

POWER PROFILE

Customer: Summa Health

Location:

Akron, Ohio, USA

Customer Business Issue:

Supply standby power for critical medical and data center operations, including a new state-of-the-art patient tower.

Solution:

18 Cat® diesel generator sets, including high power density solutions

Cat® Dealer:

Ohio Cat



Summa Health's new patient tower will house a women's health center, six operating rooms, a birthing center and neonatal intensive care unit, and private medical surgery inpatient rooms.

POWER NEED

Based in Akron, Ohio, USA, Summa Health is one of the largest integrated healthcare delivery systems in the state. The network is nationally renowned for excellence in patient care and exceptional approaches to healthcare delivery.

Summa Health caregivers treat more than one million patients each year in the greater Akron area through a network of hospitals, community health centers, a health plan, a physician-hospital organization, a multi-specialty physician organization, research capabilities and the Summa Health Foundation.

"Since we started operations a little over 125 years ago, our mission has always been to provide the highest quality, compassionate care to our patients and members, and contribute to a healthier community," said David Custodio, M.D., MBA, senior vice president of Summa Health and president of the Akron and St. Thomas campuses.

Reliable power plays a critical role in the success of Summa Health, as it supports numerous essential functions in patient care, such as emergency services, surgeries, life support and other acute patient care activities.

"Our challenge is making sure we have the right amount of power for the right equipment at the right time," said Ed Friedl, vice president of construction and property management for Summa Health. "Generally speaking, the power in this area is extremely reliable, but if you have a patient on a table in a procedure, you can't afford for power to be lost under any circumstances."

Power is also critical to support the growing role of data in healthcare, through systems such as electronic health record platforms, data storage, telemedicine and mobile applications. "Regardless of the source, data plays an important role in healthcare today," Custodio observed. "Power allows us to use the data we have to improve the care we deliver."

Summa Health has purchased 18 Cat diesel generator sets from Cat dealer Ohio Cat over the past several decades to supply emergency power throughout its network, including Akron City Hospital, St. Thomas Hospital, the Green Medical Center and Emergency Department, the Barberton Campus and the network's corporate offices.

"We have engines that are 30 years old, and they're still running today," Friedl noted.

In 2017, Summa Health broke ground on a new 343,000-square-foot, seven-story patient tower at the network's Akron campus. When complete, the facility will house a women's health center, six operating rooms, a birthing center and neonatal intensive care unit, and private medical surgery inpatient rooms.

"The tower is going to be the new front entrance for the hospital, and it will increase our footprint in the area," Custodio explained. "It was critical to build this new tower to support more advanced clinical services and give our patients a better experience."

The facilities team also sought to replace aging generator sets in Akron City Hospital with more fuel-efficient units to address standby power requirements that had grown steadily over time.

SOLUTION

Summa Health administrators selected Ohio Cat to supply three 1250 kW Cat C32 diesel generator sets featuring high power density for the new patient tower. This generator set has a smaller footprint and up to 44 percent more power density than competitive power solutions on the market today, which reduces total costs for site preparation, transportation and installation, while requiring less overall space for the generator set.

"The high power density units were selected based on their footprint and the amount of power they produce," Friedl noted. "It's also critical for us to be able to parallel the generator sets for efficiency and load shed during an extended power outage."

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"For the hospital, it's definitely beneficial to get 1250 kW out of a smaller machine, and it's a lot less expensive as well," said Mark Gibson, large electric power sales consultant for Ohio Cat.

Summa Health project managers also purchased two Cat 32 diesel generator sets to replace units that have provided standby emergency power for Akron City Hospital since the 1970s.

RESULTS

Ohio Cat and Summa Health have worked closely together to make sure the network has always had the power needed to serve patients.

"We get great service from the Ohio Cat team," Friedl recounted. "Generator sets are complicated, from relays and battery packs to fuel day tanks. Ohio Cat provides us with one person to call, one source to go to and we know it will be taken care of."

"Ohio Cat and Summa Health have a great relationship that goes beyond being an equipment supplier," Gibson explained. "Our

service technicians have been working on the equipment over many decades, and they can reach us at any time to service equipment whenever needed."

When the new patient tower opens in the spring of 2019, work will continue elsewhere to upgrade Summa Health's facilities.

"The patient tower is only one part of the picture, and we have many other initiatives to renovate clinical units," Custodio said. "We're going to make sure all of the facilities continue to be equipped with the resources and advanced technologies that will help us deliver the highest standard of care, and power will continue to play a prominent role."

As Summa Health moves forward, Caterpillar and Ohio Cat are poised to support the network's ever-present need for reliable power. "I've been using Caterpillar engines for more than 20 years, and the reliability of Caterpillar in our area is important," Friedl said. "They're reliable, and as long as I'm in charge, we won't deviate from Caterpillar."

For more information, please visit cat.com/powergeneration



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