



IR Scanning for Electrical Power Quality and Reliability

- Identify Potential Failures
- Prevent unscheduled Down-time
- Increase Equipment Reliability
- Lower Risks and Repair Costs
- Prevent Catastrophic Failures
- Meet Code Compliance



Lorbel Critical Power Services provides Infrared Thermographic Inspections service for facility power distribution reliability and safety. Infrared inspection of electrical equipment is utilized to detect hot spots which are caused by excessive heat in electrical connections or components. Excess heat is typically caused by increased resistance in an electrical bond. Problems must be corrected to prevent the component from failing, causing damage, safety hazards, equipment downtime or potential fire.

IR Scan

Infrared scanning provides an excellent method to detect these types of conditions. Periodic Infrared Thermography Inspection is a key test procedure as part of an Electrical Preventive Maintenance program. IR Scanning is recommended for panelboards, busways, motor control centers, transfer switches, breaker panels and other equipment.

IR scanning is accomplished by using a thermal camera that takes a thermogram image of the heat pattern. This pattern displays the heat image in various colors which translate to a temperature range. Viewing the Thermogram image provides the technician with the data needed to determine if the electrical equipment is operating too high of temperature allowing for recommendation on possible mitigation steps.

Scope of Work

Service will include:

- Inspections will be performed by qualified and certified technicians.
- Perform Infrared Scanning utilizing IR Camera.
- If scan readings are normal, note on report.
- If scan readings indicate and anomaly:
 - Take a photo along with the IR Scan.
 - Make a current ready on affected circuit and note the findings.
- Report will include:
 - Infrared Electrical Inspection Information
 - List of devices IR Inspection was performed
 - Anomaly Report that includes component reference, photos, scans, measured data, findings and recommendations.
 - List of Equipment used
- Review of the findings with the customer

Code Requirements

The following codes drive the requirement for IR Thermographic Scanning:

Occupational Safety and Health Administration (OSHA), in OSHA 1910 Subpart S and OSHA 1926 Subpart K purpose is to identify and reduce or eliminate electrical safety hazards in their workplace. Electrical Safe Work Practices including:

- Electrical safety principles
- Guidelines for qualification of personnel
- Job planning requirements
- Management
- Personal Responsibility

NFPA 70B – Recommended Practice for Electrical Equipment Maintenance, Section 2. Regularly scheduled inspection, testing, and servicing of equipment:

11.17.5 Inspection Frequency and Procedures. Routine infrared inspections of energized electrical systems should be performed annually prior to shut down. More frequent infrared inspections, for example, quarterly or semiannually, should be performed where warranted by loss experience, installation of new electrical equipment, or changes in environmental, operational, or load conditions.

Lorbel Maintenance and Service Plans

Lorbel is your one-stop-shop for all your UPS, generator, DC plant, electrical work and backup power infrastructure needs. We have the highly trained techs to support your stand-by power needs. Our techs follow industry standards and best practices, so you have confidence and can sleep at night knowing your generators are properly serviced.

Have confidence in your electrical power system. Lorbel offers electrical, UPS and Generator Preventative Maintenance Plans to meet your needs. Select from Platinum, Gold and Silver maintenance plans and number of PMs per year based on your specific uptime requirements. With competitive pricing, you cannot afford the risk to be without a maintenance plan. Contract Lorbel today.

Be sure to request LORBEL as your Critical Power Services provider.

Contact Info

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