Farnam ya

A SHITTE

EADING EDGE

S

OMAHA DATA CENTER A PREMIER INTERCONNECTION HUB

NIEW ENIERGY Sanitary district adopts solar power

ON THE MONEY Rental power critical for salvage firm

Living on the Edge

When you think of Omaha, what comes to mind? Maybe the fact that it's home to legendary investor Warren Buffett, Omaha Steaks, and Mutual of Omaha and it's former "Wild Kingdom" TV series.

But what you may not know is that Omaha is a rapidly emerging technology hub. Thanks to its location in the central U.S., the area is a pivot point for data carriers.

As an "edge" data center located in the heart of downtown Omaha, 1623 Farnam is the interconnection point for the country's largest carriers on their east-west and north-south routes. Housed in a former telecommunications hub, the facility named after its street address serves as the center of secure on-ramps to the world's largest cloud providers.

Because data centers cannot afford interruption of any kind from power outages, 1623 Farnam is backed by three Cat[®] 3512C diesel generators that were installed atop an adjacent parking structure.

Last December, parts of Western Kentucky were devastated by an EF-4 tornado that stayed on the ground for 124 miles. The city of Mayfield took a direct hit, which destroyed its downtown and knocked out grid power for an extended period.

While grain elevators at Mayfield Grain Company were severely damaged, a salvage operation was able to save over 70 percent of the commodity while preventing the possibility of a fire. As it does on all of its salvage jobs, the salvor used Cat rental power to maintain electric power to keep vital equipment running.

Meanwhile, many companies and municipalities are incorporating renewable energy to meet growing sustainability expectations, while also holding the line on the cost of power and preserving finite financial resources. An Iowa wastewater treatment plant achieved annual savings of approximately \$100,000 annually on its energy bill by installing solar power. With a big assist from its Cat dealer, the 4,000-plus solar panel installation was completed last year.

DID YOU KNOW?



Solar & Battery Storage on the rise

Power plant developers and operators expect to add 85 gigawatts (GW) of new generating capacity to the U.S. power grid during 2022 and 2023, according to data reported by the Energy Information Administration (EIA). Of that, 60 percent is expected to be made up of solar power and battery storage projects. In many cases, projects will combine these technologies. Declining costs for battery storage applications, along with favorable economics when deployed with renewable energy (predominantly wind and solar PV), have driven the expansion of battery storage.

The remaining 34 GW of planned capacity additions is expected to come largely from natural gas (16 GW) and wind (15 GW). The amount of planned wind capacity fell by nearly half from the previous two years, EIA said.

Twice as much utility-scale solar photovoltaic (PV) capacity was added (24 GW) to the power grid than natural gas (12 GW) during 2020 and 2021.



BANKING ON CHANGE

Bank of Africa (BOA) Uganda is one of the commercial banks in Uganda that has been licensed by the Bank of Uganda, the country's central bank and national banking regulator.

BOA Uganda operates 28 regional bank branches throughout the country. The banking sector has a legal requirement to have backup generator power at every site. The power grid in Uganda is considered fairly stable. In the main populated areas, 23 to 24 hours of uninterrupted power can be expected, while outlying areas are not served as well.

In 2012, BOA Uganda employed 14 full-time staff to look after 28 aging on-site generators, while using multiple outside contractors to help maintain them. Under this method of operation, uptime on the generators was less than optimal.

Cat[®] dealer Mantrac approached BOA of Uganda with a unique value proposition, offering to buy the existing standby (non Cat) generators and replace them with Cat rental power generators at all the branch locations.

Initially, BOA Uganda officials had concerns about having one equipment dealer supply all of their standby power. But the deal was structured so that they could take back ownership of the previous generators that had served the branches if they were not satisfied with the arrangement. The bank participated in a successful trial with Mantrac in 2013, and full installation of

the Cat gensets took place the following year.

