to actual power demand, unlike typical utility contracts that specify a take-or-pay demand for more power than the operator may need during the life of the asset.

Lease terms which improve operator capital efficiency by avoiding up-front investments in power generation equipment and a distribution network that would otherwise pull limited capital resources away from drilling and completing wells.

Eliminates additional operational overhead by freeing operators from having to hire additional personnel to operate and maintain the system.

- E&P operators can focus on what they do best develop and operate oil and gas assets
- Flex focuses on what it does best delivering power when and where it is needed.

Aligns the cost of power with operations, as the FlexGrid scales up or down, depending on the pace of development and/or the scale of operations.

