

Electrical Resiliency-as-a-Service

Water Facilities

Enchanted Rock is a leader in electrical resiliency-as-a-service, powering companies, critical infrastructure and communities to ensure operational continuity during unexpected power outages. Enchanted Rock’s dual-purpose microgrids use natural gas and renewable natural gas (RNG) offsets to produce significantly lower carbon emissions and air pollutants than diesel generators, capable of achieving resiliency with net-zero emissions. Enchanted Rock service fee is a small fraction of the purchase price of a comparable system. By participating in power markets during non-emergency situations, Enchanted Rock can significantly reduce their service fee and offset the cost of ongoing operations and maintenance.

CLEAN BURNING MICROGRIDS

Enchanted Rock’s business began with diesel generators, the company has shifted to natural gas because it is a far more resilient form of fuel. Natural gas is delivered through a robust underground network, which remains unaffected by flooding and other damages from severe weather events. On the other hand, the diesel supply chain can become very challenged during natural disasters, such as Hurricane Harvey or Winter Storm Uri, which can lead to widespread diesel shortages. Additionally, extreme flooding or icy roads can prevent delivery trucks from being able to reach sites where it is needed, and National Guard units have the right to commandeer fuel trucks destined for commercial and industrial customers. Furthermore, natural gas is a cleaner, quieter, and more efficient source of fuel which can provide up to 100 percent availability for customers.



Enchanted Rock 11.2 MW - Fort Bend County LID 2 backup system saved over \$6 million to the district. Since the generators run under load, the system is constantly tested and conditioned, which leads to a higher level of availability than traditional diesel backup.

WHY ENCHANTED ROCK



99.999% combined reliability



Electrical protection from severe weather, rolling blackouts, cyberattacks and grid failure



Net-zero emission with natural gas / renewable natural gas. 10X cleaner than diesel



Up-time performance with continuous monitoring and maintenance



CAPEX/OPEX reduction



10 seconds fast start, rich burn technology



24/7/365 monitoring and management via mNOC

WHEN A STORM STRIKES

During heavy rain and flooding events, it is paramount that storm pumps operate at maximum output to protect human lives as well as billions of dollars in property. Many Levee Improvement Districts (LIDS) and various water authorities rely on backup generation to ensure that water pumps are operational in the instance of a grid outage.

MANAGING WASTEWATER

It is critical that treatment facilities run by municipalities are backed up in order to prevent sewage spillage. When treatment facilities lose power, they are at risk for polluting surrounding bodies of water and land, which can result in unhealthy conditions and large environmental fines.

COST EFFECTIVE BENEFITS

Enchanted Rock's dual-purpose microgrids have the added benefit of providing additional financial streams, making the assets cost-effective for data center operators. With our fully-managed and sustainable microgrids, Enchanted Rock has reimagined the way companies ensure business continuity in the face of grid failure. Coupled with comprehensive support services, our team of experts designs, installs, operates and maintains purpose-built systems that enable worry-free protection from extended electrical outages.



2.4 MW - North Fort Bend Water Authority

EXISTING TEXAS SITES & CUSTOMERS

Site	MW
City of Houston	
• Northeast Water Plant	35.0
• Southeast Water Plant	5.0
• East Water Plant	16.0
Coastal Water Authority	
• Lynchburg Pumping Station	15.0
• Trinity River Pumping Station	8.0
Gulf Coast Water Authority	
• Industrial Pumping Station	5.0
• Municipal Water Plant	2.5
Fort Bend County LID No. 2	11.2
Various MUDs	11.0

GCWA CASE STUDY

In June 2017, a power outage in Texas City threatened Gulf Coast Water Authority's (GCWA) ability to provide drinking water to Galveston County and surrounding areas. Additionally, the power outage would have prevented GCWA from being able to supply critical water to refineries and chemical plants in the area. Fortunately, Enchanted Rock's combined 7.5 MW system, commissioned in 2013 and 2014, carried GCWA's load at its two water plants during the outage. This was GCWA's first time relying on Enchanted Rock's microgrids, which yielded 100 percent electrical availability.

"ERock's team not only allowed us to mitigate a potential loss of millions of dollars by our industrial customers but allowed us to continue to deliver on our promise to deliver reliable water supplies,"

-- James E. Vanderwater, P.E.,
District Engineer