

# Enchanted Rock, Ltd.

## TEEA 2018 Winner: Technical/Technology



### *Providing Reliable Emergency Power While Protecting the Environment*

The reliable natural gas power system designed and engineered by Enchanted Rock, Ltd. (ERock) is a potential game-changer for their customers and the Texas environment.

After years of demanding work to engineer their proprietary design for “natural gas resiliency microgrids,” ERock now provides the microgrids as a service to generate power for their customers during electric grid failures, and to supply the grid with a quick-start generation during normal operating conditions.

ERock’s microgrid customers, usually municipalities and businesses, only pay a fraction of the installation cost. ERock owns, operates, and maintains the system at no additional cost to the customer, making this technology cost-effective.

Their microgrids are capable of syncing to the grid in 15 seconds, providing full-power in 75 seconds, and they can be cycled multiple times-per-day without degrading the system. Compared to traditional generation for the grid, they do not need to burn surplus fuel to account for transmission and distribution losses. In addition, ERock’s microgrids are clean, emitting nitrogen oxides at a rate that is seven times lower than their permit limit.

Since the installation of their first microgrid system in 2015, ERock has installed microgrids across Texas that can produce 61.7 megawatts of electricity and construction is underway for more sites that will be able to produce 77.3 megawatts.

During Hurricane Harvey, wide-spread power outages occurred throughout the affected region. However, ERock’s microgrids provided full-power to their customers, such as 18 H-E-B stores in the

Houston area. Because these systems are fed from underground natural gas pipelines, which were not destroyed by wind or flooding, the 18 H-E-B's were able to remain open to help care for neighbors in their time of need. Today, one hundred and four H-E-B stores statewide have contracts with ERock for microgrids (41 currently operating and 63 being installed).

ERock also provides emergency power systems to municipalities, businesses, and institutions—including the city of Houston; Buc-ee's, Ltd; and Texas A&M University System's new RELLIS Campus.

ERock's resiliency microgrid service is a low cost and reliable technology that provides clean energy. Enchanted Rock Ltd. is protecting the environment while helping complete the resiliency circle making Texas better prepared for power outages and future emergencies.