

WinnaVegas Casino wins big with Select® surge suppression

When visitors to the WinnaVegas Casino in Sloan, Iowa hit the slot machines, they don't have to wonder if corn-drying season will affect their luck.

They don't have to worry that their favorite slot machine will freeze in the middle of a game or break down altogether and force them to move to another machine.

Playing at WinnaVegas wasn't always so trouble-free for the 40,000 gamblers who visit the Winnebago tribe's casino each year.

Sprawled amid the picturesque cornfields and farms that dot America's heartland, the imposing 45,000-square-foot facility is a gambler's paradise featuring 625 electronic slot machines.

Unlike the casino's visitors, the slot machines need more than luck to keep them running 24x7. They need clean, reliable electrical power.

Duane Nelson and the WinnaVegas Casino rely on Select® to protect their slot machines from harmful electrical surges and costly downtime.



The Take Cycle

About two years ago, the casino was replacing about 30 slot machine circuit boards each time an electrical spike would occur, which was typically in the summer and fall.

Throughout this area, farmers use large electrical corn-drying equipment to ensure the grain is aired evenly to prevent spoilage while stored in grain bins. However, each time the powerful drying equipment was used, not only did the corn dry up, but the fun and games at WinnaVegas did as well.

"We would normally have about 462 volts of incoming power. But when the corn dryers stopped, we'd experience a power surge," said Duane Nelson, the casino's maintenance manager. "The spikes would cause the casino to lose power for a split second — we would know because the casino lights would flicker and the slot

machines would go offline."

The brief outages caused the slot machines to freeze and then restart, much to the displeasure of the casino's gamblers.

"It was like starting from scratch because the person would have to put more coins into the slot to play," he said.

The casino was spending money to replace light bulbs and costly circuit boards in the slot machines and suffering considerable downtime as a result. Each incident cost the casino an estimated \$15,000 in parts replacement and lost revenue. After replacing numerous circuit boards, the casino sought help.

The casino's electrical contractor contacted Tom Enlow of Enlow Companies, a Current Technology factory representative. After some research, the casino discovered its problems were a result of being on the end of the rural electrical power distribution system. Although retail-type surge strips were connected to each slot machine, they could not adequately protect the machines from repetitive, high magnitude electrical transients.

"After about two or three hits, the surge strips were shot," Nelson said.

Further investigation revealed that the corn drying equipment was not the only culprit behind the casino's power quality problems. In addition to the troubles caused by unreliable incoming power during fall harvest, the casino experienced similar downtime in summer months. Internally generated transients were the cause. For example, as the air conditioning

system cycled on and off, its motor produced electrical surges that also caused the slot machines to malfunction.

To remedy the surge-related problems and prevent further slot machine damage, the casino installed a Current Technology® Select® Sel200 selenium-enhanced™ surge suppression system at the service entrance and TransGuard™ TG100 surge suppressors on the panelboards serving the slot machines. The Current Technology MasterMIND® monitoring system incorporated in the Sel200 provides real-time analysis of the percent of protection online. It also allows the casino to monitor the number of transient events the system has experienced.

House Profit

The Current Technology Sel200 device ensures surges coming into the casino from the utility's electrical distribution system are diverted away from the slot machines and other electronic equipment in the building. The Sel200 and the TG100 devices detect and suppress harmful surges created by equipment within the casino. With Current Technology, the WinnaVegas Casino and its gamblers no longer lose to electrical transients.

"Our cost for running the slot machines has gone down because we're not replacing circuit boards, starters, power contacts and ballasts," Nelson said. "We don't notice the surges or spikes anymore, because our Select and TransGuard systems takes care of them.

"With the built-in MasterMIND monitor, I can tell when there's been a spike or surge, but now nobody on the casino floor knows about it," Nelson said. "We're up and running all the time and that means happy customers and better business for us."

 **Current Technology**

1.800.238.5000 www.currenttechnology.com