

Testing Times

A newsletter for the electrical construction and maintenance industry

Volume 8 No. 1

It's working, why test?

The electrical distribution system represents a significant investment in a building's infrastructure. Unfortunately, this important system suffers from the "out of sight, out of mind" syndrome. It's hidden in the walls, floors, closets and basements. If the lights are on and computers are working, no one gives the electrical system another thought. Why don't businesses perform electrical testing and maintenance?

- power is on so everything must be O.K.
- maintenance budget was reduced
- improperly trained personnel
- maintenance was delayed
- requires an outage
- no moving parts/nothing to fail
- simply not important

Here are some facts to help you understand why none of these excuses is acceptable for avoiding preventive maintenance. According to Hartford Steam Boiler, a leading commercial and industrial insurance company, lack of maintenance is the leading cause of electrical distribution system failure. Loose connections and parts account for 30% of the



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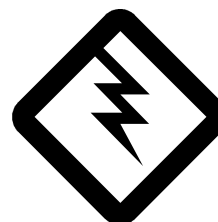
failures and moisture another 17.4%. Together, these problems account for almost 50% of all failures and almost always could be discovered and corrected with preventive maintenance.

The Institute of Electrical and Electronics Engineers (IEEE) reports that the failure rate of electrical components is three times higher for systems without preventive maintenance. According to IEEE *Industry Applications* May/June 2000, "the cost of one serious incident could be more than the cost of establishing and maintaining a good electrical safety program for several

years. In the long run, the safe way is the least expensive way to run a business." Speaking of costs, HSB reports that "electrical systems are one of the most common and costly types of equipment breakdown". HSB routinely sees losses of several hundred thousand dollars and occasionally in excess of \$1,000,000, even in modern buildings. HSB also states that 90% of electrical system failures occur in "standard commercial buildings".

Still think electrical preventive maintenance isn't important? Let's list some of the many reasons you should perform scheduled testing.

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News you can use!

Contest

We have our second contest winner! In our last *Testing Times* issue, we continued a contest where you, our readers, give us questions or suggestions for topics you would like to see addressed in future

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- improves equipment efficiency
- increases equipment life expectancy
- can reduce utility bills
- can free up equipment capacity
- can increase insurability/decrease insurance premiums
- identifies problems/schedule repairs prior to failure
- avoids costly downtime/unplanned outages
- lowers expenses for overtime labor and rush parts
- improves safety record
- tracks normal deterioration/schedule replacements
- never had start up testing/equipment may have never operated properly

Hopefully, we have given you enough information, quotes, and statistics from industry sources to convince you that electrical distribution system maintenance is not a luxury but a necessity. So now you want to test, where do you start? Your equipment manufacturers' operating manuals (if you know where they are) usually give general maintenance guidelines that can be tailored to your environment. Another excellent reference is the NFPA 70B *Recommended Practice for Electrical Equipment Maintenance*. We will discuss more about what to test and how often in future issues. ❖

(Contest, Continued from page 1)

issues. Our latest winner is Mr. Mike Ososki of Barnett Consulting Engineers in Norcross, GA. He posed the topic we address in this issue "Why test?" As promised, Mr. Ososki is receiving an Outback Steakhouse gift certificate.

Many readers have told us they use the *Testing Times* to help them educate their customers and clients about different electrical issues. The more input you give us, the better we can help you. Send us a suggestion for a topic that you would like to see covered. You will need to be specific, i.e., pose a question or describe a situation that you would like addressed. Winners will receive a gift certificate for \$25.00 to Outback Steakhouse. See below for details on how to respond. If you already sent in a suggestion, we will keep them on file and may use your suggestion in a future issue. ❖

Note from the Editor

Thanks to all who have responded to our newsletter topic contest. We will keep your questions on file and if we use your suggestion, we will send you your gift certificate and mention you in our newsletter. This contest is open-ended. If you have a topic suggestion, please fax this page with your topic to Lyn Cosby @ (404) 299-3534 or e-mail Lcosby@hoodpd.com.

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inside:

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