



Power Performance  
for the Digital Age



*When solving problems is your main enterprise,  
can you afford to lose your tools?*



Ninety percent - 90% - of power quality issues are caused by the operation of your own equipment.

The advantage of the EP Power Performance System is its unique ability to absorb the harmful transient surges and high frequency noise rather than returning these damaging anomalies back into the ground or connected electrical system.

**EP Products Specified:**

- EP-2000 Field Protection
- EP-2500 Switchgear Protection
- EP-2700 High Frequency Filtration



**CENTRAL MICHIGAN UNIVERSITY**

**The Situation:**

CMU is one of the world's leading university laboratories for audiology and hearing sciences. Their main lab building, which houses a multi-million dollar advanced diagnostics testing machine, is less than a year old. The building's electrical distribution system was protected by a legacy TVSS design based on MOV's that clamp and shunt high energy components to ground. **The diagnostic testing machine was burning out a main controller board with a \$24,000 replacement cost every two to three months.** Equally painful to the loss of the machine and the cost of the repair was the lead time for replacement parts that have to be shipped from overseas (4-6 weeks).

**The EP Solution:**

The building was analyzed and the EP-2500, EP-2000, and EP-2700 products were installed. **The goal was to remove the high frequency resonance that penetrated the power supply** and wreaked havoc on the main controller board.

**The Result:**

Following the initial testing, the existing MOV based clamp and shunt product was disconnected and the facility power was analyzed again. A noticeable improvement occurred which indicated that having transients shunt into the ground system was producing a negative effect. The EP product line was then installed and the power was analyzed a third time. The high frequency resonance was buried in the negative 65 to negative 70 dB range to the degree of insignificance. **The latest main controller board has not failed since the EP product installation, and the university has removed the legacy MOV design from their power quality standard and replaced it with the EP product.** The university also intends on retrofitting 300-plus buildings under management with EP products as part of a university facilities specifications change. Later this year, CMU will also be awarding a \$35,000,000 building project for 2007 and the EP product line will be installed across that facility's entire distribution system.