



KC Group of Research and Professional Institutes, Pandoga

Department of Electrical Engineering Industrial Visit Report

Date of Visit: 14th February 2025

Location: 220/66 KV Substation, Rakkar Colony, Una, Himachal Pradesh

GPS Coordinates: Lat 31.463122° N, Long 76.296852° E

Objective of Visit:

The industrial visit was organized to give students a practical exposure to electrical equipment, substation layout, and transformer systems. The aim was to bridge the gap between theoretical knowledge and real-world applications in the power sector.

Participants:

- B.Tech Electrical Engineering (3rd & 4th Year Students)
- Faculty Members: Mr. Deepak Kumar (Assistant Professor) and support staff

Activities Conducted:

1. Substation Overview:

- Students were given a walkthrough of the 220/66 KV switchyard.
- Engineers explained various components like CTs, PTs, circuit breakers, bus bars, and isolators.
- Emphasis was placed on safety measures, SCADA integration, and energy transmission.

2. Transformer Section:

- Practical exposure to the working and maintenance of transformers.
- A detailed session on transformer core, windings, tap changers, and cooling systems was held.
- Students interacted with field engineers about troubleshooting techniques.

3. Workshop Visit:

- A visit to the workshop where disassembled transformers were showcased.
- Students closely observed winding processes, insulation, and internal parts.

Learning Outcomes:

- Gained insight into live substation operations and protection systems.
- Understood the working of power transformers in real-time.
- Familiarity with industry-grade electrical equipment and layout.
- Awareness of practical safety norms and fault-handling procedures.

Geotagged images:





Conclusion:

The industrial visit provided valuable hands-on experience and improved technical understanding among students. The interaction with industry professionals also motivated them to prepare better for real-world challenges in the electrical engineering field.

Prepared by:

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