

# Electrical Resiliency-as-a-Service

## Critical Infrastructure

### A CRITICAL NEED FOR CLEAN WATER TO KEEP COMMUNITIES SAFE

When access to clean water is threatened, it affects the safety of constituents and the functioning of facilities that are critical to community health. 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 power generation to ensure that water pumps are operational in the instance of a grid outage.

It is critical that treatment facilities run by municipalities are backed up 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. For example, a hospital that lost power and access to fresh water during Hurricane Harvey was forced to evacuate and lost over \$20 million in revenue. To ensure the safest, healthiest, and strongest functioning community, municipalities must have an answer to any and every power loss situation.

#### ENCHANTED ROCK BENEFITS

- Ensure the safety of the community
- Replace unreliable, high emissions diesel systems
- Eliminate unplanned outages
- Reduce CapEx and OpEx



### DUAL PURPOSE MICROGRIDS, AN AFFORDABLE ALTERNATIVE

Enchanted Rock's electrical resiliency-as-a-service with its dual-purpose microgrids offer dependable backup power at a fraction of the cost of comparable diesel backup. When facilities don't require backup power, Enchanted Rock participates in energy markets by providing grid support services. This additional revenue offsets the cost of the system to the customer. Enchanted Rock owns, operates, and maintains the system utilizing our 24/7 Microgrid Network Operations Center (mNOC) to ensure operational integrity. This full, turnkey service allows water facilities to focus on their core business - providing uninterrupted services to their customers.

Our patented technologies result in the cleanest local emissions available for long duration outage protection while supporting a better tomorrow by helping balance intermittent renewables and further the integration of renewable energy. We provide resilient backup power and support the integration of renewable energy in support of decarbonization goals.

# CASE STUDY: FORT BEND LEVEE IMPROVEMENT DISTRICT 2 (LID 2)

LID 2 is responsible for providing flood protection and storm water management services for major portions of the City of Sugar Land in Fort Bend County, Texas. As storms increase in intensity and frequency resulting in power outages, LID 2 recognized a demand for uninterrupted power to safeguard 8,300 homes and more than \$5 billion worth of property. Enchanted Rock owns, operates, and maintains the systems which allows LID 2 to receive full-facility backup at a fraction of the cost of a standard reliability system.

## CLEANER MORE EFFICIENT POWER

Natural gas provides many benefits, including ultra-low emissions, low sound levels, compact footprint, and indefinite runtime. Diesel fuel is high carbon emitting, high particulate emitting, and higher NOx emitting when compared to a natural gas equivalent. Enchanted Rock's dual-purpose microgrids are best-in-class with sound levels of less than 68 dBA at 7 meters and a compact footprint, allowing them to be placed almost anywhere. The diesel supply chain becomes extremely challenged during severe weather events. For example, refueling may be impossible during severe weather events due to insufficient on-road fuel tankers or impossible roads. Alternatively, Enchanted Rock's electrical resiliency-as-a-service with its dual-purpose microgrids powered by natural gas utilize underground infrastructure which is generally unaffected by weather events and widespread power disturbances. Underground distribution is logistically more reliable than above ground delivery as it is protected from the hazards that can cause an outage.



### ENCHANTED ROCK BY THE NUMBERS

	270+	Operational Microgrid Sites
	565+	# of MW Commissioned
	260+	MW Under Construction
	11,000+	Hours of Outages Covered
	540,000+	Unit Run Hours

Stats to Publish Date

“We are relieved to find such an effortless solution that addresses our reliability needs. We feel confident knowing that our community will be better protected from flooding during severe weather events and utility power outages.”

André McDonald, LID 2 Board President

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