Once Mantrac installed the new Cat generators, the improvements were realized almost immediately by BOA Uganda, said Geoff Hoyland, the head of rental and used power systems for Mantrac Group.



"We've since extended the agreement for another five years," Hoyland said. And we helped them through the COVID times by providing small discounts."

Cat Product Link[™] supports some of the generators, which enables Mantrac service personnel to monitor the generators remotely and detect any issues that need to be addressed.

"For the last six years, we've had no major issues at all," Hoyland said. "Operationally, it's working very nicely."



IN THE SPOTLIGHT:

Leading Edge

As a data center in the heart of downtown Omaha, 1623 Farnam is the interconnection point for the country's largest carriers on their east-west and north-south routes. Housed in a former telecommunications hub, the facility named after its street address serves as the center of secure on-ramps to the world's biggest cloud providers.







8 Get Connected

Using data generated by your equipment puts money in your pocket by cutting costs

9 New Energy

Sanitary district saves 70% on its energy bill by adopting solar power

12 On the Money

Cat® rental power is critical for salvage firm

15 Cat[®] Inspect

Cat Inspect enhances reliability by giving you access to your power system data on your mobile device





RunReady^{*} is published by High Velocity Communications Inc. on behalf of your Cat[®] Dealer. Publisher, Tim O'Brien • Editorial Director, John Rondy • Senior Art Director, Eric Valk • Director of Client Services, Kelly Pemper. Every attempt has been made to ensure specifications are accurate. Because specifications are subject to change without notice, check with us, your Cat Dealer, for the latest equipment information. Some photography provided courtesy of Caterpillar Inc. High Velocity Communications Inc., 1720 Dolphin Drive, Suite D, Waukesha, WI 53186-1489. Phone (262) 544-6600. Please submit address corrections and changes via e-mail to: Kelly@HighVelocityCommunications.com. © 2022 High Velocity Communications Inc. Printed in the U.S.A. Volume 13 Number 2. © 2022 Caterpillar. All Rights Reserved. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Yellow," the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission. VisionLink[®] is a trademark of Trimble Navigation Limited, registered in the United States and in other countries.

LEADING EDGE OMAHA DATA CENTER A PREMIER INTERCONNECTION HUB

s the home of investment icon Warren Buffett and the U.S. Strategic Command, Omaha, Nebraska is known to many across the country.

Four Fortune 500 headquarters call Omaha home, including: Berkshire Hathaway, Warren Buffett's multinational holding company; Union Pacific Railroad, the largest U.S. rail network serving 23 Western states; Mutual of Omaha Insurance, which is known for its popular "Wild Kingdom" TV and now web series; and Kiewit Corp., a global construction, engineering and mining company.

irst National

But more recently, Omaha is becoming known as a tech hub. Google has two data centers in the Omaha area; a new \$600 million facility in Papillion, and one in nearby Council Bluffs, Iowa, which the search giant established in 2007. It recently announced plans to construct another \$750 million data center northwest of the city. "Omaha has grown a lot because of these hyperscale data centers," says Todd Cushing, an Omaha native who has an extensive background siting data centers. "Anybody that's doing anything in fintech (financial technology) has a large presence in Omaha. And the reason is it's the edge—it's at the center. PayPal has a big campus here, and LinkedIn is in Omaha. So it's the place to be. There's a lot of technology companies based in Omaha that people don't know about."

As a data center in the heart of downtown Omaha, 1623 Farnam is the interconnection point for the country's largest carriers on their east-west and north-south routes. Housed in a former telecommunications hub, the facility named after its street address serves as the center of secure on-ramps to the world's biggest cloud providers.

Strategically located in the heart of the U.S., 1623 Farnam is the leading network edge interconnection point for fiber and wireless network providers, major cloud and CDN companies, content providers and Fortune 500 enterprises. It supports mission-critical infrastructure and applications with the highest levels of availability, enabling maximum levels of application performance.

