

ENCHANTED ROCK: POWERING INDUSTRY WITH CLEAN & RELIABLE POWER

According to the North American Electric Reliability Corporation’s (NERC) 2024 Long-Term Reliability Assessment (LTRA)³² over half of U.S. power regions face an elevated to high risk of energy shortfalls over the next 10 years under normal and extreme weather conditions.



These challenges are largely due to increasing extreme weather events, escalating energy demand growth, accelerating generator retirements, and limited dispatchable generation resources.³³ The surge in energy demand is largely driven by the rapid growth in data centers. In fact, U.S. data center electricity consumption is projected to more than double by 2030, rising from 4% to 9% of total U.S. power use.³⁴

Amid increasing strain on the electric grid, reliable backup power is more critical than ever —especially for data centers. Historically, backup power during grid outages has come from diesel-powered generators. However, diesel systems have major environmental and operational drawbacks: local emissions of toxic air pollutants like NO_x, CO, and particulate matter; CO₂ emissions from testing and operations; uneven maintenance practices; and logistical risks of transporting and storing onsite fuel. Diesel-powered backup system limitations are especially acute

for data centers. Reliability, uptime, sustainability goals, and increasingly tight air permitting regulations make diesel fuel a less viable solution.

Enchanted Rock provides a cleaner, more scalable solution. Their natural gas generators with ultra-low emissions, connected to existing underground fuel infrastructure, eliminate the need for onsite diesel storage, minimize air quality impacts, and ensure fuel reliability even during prolonged outages. This approach simplifies operations and significantly reduces environmental risk.

Grid operators are also facing growing challenges keeping the balance between supply and demand —especially as renewable energy grows and extreme weather becomes more frequent. Flexible capacity has become essential to balance the grid. Enchanted Rock’s dispatchable onsite generation turns data centers from passive consumers into active grid partners. During supply shortfalls or emergency conditions, sites can shift

load to onsite generation, relieving strain on the grid and improving community-wide reliability.

Since 2006, Enchanted Rock has been a leader in providing electrical resiliency-as-a service solutions via their natural gas-powered generators and microgrids. These systems match or surpass performance of traditional diesel generators, in key areas such as start-up time, capacity, cost, and physical footprint with additional advantages including lower emissions, quieter operation, and more reliable fuel supply. Enchanted Rock safeguards critical operations from unexpected power outages and enhance grid stability by exporting power to the grid during peak demand.

The company’s fully managed end-to-end solutions include 24/7/365 real-time system monitoring, operation and optimization, including forecasting and participation in electricity markets. By combining cutting-edge technology, expert operational support, and data-driven optimization, Enchanted Rock delivers worry-free power that enables customers to stay focused on their mission, not on their generators.

384

operational microgrids

99.999%

combined reliability

25,000+

hours of utility outages covered

4,100

metric tons of CO₂e emissions avoided since 2018



Community Microgrids



City of Houston Northeast Water Purification Plant