

RUNREADY™

ANSWERING the CALL

DEALER SUPPORT KEEPS STANDBY
POWER SYSTEM ALWAYS READY

THE ROAD TO A GREENER LANDSCAPE

Renewable energy will help
data centers meet ESG goals

SOCIAL SUPPORT

Nonprofit organization has the
power to change people's lives



Expect the Unexpected

Most buildings experience power interruptions that are caused by utility outages and equipment failures. In many cases, these power outages are easily handled.

However, power outages caused by natural disasters and unexpected events can be much more difficult to handle. In some cases, an entire facility has to rely solely on the emergency standby power system to continue operating for several hours, or days or even longer.

Unlike most standard commercial buildings, delivering emergency and standby power to health care facilities is a major undertaking due to their complexity, size and critical care needs that demand 24/7 uptime. Many systems consisting of alternate power sources, switching equipment, controls, and distribution equipment are involved.

OSF St. Francis Medical Center in Peoria has two power plants that meet the emergency and backup power needs of the 10-building campus. Recently, an unexpected outage caused by a blown transformer required one of the power plants to run continuously for a month, supplying prime power to an older part of the complex. During this time, Cat® dealer Altorfer Power Systems responded with a regular presence, providing routine maintenance to ensure the gensets ran without interruption. *(Please see the cover story on page 4.)*

Meanwhile, data centers are leading the way to establish green energy practices that will help lessen the environmental impact of the industry's growing appetite for power. A variety of new fuels and technologies are emerging that will help data centers achieve their aggressive carbon reduction goals. *(Please see story on page 9.)*

Also in this issue, two rehabilitation centers in the Appalachian region of eastern Kentucky are backed up by Cat generator sets. In this remote area, standby power is critical as power outages tend to be more frequent. *(Please see story on page 12.)*



SUSTAINED YIELD

With almost no rainfall and temperatures frequently exceeding 105° F during the summer months, the climate in the United Arab Emirates isn't ideal for growing crops outdoors.

That's why company executives from Themar Al Emarat selected a soil-less, recirculating hydroponic system in a climate-controlled environment that supports the high-volume commercial production of beef tomatoes, cherry tomatoes, lettuce, herbs and other crops.

Motivated by a deep commitment to sustainability, company executives also sought to maximize the use of environmentally responsible processes throughout their operations. These include the recycling of irrigation water, the reuse of soil from the hydroponic system as an agricultural conditioner for traditional cultivation, and the use of bumblebees for pollination.

To support these operations, facility planners sought a reliable, top-of-the-line solution to provide power for cooling equipment, water chilling, cultivation and other greenhouse processes. However, the local grid did not extend to the farm's proposed location.

Themar Al Emarat selected local Cat® dealer, Al-Bahar, to design, install and commission a hybrid microgrid solution from Caterpillar that fully integrates advanced power generation with control and monitoring technologies. As the largest single-site microgrid located in the UAE, the system features nearly 23,000 Cat PVT117 photovoltaic modules that generate up to 2.7 MW of solar power for the facility during daylight hours. Meanwhile, five Cat 3412 diesel generator sets in sound-attenuated, weather-resistant enclosures supply up to 3.3 MW of power at night and on overcast days.



Surplus energy is stored in a 286 kWh/250 kW grid stability module supplied by a grid-forming Cat Energy Storage System, which helps compensate for fluctuations in output from renewable energy sources, while reducing reliance on the generator sets. The entire system is managed by the Cat Master Microgrid Controller (MMC), which keeps loads continuously energized with high-quality power at the lowest cost by managing the flow of power from every source in the system.

"We researched best practices around the world to obtain the latest technology that would deliver the highest quality products for our hotel and retail customers," said Dr. Ghanem Al Hajri, chief executive officer of Themar Al Emarat. "We selected systems that would make this project economically viable, save power and water and address the needs of the community as well as our shareholders."

DID YOU KNOW?



"Often we are asked what the lifespan of our generators is. We tell customers and prospects that it usually falls within a 30-year range. We recently visited a customer looking to remove a vintage Cat® D353 (circa 1963), which has been running like a champ for almost 60 years."



- **TYLER HARM**
Power Systems Sales Representative
Nebraska Machinery Company



IN THE SPOTLIGHT:

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When a blown transformer knocked out power to the older portion of OSF St. Francis Medical Center in Peoria, Illinois, several Cat® generators operated continuously for a month until utility power could be restored. Technicians from Altorfer Power Systems were there to ensure the Cat C32 gensets kept operating around the clock.

