



CHITKARA UNIVERSITY,
PUNJAB

SUSTAINABLE INTEGRATED
ENERGY MANAGEMENT
POLICY

CU/PB/INFRA/02/2024
Version 3.0

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SUSTAINABLE INTEGRATED ENERGY MANAGEMENT POLICY OF CHITKARA UNIVERSITY, PUNJAB

Chitkara University, Punjab is committed to responsible energy use and environmental stewardship. We recognize the importance of a sustainable energy future and are dedicated to implementing practices that reduce our environmental impact, optimize energy efficiency, and integrate clean energy technologies. This policy outlines our framework for achieving these goals through a comprehensive and integrated approach to energy management. The policy includes the following three different chapters.

Chapter 1 – Electrical maintenance policy

Chapter 2 - Energy-efficient building renovation and construction policy

Chapter 3 – Policy for Clean energy technology

I. ELECTRICAL MAINTENANCE POLICY OF CHITKARA UNIVERSITY, PUNJAB

- **Title:** Electrical Maintenance Policy
- **Responsible Department or Authority:** Electrical Maintenance Department
- **Version Number:** 3.0

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1. Introduction

This electrical maintenance policy outlines the procedures for ensuring the safe, reliable, and efficient operation of the electrical systems at Chitkara University, Punjab. It establishes a framework for preventive maintenance, corrective actions, and emergency response protocols to minimize electrical hazards and disruptions to campus operations.

2. Policy Statement

Chitkara University is committed to maintaining a safe and functional learning environment. This policy ensures the proactive upkeep of electrical systems, minimizes potential risks, and prioritizes timely responses to electrical issues.

3. Definitions

- **Preventive Maintenance:** Regularly scheduled inspections, cleaning, and adjustments to prevent electrical system failures.
- **Corrective Maintenance:** Repairs necessary to address identified electrical malfunctions or defects.
- **Emergency Repairs:** Immediate actions required to address critical electrical failures posing safety hazards or significant operational disruptions.

4. Policy Details

4.1 Day to day repairs

Based on daily complaints, maintenance sections in all the buildings take care of its day-to-day repairs. University does day- to-day repairs in all the structures under its care. The activities that need to be done daily, repairing defective switches, Lights, Fans, Air-conditioning, and outer lights and so on, are covered by day-to-day service facilities. The goal of this facility is to ensure that various services in the buildings continue to function properly. These services are offered after the maintenance section receives a complaint from the users through online portal.

4.2 Preventive Maintenance:

- The electrical maintenance department will implement a comprehensive preventive maintenance program for all electrical equipment and systems on campus.
- This program will include routine inspections, cleaning, testing, and adjustments as per the manufacturer's recommendations and industry standards.
- Records of all preventive maintenance activities will be maintained for future reference.

4.3 Corrective Maintenance:

- Any electrical malfunction or defect identified by staff, faculty, or building supervisors must be reported promptly to the Electrical maintenance department (Section 6.1).
- The Electrical maintenance department will assess the reported issue and determine the necessary corrective action.
- Complaint head response report will be issued for repairs, and qualified electricians will address the identified problems. (Section 6.2.2).

4.4 Emergency Repairs:

- In case of critical electrical failures posing immediate safety hazards or significant operational disruptions, emergency repairs will be prioritized.
- The Electrical maintenance department will be notified immediately, and qualified personnel will respond to address the situation promptly (Section 6.2.3).

4.5 Record keeping:

- Detailed records of all electrical maintenance activities, including preventive maintenance schedules, complaint head response report, corrective actions, and emergency repairs, will be maintained by the Electrical maintenance department.

5. Responsibilities

5.1 Electrical maintenance department:

- Develop and implement the preventive maintenance program for electrical systems.
- Respond to reported electrical issues and initiate corrective actions.

- Conduct emergency repairs for critical electrical failures.
- Maintain accurate records of all electrical maintenance activities.

5.2 Department Heads:

- Ensure faculty and staff within their departments are aware of this policy and its reporting procedures.
- Forward any reported electrical issues to the electrical maintenance department promptly.

5.3 Faculty, Staff and building supervisor:

- Report any observed electrical malfunctions or potential hazards to the Electrical maintenance department immediately.
- Avoid tampering with electrical equipment or attempting repairs without proper authorization.

6. Procedures

6.1 Reporting electrical Issues:

- Electrical issues can be reported directly to the electrical maintenance department by phone, email, or using the online reporting system (through Chalkpad).

6.2 Complaint head response report:

6.2.1 Preventive Maintenance:

- Complaint head response report for scheduled preventive maintenance tasks will be generated automatically based on the established maintenance schedule.

