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## Is there a catastrophe brewing in your electrical system?

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Arc flash is a hidden and potentially perilous danger. No one believes it will happen in their facility. But arc flash accounts for 80% of all electrical injuries. Each year more than 2,000 people are treated in burn centers from arc flash incidents.

An arc flash is a dangerous condition associated with the possible release of energy caused by an electric arc. It can occur at voltages that most people assume is too low to cause a problem and that it is only a 'high-voltage' phenomenon. This very dangerous assumption is one that could lead to personal devastation or death and business interruption of hours, days or weeks - and includes a mandatory visit from OSHA. Examples of seven-figure jury awards and six-figure OSHA fines are becoming commonplace when it comes to arc flash.

Speaking of OSHA, they are generally responsible for dictating the 'what'; that you are responsible to keep your employees, tenants and contractors from getting hurt in your facility. They are now using NFPA 70E Standard for Electrical Safety in the Workplace 2012 to accomplish the 'how' when it comes to electrical shock, arc flash and arc blast issues.

When's the Last Time?

Under normal operating conditions, enclosed energized equipment that has been properly installed and maintained is not likely to pose an arc flash hazard. However, experience shows us that although most equipment has been installed properly - it's the maintenance that falls woefully short. And that's where the problem begins.

Bottom line: if your building's electrical system has seen little or no preventive maintenance to insure its proper operation over time - that it will do what it's supposed to when it needs to - then you're at an elevated risk of an arc flash incident.

NFPA 70B Recommended Practice for Electrical Maintenance proposes regular intervals of energized inspections and de-energized maintenance of your critical power systems in order to insure that each piece of equipment operates in a manner that was intended.

The Arc Flash Hazard Analysis

You can take steps to safeguard your system against catastrophic personal injury and system loss. An Arc Flash Hazard Assessment by our PowerHawke team can identify, mitigate and propose proper Personal Protective Equipment (PPE) for any potential problems and ensure you comply with the revised 2012 NFPA 70E.

For existing facilities, most assessments begin with an on-site inspection and cataloging of each piece of electrical equipment from the utility service entrance down to the single-phase systems. Once an accurate model of the electrical distribution system is created, generally, one of a number of industry standard software is used to calculate the incident energy levels. Finally, a report and labels on each piece of equipment finish the deliverables. If mitigation of problems needs to take place, those can also be integrated into most programs.

Our team of safety and power system experts will work together to analyze and label your critical power system and correct any potential problems before they create loss and lost dollars for you.

Now that the Genie is Out

There are numerous reasons why customers are starting down this road - some as 'first-movers', some as a result of prodding from their insurance companies and still others as a consequence to an incident. Regardless of the reason, once the consciousness is raised and information is delivered, the issue of arc flash is no longer an abstract idea and the "genie is out of the bottle".

Put another way, once the arc flash threshold is passed, the issues of proper electrical safety and maintenance of critical electrical infrastructure must be addressed or the consequences of negligence could be devastating.

Protect What Matters

McPhee Electric, Ltd, with offices in Farmington, Conn. and Medford, Mass., has expanded its electrical preventive maintenance services under the PowerHawke banner, in an effort to engage more customers in what it believes is an absolute must in today's era of critical power systems.

At PowerHawke, we are working proactively with customers to provide a financially flexible yet technically prudent program to address all aspects of electric shock, arc flash and arc blast in their facilities. We'd love to talk to you more about the topic of arc flash and offer options so that you can be on your way to a plan to protect what matters.

For more information, please visit <http://powerhawke.com>.

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