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ANSWERING the CALL

DEALER SUPPORT KEEPS STANDBY POWER SYSTEM ALWAYS READY

As the fourth largest medical center in Illinois, with 5,800-plus employees and 649 beds, OSF St. Francis Medical Center in Peoria serves all types of patient care needs—from acute pediatrics and kidney transplants to advanced heart surgery—24 hours a day, seven days a week.

With 10 large buildings situated across more than 40 acres, the campus is like a city unto itself.

To keep the power on at all times, two mission-critical power plants are located on the north and south sides of Glen Oak Avenue. Six Cat® C32 generator sets that produce 1 MW of power each are housed within the standby power buildings, while a seventh is located in a separate enclosure.

Altogether, the generators can provide 7,000 kW of power, which is more than enough to handle the hospital's entire load. The generators are set up using an N+1 configuration, which is a form of redundancy. If one of the generators were to fail, another idle genset is available to pick up the load.

Energy Center 1 serves the older part of the campus, while Energy Center 2, with four gensets, provides power to the rest of the campus. An eighth Cat C32 generator set will be added this year to supply additional backup power to the newly built OSF St. Francis Cancer Institute.

In the event of a power outage, the Cat generators start up within 10 seconds to provide ongoing, campus-wide power for critical patient care needs. Emergency power supports lighting, operating rooms and patient rooms. Behind the scenes, power is required for critical things like the fire alarm system, elevators and HVAC system.

Additionally, standby power is required for the two pharmacies and a laboratory, which require a climate-controlled environment to preserve life-saving drugs and a blood supply.

Running 24/7

While power outages are a rare occurrence in Peoria, sometimes forces beyond human control can cause the loss of power. Until this year, Chris Greenway, the facilities supervisor for OSF St. Francis, can only recall one



instance where power was lost when an animal got into a manhole and caused a transformer to fail.

“There are multiple ways to lose your utility feed,” Greenway says. “Actually, I've seen more outages on sunny days than I have on stormy days.”

In mid-February, another blown transformer caused a temporary loss of power to the older part of the campus. Initially, temporary generators were brought in to supply power until St. Francis facilities staff found a way to circumvent the transformer and re-wire, enabling the Cat gensets in Energy Center 1 to supply power until another transformer could be brought in.

“Knowing that we had a lot of power available that we weren't using, our electrical department quickly developed

CUSTOMER PROFILE

OSF St. Francis Medical Center

Location: Peoria, Ill.

Application: Standby power

Cat® Equipment: C32 generator sets (7)





a solution to carry the whole hospital on emergency power,” Greenway said.

It took just over a month to replace the blown transformer with a remanufactured one. That meant the three Cat C32s at Energy Center 1 ran continuously at half load until the utility feed was restored.

“That just shows the trust we have in our Cat generators,” Greenway said. “During this stretch, we ran the whole hospital on emergency power, and they worked great. Plus, it means we didn’t have to dedicate the manpower required to keep refueling the seven temporary generators we used at first.”

“Johnny on the spot”

Cat dealer Altorfer Power Systems supplied the generators to OSF St.

Francis for both power plants, and handles preventive maintenance and any necessary repairs.

“We had Altorfer here off and on when the whole sequence of events started with the transformer failure,” Greenway said. “They changed our fuel filters when we started seeing a drop in fuel pressure, and they also changed the oil every 250 hours to ensure the preventive maintenance was performed to the highest standards.

“As for the performance of the generators, they’ve done everything we’ve asked of them and more.”

The relationship between Altorfer and St. Francis goes back a long way, well before Greenway started working for the medical center 10 years ago.

Continued on page 6



“One of the Altorfer service techs will typically call me before the service is due; he’s very engaged in the process,” Greenway says. “We have each other’s personal phone numbers. He’s well aware of the maintenance schedule for the generators, and he’s typically calling me before I know what’s coming up.

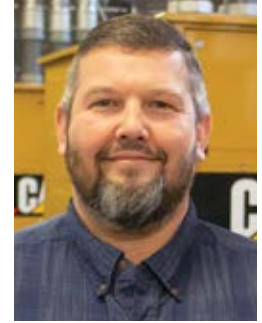
“Based on our recent use of the generators at Energy Center 1, we had to call them in the middle of the night when we noticed our fuel pressure problems, and they arrived shortly thereafter with a couple of technicians. So, we never missed a beat.”

All preventive maintenance on the generators is performed by Altorfer technicians as part of a Customer Value Agreement that OSF St. Francis has in place. For added protection, the medical center has an ESC Gold package.

Extended Service Coverage (ESC) offers protection against unexpected repair bills, as well as rising parts and labor costs. It covers 100 percent of the cost of parts and labor on not just any covered parts that fail, but also any resultant damage to other Cat parts.