6.2.2 Corrective Maintenance:

- Upon receiving a report of an electrical issue, the electrical maintenance department will assess the situation and determine the appropriate course of action.
- A complaint head response report will be issued, outlining the identified problem, required repairs, and estimated completion timeframe.

- Repairs will be conducted by qualified electricians as per safety protocols.

6.2.3 Emergency Repairs:

- In case of critical electrical failures, immediate action will be taken to address the situation.
- The electrical maintenance department will be notified, and qualified personnel will be dispatched to the location to assess the situation and initiate repairs.

7. Compliance and Enforcement

- All faculty, staff, and students are expected to comply with this Electrical Maintenance Policy.
- Failure to report electrical issues or tampering with electrical equipment may result in disciplinary action.

8. Exceptions or Waivers

- Requests for exceptions to this policy must be submitted in writing to the Head, Electrical maintenance department.
- Exceptions will only be granted under exceptional circumstances and with proper justification.

9. Review and Revision

- This policy will be reviewed periodically, at least every two years, to ensure its effectiveness and adapt to changing needs.
- Proposed revisions will be reviewed and approved by the Head, Electrical maintenance department.

10. References

- National Electrical Code (NEC)
- Occupational Safety and Health Administration (OSHA) Electrical Safety-Related Work Practices

11. Contact Information

Head, Electrical maintenance department, Chitkara University, Rajpura

II. ENERGY-EFFICIENT RENOVATION AND BUILDING POLICY OF CHITKARA UNIVERSITY, PUNJAB

- Title: Energy-Efficient Renovation and Building Policy
- Responsible Department or Authority: Electrical maintenance department and Sustainable Environment Management Committee.
- Version Number: 3.0

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1. Introduction

Chitkara University is committed to reducing its environmental impact and promoting energy conservation. This policy outlines the university's approach to incorporating energy-efficient practices in the existing building renovations new building construction.

2. Policy Statement

Chitkara University strives to design, construct, and maintain energy-efficient buildings that minimize operational energy consumption and promote a sustainable campus environment. This policy ensures that energy efficiency is a primary consideration throughout the building lifecycle, from planning and design to construction, operation, and renovation.

3. Definitions

- 3.1 **Energy Efficiency:** Practices that reduce energy consumption without compromising functionality or comfort.
- 3.2 **New Building Construction:** The process of constructing a new building on the university campus.
- 3.3 **Existing Building Renovation:** The process of modifying or upgrading an existing building on campus.

4. Policy Details

4.1 New Building Construction:

- a. All new building construction projects will comply with applicable energy efficiency codes and standards.
- b. The university will prioritize sustainable design principles such as passive solar design, natural ventilation, and energy-efficient building materials.
- c. New buildings will be designed to achieve energy performance targets established by the Office of Infrastructure Development.

4.2 Existing Building Renovations:

- a. Electrical maintenance department and infrastructure department planning renovations will conduct energy audits to identify opportunities for improvement.

- b. Renovation projects will incorporate energy-efficient measures whenever feasible, considering factors like cost-effectiveness and return on investment.
- c. The Electrical maintenance department will provide guidance and technical assistance to departments undertaking renovations.

4.3 Energy Efficiency Measures:

- a. Building envelope improvements: enhancing insulation, reducing air leakage.
- b. Upgrading lighting systems with energy-efficient LEDs.
- c. Installing high-efficiency heating, ventilation, and air conditioning systems, wherever feasible.
- d. Implementing smart building controls and automation systems.
- e. Utilizing renewable energy sources where applicable.

5. Responsibilities

- 5.1. **Electrical maintenance department:** Oversees the implementation of this policy, including project planning, construction management, and maintenance of energy-efficient systems.
- 5.2. **Sustainable Environment Management Committee:** Provides technical expertise, conducts energy audits, and sets energy performance targets for new and existing buildings.
- 5.3. **University Departments:** Collaborate with the Electrical department and the Sustainable Environment Management Committee to incorporate energy-efficient features during renovations planned for their departments.

6. Procedures

6.1. Project Planning and Design:

- a. Project proposals for new construction or renovations will include an energy efficiency plan outlining proposed measures and anticipated energy savings.

6.2. Construction and Procurement:

- b. During construction, contractors will be required to adhere to energy-efficient building practices outlined in the project plans.
- c. The university will prioritize the procurement of energy-efficient equipment and materials.

6.3. Monitoring and Evaluation:

- d. The Electrical maintenance department will monitor the energy consumption of new and renovated buildings.

- e. The Sustainable Environment Management Committee will analyze the data to evaluate the effectiveness of implemented measures and identify areas for further improvement.

