# **Electrical Safety Audit**

As safety brings reliability and life



Electrical hazards continue to threaten safety of people and property in the form of shocks, burns, injury, fire and explosion. With electricity having become an indispensable part of our life, electrical risks are to be managed effectively.

In day to day life, fires due to electrical reasons are very probable, especially in industries that handle flammable chemicals. In service industries such as information technology, telecommunications, banking and other commercial establishments, business interruption losses due to electrical hazards (fire in server room, damage of expensive communication equipment, loss of data, fire in cable gallery, etc.) could be substantial.

# **Electrical Safety Assessment**

Auditors of TUV India shall examine the safety of electrical installations by verification, enquiry, inspection and testing. Electrical Safety Audits are conducted by knowledgeable and experienced professionals who assist clients in reducing risk and help to ensure compliance with applicable standards and Regulations.

# Scope of Services

• Verification of statutory compliance with respect to Central Electricity Authority Regulation 2010, Indian Electricity Rules 1956, National Building Codes 2005 and Best Engineering Practices



- Physical inspection of all electrical panels and distribution boards (PCC, MCC Panels) to identify electrical hazards (shock, fire, explosion, overloading) and to suggest electrical safety solutions
- Review of hazardous area classification and selection of flameproof electrical equipment in the plant, including maintenance aspects
- Review of electrical preventive maintenance system (including tests, documentation, history cards, etc.)
- Review of electrical accidents and near misses in the building to identify the root causes.
- Review of electrical systems & procedures (work permits, interlocks, lockout tags, etc.)
- Review of the importance given to electrical safety in the safety policy, safety committee, continuous electrical risk identification, etc.
- To identify areas of overloading by carrying out load current measurements and compared against cable current carrying capacity calculation
- Review of the earthing system (installation & maintenance aspects), checking of earth pit testing reports. Earth pit testing of on sampling basis to verify the result with annual test reports
- Preparation of electrical safety audit report



### Benefits of Electrical Safety Audit

- Identification of electrical hazards and to minimize the risk of accidents like fires due to short-circuiting
- Identification of areas of risk in your electrical systems
- Non-compliance with the legislation and best practice
- The identification and elimination of safety hazards
- Ensuring longevity of your expensive electronic equipment's like computers and other machines
- Ensure safety of valuable information like data and other documents is safe from electrical hazards
- Improvement of employee morale
- Development of a dynamic record of safety performance
- Creation of positive cycle of safety improvement
- Improvement of management awareness of problems
- Insuring compliance with Government and industry safety related work practices

#### **Our Approach**

Our auditors follow a systematic approach for evaluating potential electrical hazards and prepare reports recommending actions for improvement. Our reports assess high risk situations and areas of non-compliance with legislation or best practice and provide recommendations to rectify the issues identified. Implementation of these recommendations will reduce the likelihood of future accidents or inconvenience to the business.

- Pre-Audit Questionnaire
- Audit
- Physical Inspection
- Tests
- Discussion
- Document review
- Management Briefing
- Final Report Submission

#### **Our Expertise**

TUV India has been closely associated with several energy efficiency improvement projects Pool of experienced Power Quality Experts to conduct detailed Power Quality Audit in all types of industries e.g. Chemical & Petrochemical, Cement, Power, Tyres, Paper, Automobile, Textile and Textile Processing, Paints, Pesticides, Fertilizer, Steel, Engineering, Ceramic, Synthetic Fibers, Hotels and Commercial Buildings etc.

Registered with BEE (Bureau of Energy Efficiency),

- MEDA (Maharashtra Energy Development Agency),
- GEDA (Gujarat Energy Development Agency),

PCRA (Petroleum Conservation Research Association), KEMA (Energy Management Centre - Kerala).

#### About Us

TUV India Pvt. Ltd. (TUV NORD GROUP) is a customerfocused, innovative, and independent, technical, quality & safety services organization, dedicated to providing future-proof solutions through technological excellence for the success of its customers with the highest level of integrity. With a presence at over 40 strategic locations in India; a branch office in Sri Lanka; state-of-the-art laboratories at Pune, Bangalore & Jamnagar; 100 important countries worldwide and through digital means, we are always connected to you, our esteemed customer, anywhere, anytime.

We are proud to provide increasing levels of services to the best known, largest global and national companies as well as medium and small industries in diverse sectors like Oil & Gas, Petrochemical, Nuclear, Renewables, Infrastructure, Food, Power, Manufacturing, Chemicals, Pharma, Paper, Automobiles, Railways, Aerospace, Defence, IT, Health, Hospitality, Retail, etc.

Over 1100 competent and experienced TUV India experts spread across India and over 14000 TUV NORD experts all over the world, enthusiastically support our clients by providing value-added services in Industry Inspection, European / International Approvals, Management System & IT Certification, Sustainability, Energy audit, Water audit, Carbon Services, Building Infrastructure & PMC, Renewable Energy, Food & Packaging Testing, Food Certification & Inspection; Product Testing - Electricals, Electronics and Industrial Machinery; Product Certification; Petroleum, Chemicals & Gas Cargo Inspection; Petroleum, Chemicals & Gas Testing: Railway Technology; Engineering, Safety Studies, and knowledge enhancing training programs under TUV India Training Academy.

# **Registered & Head Office Contact :**

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