“Altorfer helps educate us if we have questions. They’re kind of like having an extra guy, in my opinion. I treat them like they’re one of our mission partners because they’re so reliable and ‘Johnny on the spot.’”

CHRIS GREENWAY, Facilities Supervisor
OSF St. Francis Medical Center



And because all ESC options are 100 percent transferable at no additional cost, it may increase the resale value of the equipment.

OSF St. Francis’ facilities staff perform weekly inspections on the generators, and run the generators once a month for an hour. To ensure the system works as intended in the event of an outage, facilities staff also conducts an annual load bank test and operates the entire medical center on emergency power for several hours.

In addition to the prompt response he receives from his Cat dealer, Greenway appreciates the consultative relationship.

“I’ve never been turned away on a phone call with a question,” he says. “Altorfer helps educate us if we have questions. I can call them and pick their brains, or have them come out here if necessary. I’ve never had an instance where I’ve called and they’re not here within the hour.

“They’re kind of like having an extra guy, in my opinion,” Greenway says. “They understand the importance of a medical center having emergency power at the ready, and they take really good care of us. I treat them like they’re one of our mission partners because they’re so reliable and ‘Johnny on the spot.’”



REMOTE SERVICES

MANAGE EQUIPMENT HEALTH, REDUCE DOWNTIME

There's a new way to troubleshoot your genset—one that can reduce downtime and give you peace of mind as you manage equipment health.

Remote Services is a technology that works with Cat® Product Link™ hardware, enabling us to perform certain diagnostics and updates remotely so you can keep working productively.

Remote Troubleshoot makes problem detection simple. Say you receive an engine fault code alert. Instead of shutting down the genset, you call your dealer and report the fault code. While the genset continues to run, we initiate a remote troubleshoot session.

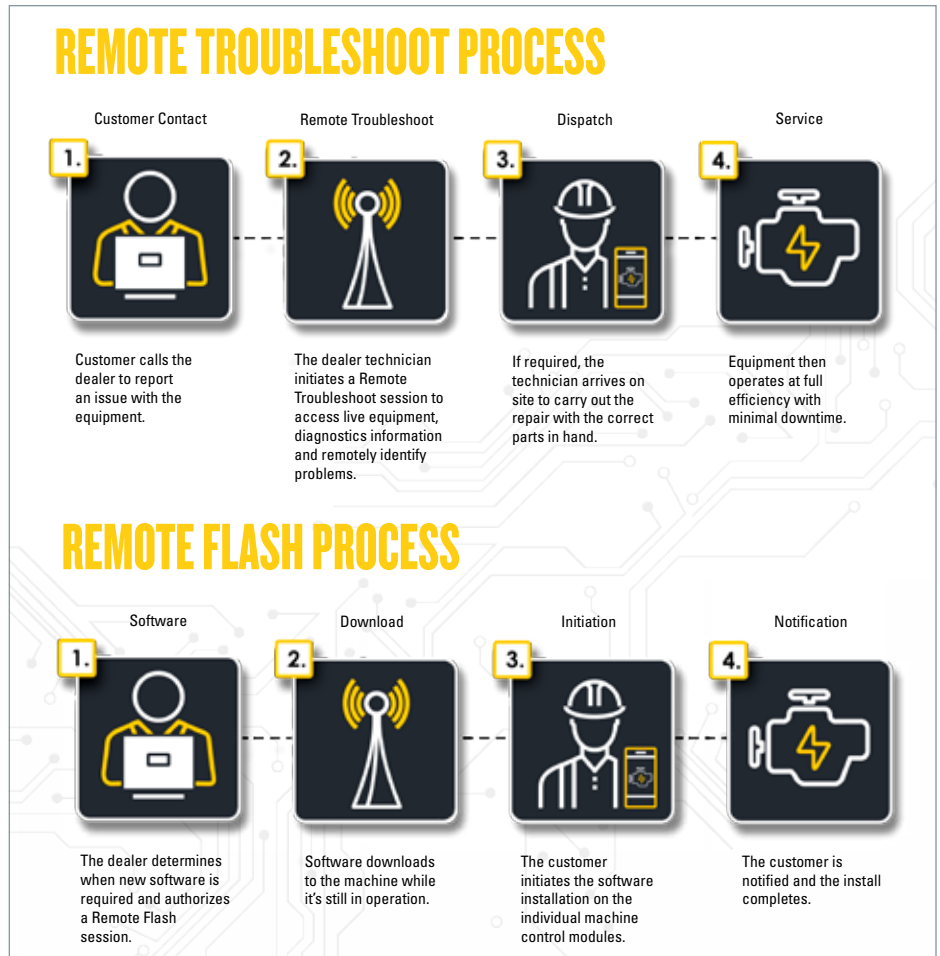
Our support specialist views live diagnostics that pinpoint the issue. At that juncture, we ensure you have the parts and service solution that's required to take care of the issue promptly.