As the regional leader in networkneutral, edge interconnection, 1623 Farnam offers access to 50 network companies which have local, regional, national and international reach. With 75,000 square feet of space, 1623 Farnam is the premier interconnection facility in the central U.S.

"If you're looking to move fiber or communications or telephone from Chicago to New York to the west coast, you're coming through Omaha," says Cushing, the president of 1623 Farnam. "If you're looking to go from Dallas or Kansas City up into Minneapolis or Chicago, you're coming through here. So it's a great location and it's a center pivot for communications to happen. A lot of providers use Omaha or this facility as their hub."

For example, a popular video streaming company stores their content at 1623 Farnam rather than going back to their own data center. As Cushing explains, data has "gravity," so it slows down the further it has to travel.

"If you're looking to do financial transactions, a lot of times the largest retailers in the United States or the world will put some of that information here, so they don't have to go back to the mothership to go get it," he says. "So, it's not just passing data through Omaha to other carriers or picking up one carrier and moving it over to another. But





actually placing content here and having the caching happen is a big part of where the Internet and data centers are going."

Facility makeover

Being from Omaha, Cushing was aware of 1623 Farnam through his IT operations background. He and a private investor group acquired the nine-story facility in 2019. Prior to that, it served as a hub for phone carriers.

"As a real estate broker, I was aware of this facility, and it needed a hug," he says. "It needed to be redone—it was a mess."

Continued on page 6

CUSTOMER PROFILE

1623 Farnam

Location: Omaha, Neb.

Application: Standby power

Cat® Equipment: 3512C diesel powered gensets (3)



"It's really important for us to be able to have technicians from Nebraska Machinery come out and maintain our generators. They aren't intimidated by delivering that much oil or that many filters and consumables into an unusual environment. We call, and they respond. If you have a concern or question, they get back to you, and they work with you as a partnership."

1623 Farnam was transformed through an infusion of half a million dollars to achieve the necessary certifications, as well as a lot of hard work on the physical infrastructure. As part of a full-scale renovation that took place in 2020-21, the facility was gutted and saw the replacement of all electrical and mechanical systems. The new facility is highly automated and secure.

"There's a huge sense of pride in what we've accomplished as a team," Cushing says. "We remodeled this facility and installed three generators during COVID in 2020, and it was a very complex buildout. While street protests were happening right outside our door, we had 125 people working in this building every day."

Originally constructed in 1973 as a bank headquarters, the corner building has a unique exterior design, prompting some to ask if it's meant to look like a stack of servers. "It makes people want to dig a little deeper, so that's an unintended consequence and kind of a fun aspect of this building," Cushing says.

Backup power is critical

Data centers need to be ready and available no matter what happens. Power outages can be caused by extreme weather conditions, grid failures, natural disasters, rolling blackouts, electrical failures, and other unplanned events that can cause a data center's power to be interrupted. All businesses expect data centers to have uninterrupted power 24/7.

Unplanned outages can lead to costly downtime, which, in the case of a data center, can have a major financial impact and damage its reputation. The average cost of a data center outage is astronomical and grows from year to

TODD CUSHING, President 1623 Farnam

year. A study by Gartner calculated the average loss at more than \$740,000, with the cost measured in lost revenue and productivity.

In a highly choreographed exercise, several streets were cordoned off downtown Omaha in September 2020, as three Cat 3512C diesel generators were lifted by a crane and placed atop a parking structure located behind 1623 Farnam. The metal support platform mounted atop the parking structure has slots for three more generators. The three gensets provide 4.5 MW of power, combined.

"The Cat 3512C was our choice because of the weight and the size of the genset for the installation we had to do," Cushing says. "We looked at other models, but this particular model works best for the level of sound we had to manage. It's a great backup power source for our building—it's super reliable and efficient."



6







Due to its urban location, the generators are surrounded by apartments and condominiums, which means the noise level when the generators are running can't exceed 65 decibels (dB) at the property line. By comparison, garbage trucks in a downtown environment register almost 100 dB.