7. Compliance and Enforcement

Non-compliance with this policy may result in the following:

Request for revision of project plans to incorporate energy-efficient measures.

Delay of project approval until compliance is achieved.

8. Exceptions or Waivers

Exceptions to this policy may be granted on a case-by-case basis by the Head, Electrical management department in consultation with the Sustainable Environment Management Committee. Requests for exceptions must be submitted in writing and clearly outline the justification for exemption.

9. Review and Revision

This policy will be reviewed every two years or as needed to ensure its effectiveness and alignment with evolving regulations and best practices. The Sustainable Environment Management Committee will be responsible for initiating the review process and proposing revisions.

10. Contact Information

For questions or concerns regarding this policy, please contact:

Head, Electrical Maintenance department, Chitkara University, Punjab

Chairperson, Sustainable Environment Management Committee, Chitkara University, Punjab

III. POLICY FOR CLEAN ENERGY TECHNOLOGY OF CHITKARA UNIVERSITY, PUNJAB

- Title: Policy for Clean Energy Technology
- Responsible Department or Authority: Electrical Department
- Version Number: 3.0

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1. Introduction

Chitkara University is committed to environmental sustainability and reducing its reliance on fossil fuels. This policy outlines the framework for evaluating, implementing, and integrating clean energy technologies into the university's operations.

2. Policy Statement

Chitkara University actively seeks to adopt and promote clean energy technologies that contribute to a sustainable campus environment. This policy encourages innovation and collaboration to explore and implement renewable energy sources, energy-efficient solutions, and other clean technology advancements.

3. Definitions

3.1. **Clean Energy Technology:** Technologies that generate, distribute, or utilize energy with minimal environmental impact, such as solar power, wind power, geothermal energy, and energy-efficient systems.

3.2. **Pilot Project:** A small-scale implementation of a new technology to assess its feasibility, performance, and potential for wider adoption.

4. Policy Details

4.1. Clean Energy Technology Evaluation:

- The Electrical department, Chitkara University will identify and evaluate potential clean energy technologies based on factors including:
 - Environmental benefits (reduction in greenhouse gas emissions)
 - Cost-effectiveness and return on investment
 - Applicability to the university's needs and infrastructure
 - Alignment with advancements in clean technology research

4.2. Pilot Projects and Implementation:

- The university will prioritize implementing promising clean energy technologies through pilot projects.
- Pilot projects will allow for data collection, performance evaluation, and refinement of implementation strategies before large-scale adoption.
- Based on successful pilot projects, the university may consider integrating the technology into its existing infrastructure.

4.3. Research and Development Collaboration:

- The university will encourage collaboration with research institutions, private companies, and clean energy experts to explore and develop innovative clean energy solutions.
- This may involve joint research projects, technology demonstrations, and knowledge exchange initiatives.

4.4. Integration with Existing Infrastructure:

- When implementing clean energy technologies, the university will consider compatibility with existing infrastructure and strive for seamless integration to minimize disruption and ensure efficient overall operations.

5. Responsibilities

5.1. **Electrical Department:** Leads the evaluation of clean energy technologies, manages pilot projects, and promotes collaboration with external stakeholders.

5.2. **Chitkara University Research & Innovation Network:** Provides technical expertise in evaluating and implementing clean energy technologies, and fosters research collaborations.

5.3. **University Departments:** Participate in the evaluation process by providing feedback on potential applications of clean energy technologies within their departments.

6. Procedures

6.1. Technology Proposal Submission:

- Individuals or departments may submit proposals/suggestions for clean energy technologies to the Electrical department.
- Proposals should outline the technology, its potential benefits, and a proposed implementation plan.

6.2. Evaluation and Approval Process:

- The Electrical department will evaluate technology proposals based on the criteria outlined in Section 4.1.
- Approved proposals may proceed to a pilot project stage with further planning and resource allocation.

6.3. Pilot Project Implementation:

- The Electrical department will oversee the implementation of pilot projects, including data collection, performance monitoring, and evaluation.
- Based on the pilot project results, a decision will be made on wider implementation or further refinement of the technology.

7. Compliance and Enforcement

This policy is a framework for promoting clean energy initiatives. There are no specific enforcement mechanisms.

8. Exceptions or Waivers

Deviations from this policy may be considered on a case-by-case.

9. Review and Revision

This policy will be reviewed annually to ensure its effectiveness and relevance. Proposed revisions to the policy may be submitted to Office of Registrar for consideration.

10. Contact Information

For questions or inquiries regarding this policy, please contact:

Head, Electrical Maintenance Department, Chitkara University, Punjab