Benefits

- Remote diagnostic testing on gensets that are in operation
- We receive vital diagnostic information, facilitating timely consultation on the best course of action
- Technicians are sent with the correct information, parts, tools, and instructions to perform repairs in the shortest possible time
- Issues are resolved more quickly with less downtime

Remote Flash

Remote Flash delivers software updates on your schedule. When you receive a notification that new software is available, we can flash the update to your equipment remotely when it's convenient for you. There's no need to wait for a technician to arrive on site. You benefit from all performance and




productivity updates without taking the equipment down.

Flash files for Remote Flash enabled equipment software are available via the Dealer Service Portal (DSP). When an eligible asset with the latest telematics hardware requires a software update, we will push available flash files to targeted gensets. Next, an authorized user (customer employee or dealer representative) will perform the following steps on their mobile device:

- Confirm the asset is ready to begin flash
- Initiate the flash
- Confirm post-flash performance

Benefits

- Reduce time taken for software updates by as much as 50 percent
- Potentially eliminate the wait for a dealer technician to arrive on site
- Ensure the benefits of software updates are installed as soon as possible
- Updates can be installed when convenient to your operation 

Contact our dealership about putting Remote Troubleshoot and Remote Flash to work for you today.



ELECTRIC CITY

Nestled in western Missouri, Butler is a small city with a vibrant history. With a population of 4,000, Butler is home to the oldest continuously operated power utility in the U.S.

Often referred to as “Electric City,” the City of Butler was the first to have electric power west of the Mississippi. County records reveal that on the evening of December 6, 1881, four “burners” on top of the Butler Courthouse were lit by electricity from the city plant. These burners flooded the courthouse and surrounding area in brilliant light.

The sight was so spectacular that Kansas City area residents would take the train to Butler at night just to see the lights. Keep in mind, it wasn’t until almost a year later in September 1882 that Thomas Edison’s well-known Pearl Street Station in Manhattan went into operation.

In the late 1990’s, the City of Butler approached Cat® dealer Foley Power Solutions about an upgrade. City officials ultimately opted to purchase four Cat 3516 diesel gensets to replace their two vintage Fairbanks Morse generators.

Powered by four Cat 3516 diesel generator sets, the historic Butler City Light Plant converts the fuel into bulk electrical power and distributes it to the Bates County electrical grid. The 8 MW plant also protects the city from blackouts, extreme weather events and other potential threats to public safety.

“We wanted a system that would meet EPA regulations,” said Charles Long, Butler City Light Plant Supervisor. “And when we called, Foley came here immediately and worked with us to determine our exact needs. They set us up for the future with a power system that’s going to last for decades.”


Foley Power Solutions designed a power system that enables a steady stream of income, while delivering robust

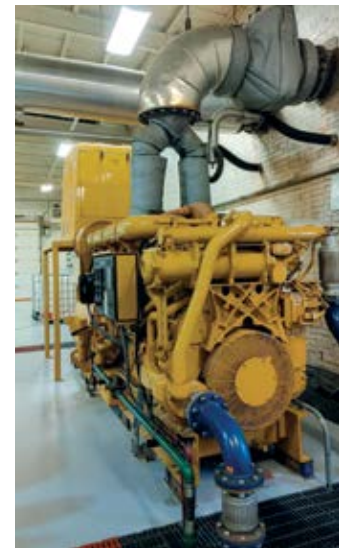
technology that provides fast-start capability in an emergency.

Last year, the plant played a key role by supplying power to the Southwest Power Pool during Winter Storm Uri. The storm brought major snowfall and damaging ice, followed by the coldest temperatures in decades to the south central U.S., taking down the Texas power grid with excessive demand. On Valentine’s Day, Butler City Light equipment manager Jim Campbell brought all of the Cat generators online to help supply additional power to the grid in the aftermath of Uri.

“Our plant has a history of service in our communities, banding together and helping out in times of crisis,” Campbell said. “Being able to pitch in and do our part to provide critical support is something that makes us all very proud.”

Today, Foley Power Solutions is a key player in developing sustainable communities and empowering progress by facilitating economic growth through infrastructure and energy development.

“We’re more than just a power supplier,” says Todd McClendon, a product support manager for Foley Power Solutions. “We’re part of tight-knit communities like the City of Butler that do their part to help power the grid.” 



