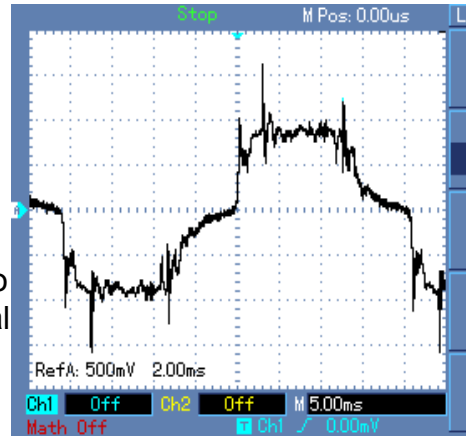
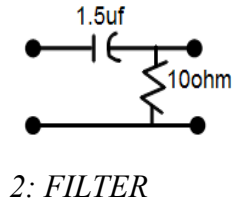


POWER TRANSIENT MEASUREMENTS

A rental apartment in Kentfield, California, was scanned at the request of the occupant, who manifested symptoms of microwave disease after a Smart Meter was installed on 12/2010. The two instruments used to assess the property were a TES-92 electro smog meter (sensitive to 50MHz to 3.5 GHz at .001 uW/Cm²), and a Tenma 25MHz two channel digital oscilloscope.



1: SIGNAL WITH SPIKES

LINE FILTER

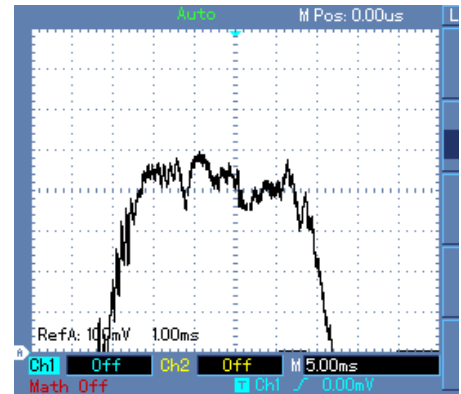
The oscilloscope's high pass filter attenuates 3dB at 10KHz, so frequencies above 20KHz are virtually unattenuated.

RF SCAN

The building's exterior was scanned for RF near the Smart Meter, and levels were below .001 uW/Cm². Since SMs communicate at 900-928 MHz, we assume the network was still in manual mode. Meters were installed 5 weeks prior.

POWER SIGNAL

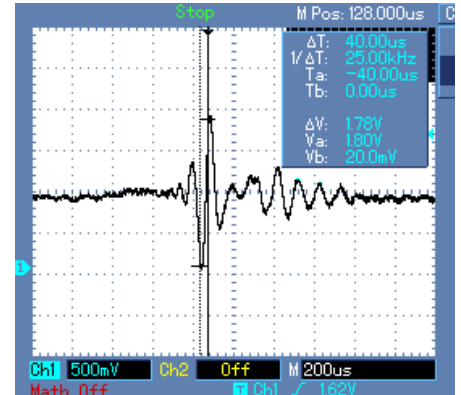
Some outlets contain 1V spikes, while others exhibited none and were not analyzed. Signal was analyzed at voltage extremes, and at zero crossing.



3: CLEAN SIGNAL

VOLTAGE EXTREME

At +/-60 volts, a spike occurs on each cycle, indicative of a switching power supply. This transient is well above the filter cross over, so measured voltage is unattenuated. The spike has a fundamental frequency of 50 KHz, and a voltage transient of 1.8V in 40us, for a slew of **45,000 V/Sec**.



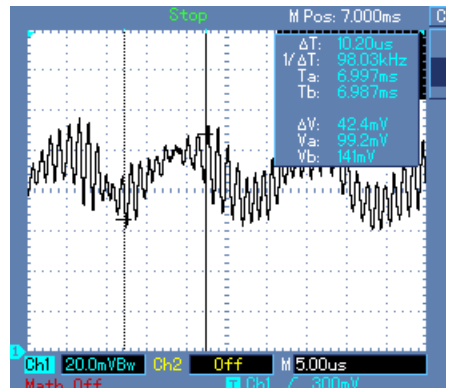
4: VOLTAGE EXTREME

ZERO CROSSING

The signal is surprisingly active at zero crossing, exhibiting harmonics at 200 KHz (10 mv), and 3.6MHz (20mv), for voltage slews of 2,000V/s and **72,000V/s** respectively.

CONCLUSION

Research shows RF power density and voltage slew promote disease, though required dose is uncertain. Power transients were found at 3.6MHz @72KV/s and 50KHz @45KV/s. RF transduction of these were not measured. Inserting a Stetzer filter attenuated little of the power transients or harmonics.



5: ZERO CROSSING

Robert States, M.S., P.E.

PC Engineering, 5 Mohawk Ave., Corte Madera, CA 94925
rcstates@yahoo.com, 1/30/2011