Medxcel

CASE STUDY

Quick pivot to alternate fuel source enables uninterrupted hospital operations

During severe weather events and national disasters, hospitals may struggle to remain operational as required utilities become strained or unavailable, impacting their ability to care for patients at a critical time.



Situation

Sudden lack of utility availability and skyrocketing costs due to weather event

Solution

Quickly pivot to alternate fuel source

Outcome

Uninterrupted fuel supply and patient care delivery at a lower cost

Situation

During the 2019 polar vortex, hospitals in the Great Lakes Region scrambled to remain operational due to disruptions in natural gas availability. In addition to supply issues, natural gas utilization above predicted usage rates resulted in a premium surcharge, increasing energy costs exponentially.

Solution

Medxcel facilities management and energy teams partnered to quickly analyze and address the situation facing hospitals impacted by the polar vortex. A command center was established, bringing together Medxcel's experts to address the issue in real time. With diesel already available at client hospitals for use in generators, it was quickly determined that switching the hospital boilers over from natural gas to diesel would allow sites to remain operational, while minimizing the cost of natural gas during the weather event.

Outcome

Benefits of switching boilers to diesel during the polar vortex:

- The on-site storage capability of diesel fuel ensured supply continuity during the severe weather event.
- Diesel boilers operate reliably under extreme conditions.
- Diesel utilization reduced the need for hospitals to pay natural gas energy surcharges during times of peak usage.
- Dual energy source boilers provided redundancy for continuous heating and critical operations.

Lessons learned

Medxcel has adopted many of the lessons learned from the polar vortex, increasing the ability for clients to pivot to diesel when indicated in extreme situations. Diesel's high energy density and lack of complex infrastructure requirements make it a reliable, economical option in certain scenarios.

To address future utility disruptions facing client sites and improve the resiliency of hospitals during disasters, Medxcel created a national strategy for standardized boiler training, in collaboration with WARE Boiler University. The program trains Medxcel technicians across the country in all aspects of industrial boiler function, helping facilities teams prepare to deliver care to their communities during the most critical times.