THE ROAD TO A **GREENER LANDSCAPE**

RENEWABLE ENERGY WILL HELP DATA CENTERS MEET ESG GOALS

It's no secret that data centers have a large appetite for power. On a global scale, data centers consume more than 200 Terawatt Hours (TWh) of energy per year, representing over one percent of the world's total energy consumption.

And the demand for energy is projected to accelerate dramatically based on industry growth forecasts. Amid the COVID-19 crisis, the global market for data centers was estimated at \$59.3 billion in 2020, and is projected to reach \$143.4 billion by 2027, growing at a combined annual rate of 13.4 percent over the period from 2020 to 2027.

Given their impact on the energy landscape, data centers are at the forefront of a movement to lessen environmental impacts, which primarily consist of greenhouse gas (GHG) emissions associated with their operations.

Large end-users have aggressive goals to become carbon neutral by the end of the decade. These targets will be achieved

primarily through the use of low-intensity carbon fuels and other technological innovations for delivering renewable energy—many of which are in various stages of development.

As businesses adopt new Environmental, Social and Governance (ESG) goals, the use of renewable energy resources from the grid has become a focal point. However, because wind and solar energy are intermittent, it will become necessary to bridge those periods when no wind or sun are available to generate electricity.

Today, diesel engines are still the standard for generating onsite standby power. Given that backup diesel generators typically make up about one percent of a data center's total power usage—and remain idle for the majority of the time—they can be leveraged to run on alternative fuels and provide prime power to fill the renewable energy gaps from the grid.

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New solutions from Caterpillar

A variety of new fuels and technologies are emerging that will help data centers achieve their aggressive carbon reduction goals.

Caterpillar is a world leader in the development and production of heavy-duty diesel engines. The company has also been an advocate for the development of renewable and alternative fuels for decades, and continues to develop appropriate specifications to ensure the successful application of these fuels in Cat® engines.

HVO. One form of renewable fuel, hydrotreated vegetable oil (HVO)—also called renewable diesel (RD)—is derived from fats and oils through a hydrotreating process.

As the search for fossil-free fuel options evolves, HVO has proven itself to be a viable alternative to fossil diesel that's also fully mixable with diesel in circumstances when it may be needed. Compared to fossil diesel, HVO can actually reduce GHG impact anywhere from 60 to 90 percent.

“Whether you’re an end user, an owner, a contractor, a consulting engineer, partner, vendor, or a supplier, everyone involved needs to come together to invest in these new technologies and make them viable.”

HVO is a full replacement fuel for most diesel generator sets. Any #2 diesel tank can be filled with HVO as needed, and vice versa. During a situation in which backup generators may have to run for days on HVO, a data center could still revert back to diesel in the event the HVO supply is exhausted and can't be procured quickly enough. Unlike diesel fuel, HVO requires little upkeep.

Because HVO mass-production is in its infancy, scale is still a challenge. But as awareness of HVO increases, production of the raw goods will increase and supply issues will improve, the justification for global HVO use will also rise. To support this undertaking, major fuel refiners have recently announced they are making sizable investments in HVO refining and production.

Caterpillar has successfully tested HVO as a replacement fuel at its Large Engine Center, a manufacturing facility in Lafayette, Indiana. In conjunction with a data center infrastructure partner, plans call for launching the first commercial installation of Cat generator sets that run on HVO later this year.

Hydrogen. Hydrogen is abundant, renewable, packs high energy density, and produces only water vapor when burned.

Plans for operating on 100% hydrogen include developing a range of commercially available products and upgrades for existing Cat® gas generators. The development and launch of these solutions address potential growth in customer demand as



the infrastructure for hydrogen supply matures.

In the fourth quarter of 2021, Caterpillar began offering Cat generator sets capable of operating on 100% hydrogen, including fully renewable green hydrogen, on a designed-to-order basis. The company also launched commercially available power generation solutions from 400 kW to 4.5 MW that can be configured to operate on natural gas blended with up to 25% hydrogen.

For those who are building new data centers, standby generators that run on natural gas represent a better choice, as many are capable of running on some blend of hydrogen (20 to 30%) with natural gas.

The supply chain for hydrogen is not yet fully developed. Several barriers, such as the high cost of green hydrogen compared to non-renewable alternatives and the lack of dedicated infrastructure, are still impeding hydrogen's full contribution to the energy transition. Blending hydrogen with natural gas can be done until more readily available sources of hydrogen are developed.