"We've had neighbors call us, and they have apps on their phones that can measure the noise level, and I've never had anybody that could show me that we were getting close to being higher than we should be," Cushing says. "So we're a good neighbor."

Dealer support is key

With experience working in data centers since age 16, Cushing eventually took charge of operations at First Data Resource, and later became a broker for the data center group at CB Richard Ellis.

"Globally, I only used Cat generators because I always had a good experience with them working through the Cat dealer network," he says. "Nebraska Machinery would travel as we did projects all over the U.S. and all over the world, and Caterpillar was my preferred go-to source.

"Service is only as good as your local support, and sometimes it's not that way in other markets," he says. "Nebraska Machinery is a big dealer, and they know how to site generators in a downtown environment. They're used to getting into tight spots and delivering them onto third-story roofs.

"They aren't intimidated by delivering that much oil or that many filters and consumables into an unusual environment. And they'll work with you. We call, and they respond. If you have a concern or question, they get back to you, and they work with you as a partnership. Things come up sometimes where we don't know or they don't know, and we work together to figure out a solution."

For ongoing maintenance, 1623 Farnam has a Customer Value Agreement (CVA) through its Cat dealer. CVAs feature individualized solutions for parts, services, and digital enablers





designed to address evolving needs throughout an asset's lifecycle.

"It's really important for us to be able to have technicians from Nebraska Machinery come out and maintain our generators," Cushing says. "They know the right filters we need. They know what specific hoses are required and they keep a watchful eye for any leaks that might develop, or any kind of maintenance that's needed.

"They know our facility, and they know us. So they're a really good vendor and partner. Super top-shelf is what I'd say, right there with the Cat brand." R



GET CONNECT CAN HELP YOU CUT COSTS

s your operations become more complex and you see a greater need to control costs, you're continually being pushed to do more with less. Your ability to monitor operations remotely becomes critical to working smarter and becoming more efficient.

Cat[®] Connect helps you monitor, manage and enhance your operations, giving you more control.

Using data provided by your gensets puts money in your pocket by helping you keep them in top shape and avoid unplanned downtime. Lower life cycle costs can make you more efficient and increase reliability, even during the most challenging circumstances.

Here are six ways to make the most of your data to help manage your assets and reduce operating costs.

Preventive maintenance

Take advantage of electronic data, alerts, and records to schedule and complete all recommended maintenance and service.

Maintain peak unit performance

Use alerts to prevent problems that may reduce fuel efficiency. Using your investment properly by running at peak performance can positively impact your bottom line.

Offsite support

Diagnostic information sent to offsite experts can help eliminate the need for unnecessary onsite visits by service technicians throughout the life cycle of your system, reducing labor costs.

Repair before failure

Use equipment data and electronic alerts to catch small problems early. Schedule repairs quickly to avoid breakdowns and keep repair costs low. Unscheduled downtime can have a huge impact on your critical day-to-day operations.

Identify training

Operating practices can dramatically impact performance and component wear. Remote monitoring helps spot operational problems and identify training opportunities.

Record-keeping

Automatically gather data on equipment history, component life, and operating costs. Good records help you control expenses by identifing high costs or problem areas.

To conduct a thorough evaluation of your asset managment practices, contact the Power Systems experts at our dealership.



NEW ENERGY

SANITARY DISTRICT ADOPTS SOLAR POWER

any companies and municipalities are incorporating renewable energy to meet growing expectations of sustainability, while also holding the line on the cost of power and preserving finite financial resources.

In 2020, the trustees of the Iowa Great Lakes Sanitary District (IGLSD) were seeking to cut high electrical costs at its Milford wastewater treatment plant in northwest Iowa. In the most recent plant update, adding wind power was ruled out due to the flight path of the Milford Airport.

