

SUMMARY OF THE INVENTION

[008] Various illustrative embodiments of a system and method for providing electricity to a hydraulic fracturing operation are provided herein. In accordance with an aspect of the disclosed subject matter, the method and system of the present invention provide an auxiliary trailer powered by natural gas run turbines for powering electric wireline equipment to be used in hydraulic fracturing operations. The wireline equipment can include an electric wireline unit, crane truck, and workshop trailer. Further, all of the equipment relating to fracturing operations can be powered by the electricity generated and controlled by the present system including third party equipment.

[009] Embodiments of systems and methods of the present disclosure are designed to provide power to an hydraulic fracturing operation through the use of natural gas powered turbines and an auxiliary trailer. In one embodiment at least one turbine generator driven by natural gas provides the main source of electric power. A second auxiliary trailer with multiple turbines can be provided to supply additional power to the fracturing equipment. Multiple turbines can power a single auxiliary trailer, or a single turbine can power multiple auxiliary trailers depending on the total power demand and the output of the turbine generators. The trailers can include transformers to step the electricity generated by the turbines down to the needed voltage for the hydraulic fracturing equipment. It is also possible to have the transformers physically separate from the auxiliary trailer and electrically connected with cables. They also include a power distribution panel to supply power out to the wireline unit, crane truck, and workshop trailer. There are also newly designed receptacles so that the wireline equipment can be connected quickly and efficiently and new cables, which are able to detach at both ends for fast move in rig up and fast disassembly and take down.