Synthetic diesel fuel. Microsoft is using Cat® C175-20 and C18 generator sets to provide complete standby power solutions in the first phase of data centers installed in Sweden. The Cat generator sets align with Microsoft's sustainability goals by enabling operation on a co-processed synthetic diesel fuel that contains more than 50% renewable raw materials.

All of the Cat generator sets can be powered by Preem Evolution Diesel Plus, a renewable liquid fuel. Manufactured at the Preem refinery in Gothenburg, Sweden, it is the first eco-labelled liquid fuel in the world.

The facilities in Sweden will be among Microsoft's most advanced and sustainable data centers, featuring

energy-saving designs, power from 100% renewable energy sources, and ambitions for zero-waste operations.

Fuel cells. Caterpillar is working alongside Microsoft and Ballard Power Systems to demonstrate a 1.5 MW power system incorporating a large-format hydrogen fuel cell to produce reliable and sustainable backup power for data centers. As the project's prime contractor on the project, Caterpillar is providing the overall system integration, power electronics, and controls that

form the central structure of the power solution, which will be fueled by low-carbon-intensity hydrogen. Microsoft is hosting the demonstration project at a company data center in Quincy, Wash., while Ballard is supplying an advanced hydrogen fuel cell module. The National Renewable Energy Lab (NREL) will analyze safety, techno-economics, and greenhouse gas (GHG) impacts.

Funded in part by the U.S. Department of Energy (DOE) under the H2@Scale initiative, the demonstration will provide key insights into the capability of fuel cell systems to serve multi-megawatt data centers by providing uninterruptible power that supports 99.999% uptime requirements.

Energy storage. To offset the early retirement of coal, combined cycle, and nuclear plants (and to optimize the complete value of the increasing

presence of intermittent renewable generation), today's grid requires bankable capacity with immediate response to be installed on a distributed basis.

This can be accomplished by utilizing a Battery Energy Storage System (BESS) paired with efficient and responsive Cat gensets that are configured to run on many renewable fuels. The entire system is tied together through a Cat Master Microgrid Controller.


The microgrid controller uses artificial intelligence and machine learning technology to manage energy supply and demand, ensuring the lowest-cost energy source is being used at any given time.

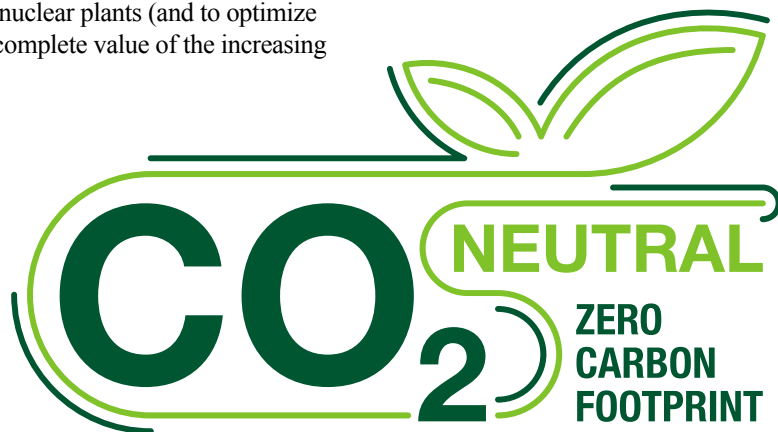
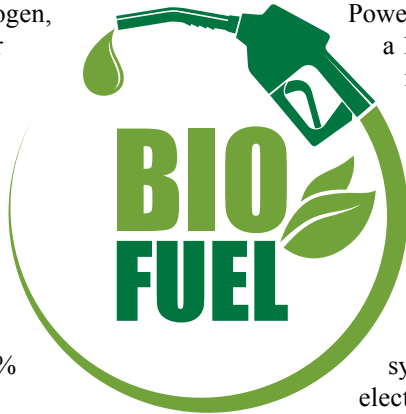
Dedicated effort is necessary

By the end of the decade and beyond, a typical data center and the energy infrastructure that supports it is likely to look much different than it does today, says Matt Spitznagle, director of global accounts for Caterpillar Electric Power.

The pathway to transform the global energy sector from fossil-based to zero carbon will be a massive undertaking that is now in its early stages. Concerted efforts are necessary to bring about large-scale environmental change.

"A greener data center landscape will require participation across the industry spectrum," Spitznagle says.

"Whether you're an end user, an owner, a contractor, a consulting engineer, partner, vendor, or a supplier, everyone involved needs to come together to invest in these new technologies and make them viable." 



