

Power Protection - Overview

One out of four computers gets hit by a major power event every year. It's not a question of if...it's a matter of when. And, even if you avoid a major catastrophe, every computer gets hit daily with sags, surges, and noise that can cause system crashes, keyboard lock-ups, and data corruption. Spikes and blackouts, while less common, can impose corruption and loss of data as well.

When you are getting ready to buy a network, how often do you think about power quality? When the network unexpectedly reboots or keyboards lock up, who and what is usually blamed? Network administrators and users will almost always blame the network (and the reseller) for flaky behavior. However, this behavior may have been caused by power disturbances.

How do power problems affect computers and other sensitive electronic equipment? Power problems pose threats to network reliability and cause downtime, data loss, file and database corruption, hardware damage, and lost communication and services.

Power is the last component blamed but is the easiest to fix. Don't take our word for it, look at what other companies say about the problem with power.

Power problems are

[1] The largest single cause of downtime (KPMG Peat Marwick)

[2] The largest single cause of data loss (Contingency Research/IBM)

[3] The second largest cause of hardware loss — to theft (SafeWare Ins.)

You may not know that the average business computer installation experiences 120 power disturbances per month (IBM). And, 42 percent of companies estimate the cost of downtime to be \$1000 per hour or more (Yankee Group)!

As you can see, power is a very important foundation on which a network is built. But what percent of your budget is allocated for power protection? As you now know, not enough!

"In the long term, the adequacy of resources and transmission systems is less certain because the industry is moving to a more competitive wholesale electricity market."

➤ ***North American Electric Reliability Council.***

Power quality continues to decline because of

[1] Utility Deregulation More than 40 states are now studying or implementing plans to allow customers to choose their electricity provider. The result of this increase in competition will be that the quality of the power will suffer.

[2] Capacity Margin By the year 2000, demand will be greater than supply and with every drop in capacity, the number of power problems increases.

[3] Increasing demand of **high-grade** power Sensitive electronics have created the demand for **high-grade** power. Some 30 percent of power drawn from utility is for sensitive equipment. Remarkably, this figure will grow to 50-60 percent by the year 2010. And, utility power is not computer-grade power.

[4] Age/Design of existing power grid Most utility transmission networks are 20 years old. The technology explosion of the '80s and '90s has changed the requirements substantially, making utility systems overburdened and unreliable. Last summer most of the U.S. was hit with summer outages due to storms and shortage of resources.

You Need To Protect Your Equipment

If the power foundation is not solid, your network will crumble. In general, power should be a bigger consideration in network installation upgrades. Make it a priority for your systems. Don't forget: Summer is approaching — what happens if you are left unprotected?

By understanding proper power protection for your computers - fileserver(s) and workstations - you can make the investment in good quality battery backups with AC line conditioning to help protect your substantial investment.