Previously, a group with the University of Nebraska had evaluated power usage

at the wastewater plant in 2018-19. That study suggested utilizing distributed generation would help reduce the cost of power, as the plant was already very energy efficient.

"We could see that the long-term cost of electricity was continuing to increase. Our bill over an 18-month period in 2019-2020 was averaging \$15,000 a month," said district superintendent Steve Anderson.

Seeking an alternative, the trustees worked with Milford Municipal Utilities to find someone who could assist with evaluating and planning for a solar

Continued on page 10



CUSTOMER PROFILE

Iowa Great Lakes **Sanitary District**

Location: Milford, Iowa

Application: Solar energy

Cat® Equipment: Thin-film solar panels (4,000+)





project. IGLSD ultimately engaged Ziegler Power Systems for engineering and design of the system. Based on power used by the sanitary district in 2018 and 2019, a Ziegler team determined a 500 kW system would be the proper size.

Ziegler was brought in early in the development process, helping the water district select a proper site and developing an interconnection strategy. Building the infrastructure for the project started in 2020, and the solar array went online in May 2021.

"Ziegler was good to work with. They took care of all the interconnect processes, making it mostly seamless on our end," Anderson said.

Solar a good fit for wastewater plants

Wastewater facilities are high energy users, which makes them perfect candidates for onsite power generation. "The concept of having solar as a distributed energy resource in a wastewater treatment plant makes more sense after you look at how energy demands for a facility such as ours works."

STEVE ANDERSON, District Superintendent Iowa Great Lakes Sanitary District



The solar array utilizes Cat[®] thin-film technology. The thermal coefficient of thin-film modules performs well in hot and humid conditions, which is when the strongest sunshine occurs in the Upper Midwest, making them a perfect fit for IGLSD's application.

The 500 kW DC system produces an



estimated 730,000 kilowatt hours annually—or about 70 percent of IGLSD's annual power demand at the wastewater treatment plant. The solar array will save an estimated \$100,000 in energy costs annually, and is projected to pay for itself in approximately seven years, Anderson says.

"The concept of having solar as a distributed energy resource in a



wastewater treatment plant makes more sense after you look at how energy demands for a facility such as ours works," Anderson says.

"Usually, we're using the most electricity during the day, and then our peaks drop off at night. It matches with our operations fairly well in that the solar panels are producing energy when we need it. And at night, they're not producing energy when demand for power is at its lowest."

The power produced at the facility offsets almost 500 metric tons of CO_2 emissions annually, which helps the wastewater district reduce its carbon footprint.

"The Sanitary District was formed back in the 1930s to preserve water quality," Anderson says. "And this solar energy project just adds another piece to our mission of conservation and environmental protection." R





THE IOWA GREAT LAKES

The lowa Great Lakes, often referred to as Okoboji, is a group of natural lakes in northwestern lowa. There are seven lakes in the region totaling 12,687 acres, with the three principal lakes of the group being Big Spirit Lake, West Okoboji Lake, and East Okoboji Lake. They are the largest natural lakes in the state of lowa. The largest, Spirit Lake, is 5,684 acres and extends to the border of Jackson County, Minnesota.

The Iowa Great Lakes Sanitary District (IGLSD) was created in 1939 to protect the lakes from pollution and sanitary issues. It covers an area from the southern border of Minnesota to the south end of Milford, and runs along the west side of West Okoboji and Spirit Lake and the east side of East Okoboji and Spirit Lake. The sanitary district serves the cities of Orleans, Spirit Lake, Okoboji, Arnolds Park, West Okoboji, Wahpeton and Milford, as well as some unincorporated areas.

The population served by the IGLSD wastewater treatment plant (WWTP) is highly variable due to increased use of the lakes during summer and holidays. The current off-season population is approximately 14,000 whereas, the peak summer population is estimated at 120,000.

The district's collection system includes a service area of approximately 12,000 acres, with 100 miles of sewer pipe, and 64 pumping stations. IGLSD runs a daily average of about 2.5 million gallons of wastewater through the plant. The district treated a total of 786 million gallons last year.