SOCIAL SUPPORT

WESTCARE HAS THE POWER TO CHANGE PEOPLE'S LIVES

The WestCare Foundation is a family of tax-exempt nonprofit organizations operating in 19 states and three U.S. Territories. WestCare provides a wide spectrum of health and human services in both residential and outpatient environments.

Services include substance abuse and addiction treatment, homeless and runaway shelters, domestic violence treatment and prevention, and mental health programs. For more than 35 years,

WestCare has specialized in helping people some write off as too difficult to treat, such as those who are indigent, have mental health issues, or are involved with the criminal justice system.

“For over four decades, we have dedicated ourselves to our well-known motto, ‘Uplifting the Human Spirit,’” says Dick Steinberg, WestCare President and CEO. “We are committed to that lofty mission for individuals, families, communities...for all of mankind.”

WestCare operates six locations in Kentucky, including two treatment centers in the Appalachian region of eastern Kentucky—an area that has experienced a high rate of opioid and methamphetamine addiction.

The Judi Patton Women and Children Center in Elkhorn City enables women with substance abuse issues to seek help and recovery and also welcomes their children to accompany them during their stays. The facility is located in the



former Lookout Elementary School that sat vacant for 17 years until undergoing an extensive renovation.

In the nearby town of Ashcamp, the Hal Rogers Appalachian Recovery Center provides a therapeutic residential program for men struggling with alcohol or drug abuse.

WestCare Kentucky regional administrator Stephen Wright says the center offers more than peer counseling; it gives clients purpose.

“Schedules and structure are part of their treatment,” Wright said. “Often, an addict loses that. Their world is upside down. Here, their days are structured. We try to give them life skills, sometimes more than they have ever received in the past.”

The center provides more than just counseling. Along with GED classes, parenting classes and cognitive behavior counseling, it provides work. Clients perform maintenance on the grounds, tend a large garden near the facility, and keep chickens and ducks. All the food raised at the center is eaten by the clients and staff. They also participate in community projects and perform yardwork for local seniors and community churches.

Both facilities are required to have a source of backup power. It’s particularly important in a region where power from the grid can be unreliable, says Jeramy Salyers, deputy administrator for Fitzhouse Enterprises, a property holding company that oversees all WestCare facilities.



Lookout facility

“As a nonprofit, we look for products that are bulletproof, so we don’t have to worry about it. We choose to go with Cat gensets because of their reputation for quality and dependability.”

JERAMY SALYERS, Deputy Administrator for Fitzhouse Enterprises

“Given the rural location, sometimes the grid can be a little sketchy,” Salyers says. “When a heavy snow falls or some other weather event occurs, they’ll typically lose power for a short time. We’ve even seen power outages last for as long as two weeks following a bad storm.”

Cost-effective solution

When a previous backup generator experienced a permanent failure at WestCare’s Ashcamp treatment center in 2010, Salyers contacted Boyd CAT.

The Cat® dealer quickly made arrangements for the installation of a 125 kW Cat Olympian D125-6 generator set, which powers the kitchen along with lighting the 31,000 square-foot facility and providing HVAC to the gymnasium, which also serves as an emergency shelter. A transfer switch automatically activates the generator when there is an

outage, which typically occurs five or six times a year, Salyers says.

To provide backup power to the new Lookout facility, WestCare selected a Cat D250 GC diesel generator set. Field-proven in thousands of applications worldwide, the C9 four-stroke-cycle diesel engine combines consistent performance and excellent fuel economy with minimum weight. The D250 GC was recommended by a local engineering firm that installed the genset.

Because WestCare is a nonprofit that receives the majority of its funding from governmental sources, Salyers needed to locate a cost-effective standby power solution, said Todd Breahm, president of Elliott Contracting in Pikeville, Ky. Breahm was quick to recommend a Cat generator set.

Continued on page 14

CUSTOMER PROFILE

WestCare Kentucky

Location: Elkhorn City and Ashcamp, Ky.

Application: Standby power

Cat® Equipment: D250 GC and Olympian D125-6 gensets



“We’ve always had a good experience installing Cat generators, and we have a longstanding relationship with Boyd CAT that’s built on trust.”

The new GC gensets are targeted for general standby applications including hospitals, agriculture, municipal infrastructure such as pump stations and water treatment plants, small commercial enterprises, and small- to medium-sized office buildings.

Cat GC units are EPA-certified for Stationary Emergency Application and

include Caterpillar’s customary two-year warranty for standby power solutions. Manufactured in Seguin, Texas, Caterpillar engineers the GC lineup with common parts to minimize downtime, reduce installation costs and simplify maintenance.

