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Electrical Hazards in Indian Hotels: Industry Insights and Preventive Safety Measures Based on Public-Domain Incident Reports, 1 January–30 August 2026

Hotel Industry Research Paper

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IMPORTANT DATA DISCLAIMER

This document is an indicative industry-improvement study prepared from public-domain sources, including media reports, open sources and publicly accessible social-media information. Sustenergy Foundation does not claim the authenticity, completeness or accuracy of every reported incident. Many electrical incidents, near misses, defects and corrective actions may never be reported publicly. The dataset must NOT be interpreted as an official national database, statistical incidence rate, forensic record or legal finding. It is intended solely to identify learning themes and encourage improvement in electrical safety, operations, maintenance and emergency preparedness.

Abstract

Hotels are complex electrical environments with continuous occupancy, high electrical loads, wet areas, kitchens, HVAC systems, lifts, pumps, emergency power, UPS systems and extensive distribution. This paper analyses 16 publicly reported hotel electrical-hazard incidents compiled for India during 1 January–30 August 2026. The study is descriptive and improvement-oriented, not a statistical estimate of national incidence. Recurring themes include electrical fire and smoke events, short circuits and electrical faults, wiring/cable/panel issues, power-equipment risks, overheating, maintenance deficiencies and protection-system concerns. The paper translates these observations into recommendations centred on annual electrical safety audits, stronger operations and maintenance, strict prohibition of unsafe RCCB/RCD bypassing, periodic thermal imaging, quality-focused project management, competency development and tested emergency preparedness.

Index Terms

Indian hotels; electrical hazards; electrical safety audit; electrical fire; RCCB bypass; thermal imaging; operations and maintenance; project quality; emergency preparedness; hotel engineering; risk management.

I. Introduction

Hotel electrical systems support accommodation, food and beverage operations, laundry, HVAC, water systems, lifts, security, IT, communications, fire and life-safety systems and emergency power. Electrical failure can lead to fire, smoke, evacuation, business interruption, injury or loss of life. This research converts publicly reported incidents into practical engineering lessons without assigning legal liability or definitive causation where public information is incomplete.



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II. Data Sources, Scope and Methodology

Sustenergy Foundation has collected information from Public domain during the past 8 months and prepared an Incident register. The incident register contains 16 records for 1 January–30 August 2026. Sources represented in the workbook include media, open sources and publicly accessible information. The data analysis workflow comprised data review, normalization, descriptive hazard screening and engineering interpretation. Public reporting is uneven and many incidents or near misses may remain unreported; therefore the dataset is incomplete and indicative only.

III. Key Findings

The incident sample is dominated by fire-related events, with short circuit/electrical fault repeatedly identified or suspected in public reporting. Several reports also highlight internal wiring/equipment, AC or kitchen equipment, generator-related risk, smoke spread and the consequences of inadequate life-safety controls. These observations reinforce the need to address electrical risk before ignition and to prevent escalation after ignition.

IV. Incident Data Snapshot

Date	Hotel / Facility	State / UT	Hazard / Incident
2026-01-28	Hotel Pallavi Palace	Delhi	Fire — Fire / electrical
2026-02-06	Under-construction hotel, Vibhuti Khand	Uttar Pradesh	Basement fire — Fire / construction electrical
2026-02-23	Udupi Hotel, Mira Road, Bhayandar	Maharashtra	Hotel fire — Fire / electrical
2026-02-25	Taj Hotel, Tumakuru	Karnataka	Fire — Fire / electrical
2026-03-01	Hotel Sonal Palace, Jodhpur	Rajasthan	Fire — Fire / electrical
2026-04-12	Hotel HM International, Varanasi	Uttar Pradesh	Fire — Fire / electrical
2026-04-16	Newly opened hotel near Sompura Circle, NICE Road, Bengaluru	Karnataka	Fire — Fire / kitchen electrical
2026-05-02	Delight Inn Luxury Rooms, Kondapur, Hyderabad	Telangana	Fire — Fire / electrical
2026-05-08	Hotel/eatery, Nagarabhavi, Bengaluru	Karnataka	Fire — Fire / electrical
2026-06-03	Flourish Stay / Flourish Inn B&B, Malviya Nagar (Hauz Rani), Delhi	Delhi	Fire — Fire / internal electrical
2026-06-06	Hotel Treasure Dine, Ellisbridge, Ahmedabad	Gujarat	Fire — Fire / cause pending
2026-06-15	Hotel near Bellampalli Chowrasta, Mancheria	Telangana	Fire — Fire / electrical equipment
2026-07-10	Highland Hotel, Thampanoor, Thiruvananthapuram	Kerala	Sixth-floor fire — Fire / kitchen electrical
2026-07-17	Hotel Country Yard, Amritsar	Punjab	Generator fire — DG / fire / cause pending
2026-08-17	Hotel Bideshini / Bidishini, Tarapith, Birbhum	West Bengal	Fatal hotel fire — Fire / AC electrical
2026-08-19	Shikha Inn, Free School Street, Kolkata	West Bengal	Fatal hotel fire — Fire / AC / electrical

V. Industry Insights Learned from the Incidents

The incidents provide recurring warning signals for hotel owners and engineering teams. The central lesson is that electrical safety must be treated as a continuous risk-management system rather than a one-time compliance exercise.