The wastewater passes through several treatment processes at the WWTP to remove pollutants before discharge into Milford Creek. The treated effluent must meet stringent standards, which are defined in the plant's discharge permit by the lowa Department of Natural Resources. The water discharged from the wastewater treatment plant must be able to protect human health as well as sustain aquatic life in the stream.

ON THE MONTHESE STATES AND A ST

RENTAL POWER CRITICAL FOR SALVAGE FIRM

n December 10, 2021, the deadliest tornado outbreak on record for December roared across the mid-South, leaving widespread destruction and human suffering in its path. More than 15,000 buildings were destroyed, and 74 people died.

A violent EF-4 tornado began in far northwest Tennessee, and moved across Western Kentucky, cutting a wide swath from southwest to northeast. The Tri-State tornado was on the ground for more than 125 miles. That night, the tornado continued northeast through Mayfield, Ky., where it produced widespread destruction.

According to current estimates, 23 people died and 225 were injured in Graves County (Mayfield is the county seat). An estimated 50 percent or more of the historic downtown was destroyed, while eight people died at the Mayfield Consumer Products candle factory after being trapped when the building collapsed.

Large metal silos were crumpled and heavily damaged at Mayfield Grain, and the large Mayfield water tower was toppled to the ground and completely destroyed. In the center of town, the post office, city hall, fire station, and police station were also significantly damaged or destroyed.

Many trees sustained severe denuding and debarking, while cars were thrown hundreds of yards and mangled.

Dual polarization radar imagery showed that the tornado had lofted debris up to 30,000 feet into the air as it impacted the city. The winds were so powerful that Nichole Eagle, who lives 98 miles northeast of Mayfield in Hanson, Ky., said she found papers from Mayfield Grain in her front yard the next day.

Rental power response

When the storm knocked out grid power to the area, calls started coming into Boyd Cat's Paducah branch seeking rental power to keep critical operations running. One of the first calls came from Mayfield Electric & Water Systems, which required power to keep sewer and water lines running. Mobile power was also needed by banks, other businesses and cleanup crews.





"Everybody was without power," recalls Jacob Locke, a field technician with Boyd Cat in Paducah. "The tornado was a mile wide and took out a big area. A whole lot of people

were without power, and some places like the utility company and Mayfield Grain ran on generator power for quite awhile."

Located about a mile southwest of the downtown area, the Mayfield Grain Company took a direct hit, as portions of the facility were shredded by the powerful storm. The tornado tore the roofs off of grain bins. Buildings were unrecognizable as the structures were in pieces, and a semi full of grain was thrown on its side.



With expertise in salvage operations for grain elevators damaged as a result of fire, explosions and storms, Memphis-based Callan Salvage & Appraisal was called in to minimize the loss of a valuable commodity. To run its specialized equipment, which includes augers and conveyers, Callan required continuous power, which was not available from the grid in the aftermath of the storm.

"The power company told us we could have power that might stay on for a day, but then it could be out for a day or two—we couldn't accept that," said owner Ron Callan. "So we brought in Cat[®] rental generators. We had to have power running 24 hours a day on these bins because they had wet grain inside. So we had to help keep the air on it to keep the grain from catching on fire.

"We had to keep this equipment running because we were loading up to 100 trucks a day," Callan said. "We had about 15 men and all of this equipment on site, so we can't afford to not have these people working because idle time costs us money."

Callan called on Boyd Cat to provide four Cat rental power units ranging in size from 30-, 60-, 100- and 500 kW. One of the generators was used to run the conveying system under the grain elevator which loaded semitrucks. Another generator was used to power portable augers that cut holes in the bottom of the damaged bins.

CUSTOMER PROFILE

Callan Salvage & Appraisal

Location: Memphis, Tenn.

