FAIRBANKS MORSE

CASE: WOLF CREEK NUCLEAR POWER PLANT



• 1,200 MW backup power

• Two FM PC2.5 Engines

The Wolf Creek Generating Station, located in Burlington, Kansas, counts on Fairbanks Morse power

Wolf Creek Nuclear Power Plant, Burlington, KS

Profile

Power System:	14-Cylinder
Model	FM PC2.5
Installed:	1979
Fuel Type:	Diesel
Power Output:	1.200.000 kW

Wolf Creek Background

The Wolf Creek Generating Station, located in Burlington, Kan., is the only nuclear power plant in the state of Kansas. The plant is owned and operated by the Wolf Creek Nuclear Operating Corporation, a subsidiary of three owners – Kansas City Power & Light, Kansas Gas and Electric, and Kansas Electric Power. The plant was designed in 1976 and began commercial operations in 1985. It generates 1,200 megawatts, enough power to provide energy to nearly 800,000 households.

Safety: Second to None

Jim Weeks is the system engineer for Wolf Creek. With more than 10 years of systems engineering experience, Weeks doesn't underestimate the importance of safety, especially in the case of emergency backup power.

"Standby power engines are the secondmost important pieces of equipment in the plant, after the Terry turbines," Weeks says. "Emergency backup engines are required to energize the business in less than twelve seconds in the event of a power failure," continues Weeks. "Our Fairbanks engines start in around eight to nine seconds. They're very reliable – they have to be."

Because of this extreme importance and need for reliability, Wolf Creek counts on two Fairbanks Morse FM PC2.5 engines to supply its emergency backup power. "The engines were chosen in 1976, when the plant was designed," says Weeks. "They were installed around 1979 as the plant was built and they've been providing standby power since the plant started commercial operations in 1985."

Reliability: Ready When Required

Fairbanks Morse is based in Beloit, Wis., and has provided engines and engine technology to the locomotive, marine and nuclear industries since its inception in 1885. A leader in innovation, Fairbanks Morse was the first company to successfully market a gasoline engine in the United States in 1893. Its opposedpiston technology was developed in the mid-1930s, and continues to provide reliable power and service to U.S. Navy ships and power plants.

This heritage, combined with the company's reliability and attention to service, is appreciated by Weeks. "The engines were here before I was, but if I had to choose, I'd still choose these," Weeks says. "They definitely meet my expectations."

Weeks also appreciates the continued improvements that Fairbanks Morse makes to its service offerings. "I'll be honest, I used to feel like their tech support was slow," Weeks admits. "But they listened, formed a new tech group with a new approach to service, and it's been good since then." "Plus, going direct to the factory gives us a better response for questions and support," he adds. "Everything is much more timely."

With an operation the size of Wolf Creek, timeliness carries heightened importance, as does reliable service. But, even with 30-year-old engines, Weeks doesn't have much need for parts and service support – a testament to the sound engineering that goes into Fairbanks Morse engines.

"We've never had any major troubles," Weeks says. "We count on these engines and they work when they're called upon, which is obviously the most important part."

For more information, please visit www.fairbanksmorsedefense.com or email us at FM.marketing@FMDefense. com





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