



Green-Energy-Products.Com, LLC

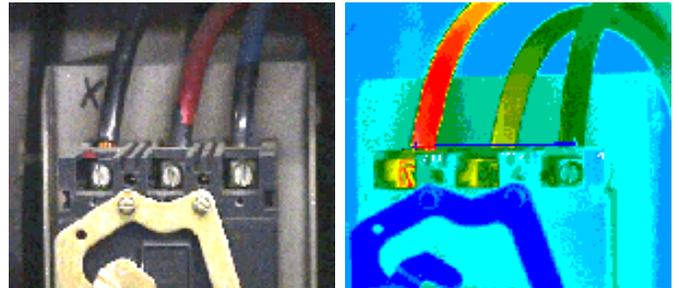
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<https://www.green-energy-products.com>

Green-Energy-Products offer a multiple disciplined approach to analyzing the efficiency of any electrical system. The first step is to assess how much energy is consumed and to evaluate what measures can be taken to make your business or home more energy efficient. An audit will show you problems that will, when corrected, save you significant amounts of money, reduce Kwh and identify safety issues that could [cause catastrophes](#) (MGM Grand Fire), if not corrected. During the audit, we will pinpoint where your business or home is wasting energy through inefficiencies or NEC, IEC, and IEEE standards code violations. Our multiple disciplined approach uses several technologies and methodologies in completing the Energy Efficiency Analysis. Included are reference links that explain the more complex issues and electrical terms.

- A **POWER QUALITY ANALYZER** is used to measure all aspects of power: voltage, current, frequency and power - (watts, VA, VAR, power factor, and energy in kWh) as well as harmonics (spectrum and THD).
- Thermal imaging of your electrical circuit panel and breaker connections is one of the most important aspects relating to unseen hot spots which can [cause electrical fires](#). We identify worn electrical parts that still function but **consume 4 to 6 times more energy** to operate, which in turn, create a heat pattern that affects other parts around them and causes more damage, and energy loss.



- Ground system check, certification and ground loop analysis. The facility electrical ground system must meet or exceed NEC 2017 code 250.56 for Certification and the repairs must be made that will:



- Efficiently dissipate lightning surge energy that may arrive via down conductors of the lightning protection system.
- Efficiently dissipate electrical surges and faults to minimize the chances of injury from either “[step potentials](#)” or “[touch potentials](#)”
- Provide a stable reference for electrical and RF circuits at the facility to minimize noise during normal operation.
- Be properly bonded to provide an [Equipotential](#) plane under fault conditions



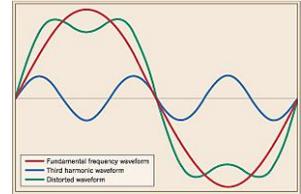
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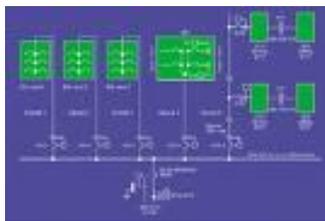
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- **Harmonic inspection** check, because of the adverse effect of harmonics on power system components, the IEEE developed standard 519-1992 to define recommended practices for harmonic control. This standard also stipulates the maximum allowable harmonic distortion allowed in the voltage and current waveforms on various types of systems.



- **EMF Check**, excessive Electromagnetic fields increase with the current in the power lines so if we identify high EMF's in the system then we can isolate the problem and reduce energy consumption.



- Visual inspection and documentation of the entire electrical system, including creating a line diagram, opening each panel and measuring the loads on each circuit.

- **Photographic and Video images** are taken to document the before and after conditions of the entire electrical system which includes all equipment such as: transformers, air conditioners, air handlers, motors, VFD's name plates and descriptions.



In conclusion, you may be wondering is this all necessary just to reduce energy consumption? Well let me explain: I have been working for the past fourteen years with products that support the theory that they can reduce energy consumption. Some devices work in one environment and not another. Some devices cause problems not the fault of the device but of the electrical system that they are connected to. This is just a small example of cause and effect relationships. If you would be interested in an Energy Efficiency Analysis please contact us to discuss your specific situation.