



1 cycle of a 60 Hz Frequency

### Example of Extremely Low Frequency (60 Hz) Causing Electrical Failure

Thermal radiation inspections for oil, gas, energy, petrochemical, manufacturing, lumber, mines, insurers, etc are to isolate electrical problems before they fail. Failure can cause explosions, fire, injury, loss of life, production and economic losses.

The IR image above are called parallel feeds, big wires feeding a Motor Control Centre in a lumber mill. Electrical professionals accommodate the EMFs around **each** conductor using a non magnetizing insulating board. This installation didn't use the Mica board so the 60 Hz EMFs are inducing currents and causing the molecules of affected metal cabinet to change direction 120 times per second. Metal doesn't change direction easily and heat is a byproduct. The wire insulation is rated for 90 deg. C. and close to being exceeded. Breakdown in insulation would result in a groundfault and violent explosion. This is with extremely low frequencies.

Natural frequencies like solar EMFs can cause buildings to grossly exceed building code by causing excitation of absorbent versus reflective exteriors. This is a link to a time-lapsed radiation video of solar EMFs interacting with development right after sunrise. IR images were taken every 60 seconds without expectations. <http://youtu.be/dKGHKTkqeMc>

Wi-Fi, smart meters or RF EMFs going through walls induces currents and causes structural components, fire separations, etc to vibrate 1.8 to 10 billion times per second. That affects building code compliance.