

POWER PROFILE

Customer: Callan Salvage & Appraisal

Location:

Memphis, Tennessee

Customer Business Issue:

Off-grid power

Solution:

30-, 60-, 100-, and 500 kW mobile generators

Cat® Dealer:

Boyd Cat



On December 10, 2021, Mayfield Grain took a direct hit from the deadliest tornado on record, with high winds tearing the roofs off grain bins and damaging buildings. Memphis-based Callan Salvage & Appraisal was called in to minimize grain losses and enlisted Cat® mobile generators to provide emergency power.

POWER NEED

On 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 10,000 buildings were destroyed, and 80 people died.

Cutting a wide swath from southwest to northeast, a violent tornado began in far northwest Tennessee and moved across Western Kentucky. The hardest-hit areas included Mayfield, Dawson Springs, and Bowling Green. Approximately 740,000 power outages resulted from the fierce storm.

According to the National Weather Service, the EF4 tornado that hit Mayfield traveled more than 163 miles, breaking the record for longest tornado track in Kentucky history.

An estimated 50 percent or more of Mayfield's 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 Co., 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 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, Kentucky, said she found papers from Mayfield Grain in her front yard the next day.

When the storm knocked out grid power to the area, calls started coming into the Boyd Cat 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 a while."

Located about a mile southwest of the downtown area, Mayfield Grain took a direct hit, as portions of the facility were shredded by the powerful storm. The tornado tore the roofs off grain bins. Buildings were unrecognizable as the structures were in pieces, and two semis full of grain were pushed over and spilled their cargo.

SOLUTION

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 our own power from Caterpillar. 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 says. "We had about 15 men and all of this equipment on site, so we couldn'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.

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

"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."

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RESULTS

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 knew 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."



Callan Salvage & Appraisal powered equipment with Cat 30-, 60-, 100-, and 500 kW mobile generators following the aftermath of an EF4 tornado that hit Mayfield, Kentucky, and other areas of the mid-South. Thanks to the rental solutions, 6,800 trailer loads of grain worth \$30 million was saved.