“Customers with standby power needs are seeking systems with an optimized combination of capabilities that deliver the productivity and dependability they need while minimizing purchasing and installation costs,” said Jason Kaiser,

vice president of Caterpillar’s electric power division. “The Cat GC diesel generator sets have been specifically engineered to offer these customers Cat performance in a package that provides the most commonly specified capabilities.”

When the Cat D250 GC genset was installed at the Lookout facility in the spring of 2020, a Boyd CAT representative did a walk-through with Salyers, showing him how to operate the controls and pointing out its capabilities.

“It’s a state-of-the-art piece of equipment,” Salyer says. “Actually, I was pleasantly surprised about the cost. I thought it was going to be quite a bit more.”

Turnkey service


As a nonprofit organization with far-flung operations, WestCare looks for affordable, dependable equipment solutions to meet its needs.

“As a nonprofit, we look for products that are bulletproof, so we don’t have to worry about it,” Salyers says. “For our weekly startups, the Boyd CAT technicians come out and set up the generators to start up at the same time every week. It starts up, does its test and shuts itself off.”

Boyd CAT provides WestCare with turnkey service that includes all maintenance, repairs and fuel treatment.

“We don’t have to touch it,” Salyers says. “They do the fuel treatments and all the testing and make sure that everything is good to go. As a nonprofit, they have been very vital in helping us with our mission. And their workers are just really nice people.”

Elsewhere, WestCare operates three Cat gensets supplying prime power in a mountain camp setting outside of Las Vegas that is not connected to the grid. Two more GC models were installed during the summer of 2020 at WestCare locations in Florida.

“We choose to go with Cat gensets because of their reputation for quality and dependability,” Salyers says. “I consider it the Cadillac of engines, and longevity is important.” 





REMOTE ASSET MONITORING NOW STANDARD ON DIESEL GENSETS

Factory-installed Cat® Connect Remote Asset Monitoring (RAM) is now offered at no additional cost on small- and medium-sized Cat diesel generator sets from 6.8 to 850 kVA (50 Hz) and 8 to 750 kW (60 Hz). Caterpillar is also offering customers a free Cat Remote Asset Monitoring standard subscription until December 31, 2022.

This is the latest step in Caterpillar's strategy to configure its entire lineup of diesel generator sets with Cat RAM—the advanced data collection, visualization reporting and alert solution—which is already standard on larger diesel generator sets.

Cat RAM helps operators and Cat dealers track and manage the operation of Cat generator sets.

The Cat Connect and Cat RAM package enables the real-time collection and remote monitoring of site performance data across Caterpillar's product portfolio. Providing data visualization, reporting and alerts from anywhere in the world through an easy-to-use web interface or mobile app, Cat RAM helps operators and Cat dealers track and manage the operation of Cat generator sets.

You can also flag potential problems, perform remote troubleshooting, manage operational expenses, and leverage long-term archives containing site performance history to identify opportunities for further operational or system enhancements.

Cat RAM can monitor and analyze between 13 and 200 key generator set performance indicators, based on the generator set model and the subscription level selected. Depending on the model and Cat Connect hardware device, Cat RAM


can also be configured to use a cellular or local network connection to deliver intelligence to key customer contacts and Cat dealer technicians.

More than 18,000 Cat generator sets worldwide are already configured with factory-installed Cat Connect capabilities.

“Equipment intelligence is increasingly important in helping the owners of power solutions to maximize the performance of their equipment and better manage their total costs of ownership,” said Jaime Mineart, general manager for Caterpillar Electric Power. “This standard capability makes it easier than ever for Cat genset owners to improve efficiency, reduce risk, cut costs, and boost their bottom lines by leveraging Cat technology and energy expertise.”

Enhanced Cat Remote Asset Monitoring options are available where customers require additional monitoring of generator set parameters. These options are provided free of charge to customers who have purchased a Customer Value Agreement or Long Term Service Agreement.

Cat Connect hardware can also be purchased as a retrofit item alongside a subscription on existing Cat and competitor power solutions.

Remote Access Monitoring will be available later this year as standard with no additional charge on Cat GC diesel generator sets, including DE1100 GC to DE1500 GC, DE800S GC to DE1250S GC, and D800 GC to D1250 GC models. 

For more information, contact our dealership or visit cat.com/catconnect.

ENERGY SOLUTIONS FOR A BRIGHTER FUTURE



At Cat[®] Electric Power, we are striving for a world in which all people's basic needs—such as shelter, clean water, sanitation, food, and reliable power—are fulfilled in a sustainable way. We provide microgrids, combined heat and power (CHP), and low/no carbon-fueled power systems that enable economic growth through sustainable infrastructure and energy development.

Learn more at www.cat.com/sustainablepower

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