

*Education is an important part of problem-solving. The Winfield School District is in the education business, and they learned about the importance of getting educated about power when their new computer system was locking up daily. The knowledge they gained enabled them to solve the problem with ONEAC.*

## Learning the Power Lesson

The Winfield school District met an ambitious schedule, implementing a file server and extensive computer system in less than two months, just in time for the start of the school year. "From the time we installed the system we were having frequent downtime on our file server. It would freeze up or go down for no apparent reason," said Jack Barshinger, Superintendent of the Schools for the Winfield School District. The school district's computers were experiencing error messages, lock-ups and reboots daily.

The file server connected the schools with a network of 75 PCs, allowing for computers on every teacher's desk and in the classrooms. "Our students have a technology period in their schedules," Barshinger explained. "When the network went down, it not only took teachers off line; it also brought our technology classes to a screeching halt. That's learning time that you cannot make up. The problems made us scramble all the time, constantly trying to get the system back up as quickly as possible."

Like many organizations that experience power problems, Winfield's personnel thought it was the equipment. "First, we

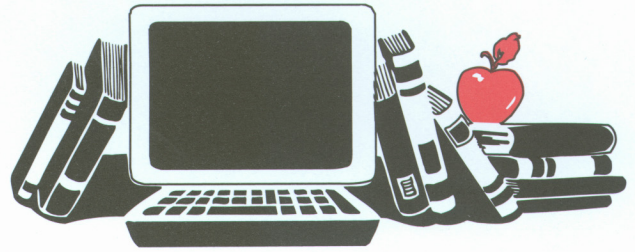
rebuilt our file servers piece by piece," Barshinger said. "Although those efforts helped, they never completely solved all the problems. Then, we tested the lines and discovered that we had some high spikes from a dirty power source."

Winfield brought in Commonwealth Edison, the school district's local electricity supplier. ComEd provided a technician who performed a complete check of the power source and offered a solution, which involved taking transformers apart and cleaning off years of corrosion. ComEd also suggested dedicated grounds for some of the lines with heavier computer usage. Winfield followed ComEd's advice, and again, although the efforts helped, Winfield was still encountering dirty power and the related computer problems.

**"ONEAC has enabled us to move forward with the rest of the technology plan."**

*Jack Barshinger,  
Superintendent of Schools,  
Winfield School District*

"There was still some fluctuation in power," Barshinger noted. "We were still having system lock-ups — not daily but on a regular basis, enough



to keep everyone working on solving the problems, instead of moving our entire system forward. Everything was on hold. You don't move forward and add to your system when you can't get what you have working. We know there must be something we were overlooking, and we kept searching for solutions."

Winfield's lack of power education caused the school district to use a UPS manufactured by a leading competitor of ONEAC. Unlike ONEAC equipment, the competitor's unit did not include a power conditioner with an isolation transformer, thus exposing Winfield's computer system to damaging noise on the line. The competitor's UPS was not able to prevent Winfield's computer system from experiencing the continuing problems.

"Our computer consultant suggested ONEAC power conditioning," said Barshinger. "We installed the ONEAC equipment and it straightened up almost all the remaining problems. ONEAC really cleaned things up quickly."

"In the beginning when we started having problems," he continued, "we had not looked at power as being one of the major issues. You make the assumption that the power source is good. I was surprised that it was the power and that it

was fixed so well by the power conditioners."

One of the options recommended to Winfield was to spend thousands of dollars on rewiring the building to obtain clean grounding. Instead, Winfield chose ONEAC and ended up paying a fraction of the proposed rewiring cost in addition to solving the problems immediately. Even if the school district had opted to have the expensive, inconvenient and time consuming rewiring done, it wouldn't have offered the same 100% protection furnished by ONEAC.

"We were very pleased with the ONEAC equipment," Barshinger commented. "ONEAC has enabled us to move forward with the rest of the technology plan. We have freed the resources to expand the program instead of spending all of our time just keeping the hardware running."

"At Winfield, we thought having an uninterrupted power supply would be enough," he concluded, "but we learned our lesson and it became very clear to us that going the extra step and adding power conditioners was essential to the success of our implementation program."

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