

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

Infrared electrical 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.

When wires are run together the EMFs cancel each other out. When the wires are separated as above, the EMFs will interact with the metal cabinet so electricians install a non magnetizing insulating board where the wires enter the MCC. This installation didn't use Mica Board so the 60 Hz EMFs of each conductor are causing the molecules of affected metal cabinet to change direction at twice the speed of the frequency. Metal doesn't change direction easily and heat is a result. The wire insulation is rated for 90 deg. C. and breakdown in insulation would result in a groundfault and violent explosion. 60 Hz is considered to be an extremely low frequency.

Natural frequencies like solar EMFs can cause buildings to grossly exceed building code by causing excitation of absorbent versus reflective exteriors. Here is a time-lapsed infrared video of solar EMFs interacting with buildings right after sunrise. IR images were taken every 60 seconds. http://youtu.be/dKGHKTkqeMc

Elelctrical professionals are carefeful with wireless use. Wi-Fi, smart meter or RF EMFs going through walls is causing structural components, fire separations, etc to vibrate 1.8 to 10 billion times per second.