Application: Rental power

Cat[®] Equipment:

30, 60, 100 and 500 kW mobile generators



Meanwhile, another Cat rental generator provided power to the scales for weighing grain, as well as a temporary office.

Continued on page 14



"We travel all over the world—we've even shipped generators with our equipment to South America on a couple of occasions—and it's very important that we have reliable power. We will not use anything other than Cat generators because we know how dependable they are."

> **RON CALLAN**, Owner Callan Salvage & Appraisal

"We have a list of all the Cat dealers throughout the country, and when we get these jobs, we make arrangements with one of them immediately," Callan says. "They know we're working under adverse conditions, and the rental equipment is something that we need right away. We don't need it tomorrow or next week. And they always come through for us."

Working from January 2 until the end of May, Callan Salvage & Appraisal saved 6,800 trailer loads of grain, each weighing approximately 20 tons. The salvage operation saved more than \$30 million worth of grain.

"I don't know how many generators we run a year, but we rent a lot, and it's always Cat power," Callan says. "Our job is to get the grain out and keep it in the best condition we can. We use the generators to run all of our equipment so we can do the blending and retrieve it as fast as possible.

"We travel all over the world we've even shipped generators with our equipment to South America on a couple of occasions—and it's very important that we have reliable power," Callan continues. "We will not use anything other than Cat generators because we know how dependable they are. And if we have problems, we can call a Cat dealer and they can come out and fix it or replace it, or do whatever needs to be done.

Callan Salvage & Appraisal reduced the loss for the grain elevator and its

insurance company by up to 70 percent, Callan said.

"We saved them that much, which made the insurance company very happy," he said. "And it helps the grain elevator company because if they have a smaller loss ratio, that's going to help with their insurance premiums."

Callan said the salvage operation at Mayfield Grain was a total team effort.

"All the people we hired locally which was very few—but all the construction people couldn't help us enough," Callan said. "They know that this place had to get back in business, and everybody pulled together as a team. And that's what's important. Everybody worked as a team, including the local Cat dealer." 32





CAT® INSPECT FOR ELECTRIC POWER

QUICK AND EASY INSPECTIONS

hen uptime is critical, keeping a close eye on your generator sets is critical. Caterpillar delivers legendary reliability and durability, even in the most challenging conditions. Cat Inspect enhances that reliability by giving you access to your power system data—such as operating hours, fluid condition, and maintenance needs—right from your mobile device.

This easy-to-use digital inspection app offers a full engine management solution, integrating with your other Cat data systems and enabling you to download and complete Cat dealer and user-defined inspections of your assets and take action to keep your system running. The benefits include:

Simplified daily inspections

Save time and eliminate errors with auto-populated equipment information and data.

Integrate with your existing systems

Inspection results can be viewed in related Cat equipment management applications, like My.Cat.Com and Cat Connect Remote Asset Monitoring.

Save time using digital inspection features

Digital inspections provide current information for review, retention, sharing, and printing.

Here are the key benefits provided by Cat Inspect:

Complete inspections

Equipment Inspections: Search by family or serial number prefix.

Site inspections: Includes buildings, storage and contamination control.

S•O•S[™]: View fluid analysis reports to better understand equipment condition.

- Create custom inspection forms
- Use for both Cat equipment and equipment from other manufacturers
- · Save images, videos and comments



Share inspections

- · Assign inspections to team members
- Evaluate results from colleagues—online, anytime
- View, retain, and print real-time inspection information
- Use Cat Inspect Web, the companion web application for Cat Inspect, when working from your personal computer

Prioritize repair budget

- Quickly identify actionable items with Red, Yellow, Green, or Gray ratings
- Integrate with My.Cat.Com and Cat Connect Remote Asset Monitoring for a view of the inspections of your gensets

To learn more about effective daily management of your genset performance with Cat Inspect, contact the Power Systems experts at our dealership.

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

FOLLOW CAT ELECTRIC POWER



© 2021 Caterpillar. All Rights Reserved. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

