



# TEDDER'S TECHNICAL FACTS

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For Facility Managers

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## Electrical Systems Need Reliability Centered Maintenance

**Millions of dollars per minute!!!** That's what downtime can cost in this age where building systems and information must be continuously and instantly available. The spotlight shines brightly on facilities having guaranteed uptime and a continuous power supply. Facility failure impacts productivity, employee morale, and corporate credibility - all critical factors no company can afford to put at risk.

Today's building systems are sensitive and interrelated so commitment to reliability is more important than ever. **Predictive Testing and Inspection (PT&I) identifies your reliability problems before they happen and then you're the hero!**

Interconnected building systems greatly increase efficiency, but this **interconnectivity can make a whole building more vulnerable** because a problem arising in just one system or one piece of equipment affects others. The best way to increase a building's system reliability is to develop and employ PT&I within an ongoing maintenance program.

**PT&I** uses advanced technology to evaluate equipment condition and **produces data that allows you to predict and fix a problem before failure occurs.** PT&I data provides a performance baseline, which is then used to plan and schedule preventive maintenance or repairs before equipment fails, increasing reliability. In the commercial building industry, PT&I is sometimes called "condition monitoring" or "predictive maintenance". This condition-based maintenance is work done as a result of PT&I data analysis.

A few reasonable and cost-effective PT&I actions are listed below. Some relate directly to a facility's electrical distribution system and power quality; all are important to reliable facility performance:

- ◆ **Power Monitoring**
- ◆ **Infrared Thermography**
- ◆ **Partial Discharge Analysis**
- ◆ **Visual Inspection**
- ◆ **Insulating Oil Tests**
- ◆ **Insulation Resistance Tests**
- ◆ **Insulation Power Factor Tests**
- ◆ **Protective Relay Testing**
- ◆ **Ground Fault Protection Tests**



**Reliability = Profitability**

**PT&I is the centerpiece of a Reliability Centered Maintenance (RCM) program**, which is a continuous process of finding the optimum mix of reactive, preventative, predictive and proactive maintenance practices, thus achieving your desired reliability level at lowest cost. An RCM program's prime goal is determining the failure modes for each system and each piece of equipment in a facility and the related consequences. You can then identify and recommend to your management the most cost-effective maintenance techniques to reduce risk of failure and consequences of failure.

**Call us to discuss RCM programs.** We are the West's premiere NETA certified testing agency. Let our 45-year, single-ownership, industry know-how help assure a maximized reliability and resultant uptime for facilities under your control.

**Visit us at: [www.hamptonedder.com](http://www.hamptonedder.com)**