

CITIZENS MEDICAL CENTER CRISIS-PROOFS OPERATIONS WITH FULL-FACILITY POWER RESILIENCY

Resiliency-as-a-Service Option Lowers CapEx by 80 Percent

THE CHALLENGE

When Hurricane Harvey swept through the Gulf Coast in 2017, Citizens Medical Center in Victoria suffered a multi-day power outage. The 338-bed hospital was equipped with standard emergency diesel generators backing up the life safety equipment and critical loads required for regulatory compliance. However, the loss of water combined with unprotected loads created a cascading impact that required Citizens to evacuate staff and patients to a safer location, resulting in \$6 million of lost revenue for the hospital.

To avoid potential future losses due to postponed procedures, damaged supplies or medicines, and patient and staff evacuations, Citizens decided to search for an affordable full-facility power resiliency solution.

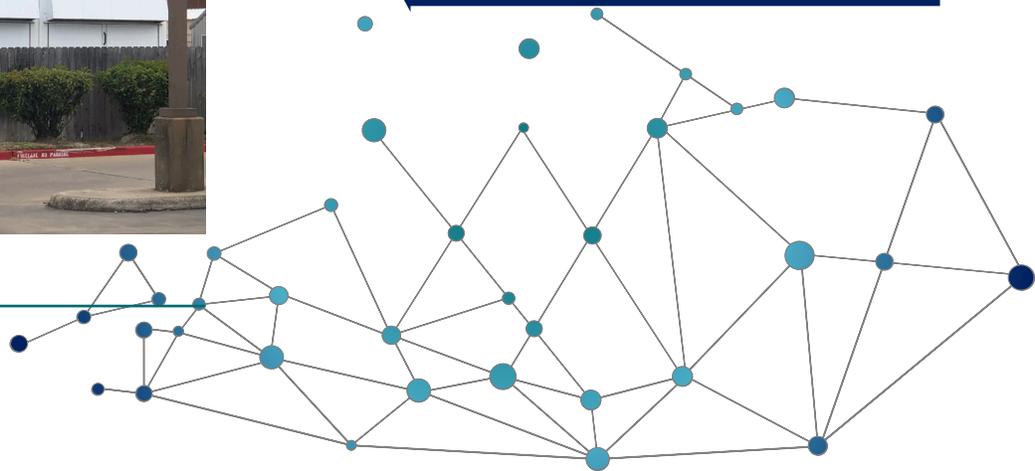
THE SOLUTION

After evaluating many options, Citizens selected Enchanted Rock's Integrated Reliability On Call (iROC) solution to ensure outages no longer impacted the safety, medical care, and comfort of its patients. With a full-facility backup system, operations can run as usual despite outside weather events or grid disruptions.

Enchanted Rock's iROC solution was an attractive option because it increases power resiliency while lowering capital cost. Enchanted Rock owns and operates the systems, allowing Citizens to focus their resources on what matters most -- providing high-quality care for their patients.

BUSINESS BENEFITS

- **Protect the safety and comfort of patients and staff**
- **Avoid lost revenue from canceled procedures and damaged supplies**
- **Reduce CapEx and OpEx with a fully-managed service offering**
- **Ensure seamless integration with existing energy assets**



"We have been very impressed with all aspects of this project, and we are very pleased to have this service available to our entire hospital in the event of an outage. This gives us a great deal of security to know that we will be able to take care of our patients, staff, and community if we face another hurricane or other disaster that results in loss of electrical power,"

- Mike Olson, Citizens CEO

Enchanted Rock was selected for several reasons:

Affordability: Enchanted Rock owns and operates the systems, relieving the hospital of much of the cost of ownership. Citizens paid a small upfront contribution that was 20% of the cost of the entire system. Additionally, all operations and maintenance is included at no additional cost.

Experience: Enchanted Rock operates the largest dispatchable distributed generation fleet in Texas and has a solid track record of providing dependable backup power during severe weather events and long-duration outages.

Turnkey Solution: Enchanted Rock delivers a proven, full-service solution that provides customers with trouble-free backup power. The innovative solution includes the design, financing, construction, operations, and maintenance of the system. Enchanted Rock's microgrid Network Operations Center (mNOC) provides 24/7 monitoring of the systems.

The Enchanted Rock resiliency-as-a-service (iROC) model includes all of the Enchanted Rock services:

- Requirements analysis
- Microgrid design, build, and installation
- Operation, monitoring, and maintenance
- Monetization of residual energy
- Financing

WORRY-FREE INTEGRATION

Enchanted Rock designed a microgrid solution that integrated with the existing diesel system that complied with regulatory standards. The Enchanted Rock resiliency microgrids are located upstream of the diesel equipment between the utility and the load, and they act as a secondary utility power supply. In the event of an outage, the diesel generators pick up the critical load. In tandem, Enchanted Rock's systems start up and will pick up the entire facility's load in a matter of seconds, including the loads the diesel generators are already powering, allowing the diesel system to shut down.

ABOUT ENCHANTED ROCK

Enchanted Rock provides the most affordable, long duration backup power to commercial, industrial, and institutional customers by delivering a proven, full-service solution with the cleanest available technology.

Enchanted Rock manages the design, construction, commissioning, operations, maintenance, and ownership of the natural gas-powered microgrid, so customers can have reliable backup power without the capital risk and challenges that come with maintaining a backup generation system. Enchanted Rock has commissioned over 380 MW of distributed generation and actively manages nearly 200 microgrids.

To learn more, visit www.enchantedrock.com or contact us at info@enchantedrock.com.

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