

A "PowerClamp" User Report

[LOS ANGELES, California] My experience with PowerClamp Transient Voltage Surge Suppressor units began in 1988.

I was (and still am) the contract engineer for a Class B FM station in southern California. The station was experiencing a problem with their transmitter, which was located on a mountaintop – a two-hour drive from the station's studios.

ANNOYING OUTAGES

The problem was simple but annoying: almost every Thursday morning at about 8:00 AM, the transmitter would throw its main breaker and the station would go off the air.

This would require someone to drive up to the site, reset the breaker, and get the transmitter back on the air. Every time this happened, they would try to locate evidence of whatever caused the breaker to trip, but nothing was ever found.

The local utility company was contacted, under the assumption that the problem was power line related. They ultimately issued a 23-page report, explaining that it was not due to anything the utility company was or was not doing.

A SOLUTION

About this time I was contacted by a representative of Sine Control International. They claimed to have the solution to this problem, in the form of a highly effective surge suppression device. Since we were at our wit's end, I agreed to try one of their units.

Once it was installed, the problem went away and never returned. Ever since that experience I have been a big fan of these units, which are now marketed by Henry Engineering as "PowerClamp."



REPEATING MOVIE

A few years later, I became Chief Engineer of one of Los Angeles' major FM stations. They were using a pair of older tube-type transmitters. They too had the occasional problem with one (or both) of the transmitters tripping the main breakers.

And again, someone (usually me) had to drive up the mountain to reset the breaker.

Since "I had seen this movie before," I installed a PowerClamp Series 8 surge suppression unit. Again, the problem went away and never returned.

GOOD HABIT PAYS OFF

In the early 1990's we upgraded to a completely new transmitter plant on Mt. Wilson – the 6,000 foot mountaintop that serves Los Angeles with most of its FM and TV signals. I installed a pair of Continental tube-type trans-

mitters at this site, which also housed another FM transmitter and a TV transmitter.

Taking a clue from my past experiences with mountaintop power, I installed a PowerClamp Series 8 surge suppressor on my transmitter's AC power input. It paid off. A few months later, there was a significant power line surge. The surge – or whatever it was – caused my transmitter to "hiccup," but it came back on the air after a few seconds. There was no damage.

Meanwhile, various transmitters in the same building from other FM and TV stations sustained very serious damage. (The cost of their repairs greatly exceeded what I spent on the PowerClamp unit.)

MORE STATIONS, MORE CLAMPS

I am currently the Chief Engineer for the Los Angeles cluster of several broadcast facilities under common ownership. Being responsible for many radio stations means my time is limited, and there is no room for "taking chances." For this reason, I have installed PowerClamp units on virtually every transmitter for which I am responsible.

We had previously experienced unexplainable off-air episodes about once every four to six weeks. In over a year since the PowerClamp units were installed, we have not had such a re-occurrence.

Another benefit I have also noticed is an increase in tube life. Our Harris tube-type transmitter formerly consumed final tubes about once per year. After installing a PowerClamp unit, tube life has increased. We are now 16 months into a tube and it is still going strong. I can only conclude that keeping voltage spikes out of the tube is having this positive effect.

I am convinced that PowerClamp TVSS units are well worth their cost. They have demonstrated their ability to eliminate power line surges and glitches that cause tripped breakers and serious damage to transmitter plant equipment. As the saying goes: "Don't leave (your transmitter) home without one."

For more information on the PowerClamp, see the Tech Guide on page 20.

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