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A. Necessity of Yearly Electrical Safety Audits

Conduct a comprehensive independent audit at least annually and after major electrical modifications, incidents or substantial load changes. Cover HT/LT systems, transformers, switchgear, panels, cables, earthing/bonding, protection, RCCB/RCD/RCBO, DG, ATS, UPS, emergency systems, kitchens, wet areas, documentation and housekeeping.

B. Improve Electrical Operations and Maintenance

Preventive maintenance should include measurable inspection and testing, not only cleaning or checklist completion. Rank defects by risk, assign responsible persons, set deadlines and verify closure. Repeated faults and protective-device trips require root-cause investigation.

C. Zero-Tolerance RCCB/RCD Bypassing

RCCBs/RCDs and other protective devices are safety barriers. Bypassing, bridging, locking out or defeating them to stop nuisance tripping can remove protection against shock and leakage-related fire. A trip should initiate safe isolation, diagnosis, correction, suitability review and testing—not bypassing.

D. Periodic Thermal Imaging

Thermography can identify abnormal heating from loose connections, overloaded circuits, phase imbalance, deteriorated contacts and other defects before visible failure. Surveys should be conducted under suitable load by competent personnel, with abnormal findings investigated and closed.

E. Project Management and Quality of Electrical Work

Electrical safety begins during design and construction. Use quality gates for load calculations, protection selection/coordination, earthing design, material inspection, installation quality, termination, insulation/continuity tests, functional tests, commissioning and as-built documentation before energization.

F. Training and Development of O&M Teams

Engineering staff and contractors should have documented competency in electrical isolation, shock prevention, protective devices, testing, thermography awareness, emergency response, fire-system interfaces and incident reporting. Refresher training and drills should be periodic.

G. Emergency Preparedness and Effective Deployment

Emergency plans must be executable, not merely documented. Scenario-based drills should test alarm raising, communication, safe electrical isolation, evacuation, emergency lighting, DG/ATS response, fire-system interfaces, access to electrical rooms, coordination with emergency services and management decisions.



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VI. Recommended Hotel Electrical Safety Framework

1) Annual independent audit; 2) risk-based monthly/quarterly O&M inspections; 3) zero-tolerance protection-bypass policy; 4) periodic thermography; 5) project quality gates; 6) competency matrix and training; 7) scenario-based emergency drills; 8) management audit-to-closure review; 9) contractor and temporary-work controls; 10) current SLDs, load schedules, test certificates and asset histories.

VII. Minimum Annual Audit Checklist

Verify SLDs against installation; inspect HT/LT and transformers; inspect distribution boards; test suitable insulation, continuity, earth and protective devices; verify RCCB/RCD/RCBO operation; inspect cables and terminations; thermographically inspect critical equipment; test DG/ATS/UPS; inspect kitchen and wet areas; eliminate temporary wiring and overloads; verify emergency/life-safety electrical supplies; review maintenance and incident records; verify staff competency; and conduct an emergency drill.

VIII. 12-Month Improvement Roadmap

Months 1–2: baseline and critical-risk identification. Months 2–3: comprehensive audit, testing and thermography. Months 3–5: close critical/high findings and implement anti-bypass controls. Months 4–7: O&M competency and contractor controls. Months 5–8: project quality gates and commissioning controls. Months 7–10: emergency drills and closure. Months 10–12: trend analysis, management review and annual re-audit.

IX. Conclusion

The 16 reported incidents reviewed for 1 January–30 August 2026 are an indicative public-domain sample, not an authoritative national incident database. Nevertheless, they provide useful industry learning. Hotels should establish a continuous electrical-risk programme combining annual independent audits, disciplined O&M, strict protection integrity, thermographic condition monitoring, project quality management, competent personnel and tested emergency preparedness. Recommendations should be validated against applicable statutory requirements, standards, manufacturer instructions and property-specific engineering conditions.

X. Data Disclaimer and Limitations

The information was compiled from public-domain, media, open-source and publicly accessible social-media information. Authenticity or accuracy of every incident cannot be claimed. Many incidents and near misses may not be publicly reported. The dataset is not an official government, regulator, fire-service, police or industry census; it must not be used to assign legal liability or as a forensic record. Incident descriptions may be incomplete and classifications are descriptive.

XI. References

- [1] Central Electricity Authority, Electricity (Safety) Regulations, Government of India, as amended.
- [2] Bureau of Indian Standards, National Building Code of India, relevant electrical and fire/life-safety provisions.
- [3] Bureau of Indian Standards, applicable standards for electrical installations, earthing, wiring and protection.
- [4] IEC 60364 series, Low-voltage electrical installations.
- [5] IEC 61557 series, Electrical safety in low-voltage distribution systems—testing, measuring and monitoring equipment.
- [6] NFPA 70, National Electrical Code, latest applicable edition.



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[7] Sustenergy Foundation Research Cell, Indian Hotel Electrical Hazards Incident Register, 1 January–30 August 2026, supplied research dataset.

Research Team

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Institutional note: This paper is intended for industry awareness, research and continuous improvement. It is not a forensic, legal or regulatory certification.

Appendix A — Source Workbook Structure

- Dashboard: 12 rows; 8 columns.
- Hotel Incident Register: 16 rows; 11 columns.
- Executive Summary: 23 rows; 4 columns.
- State & UT Coverage: 36 rows; 5 columns.
- Day-wise Review: 243 rows; 6 columns.
- Source & Verification: 16 rows; 8 columns.
- Methodology & Caveats: 11 rows; 3 columns.
- Hazard Summary: 9 rows; 4 columns.