

Summer Internship (I) Summary

Title: Power Line Carrier Communication(PLCC)

Organization: Chhattisgarh State Power Transmission Company Limited (CSPTCL), Raipur.

I completed a summer internship at Power Line Carrier Communication(PLCC) in Chhattisgarh State Power Transmission Company Limited (CSPTCL), Raipur.

Objective: Power Line Carrier Communication (PLCC) system is to transmit voice and data signals over high-voltage power lines.

Work Highlights:

- **Assisted with maintenance and operation of PLCC equipment:** This included tasks like routine checks of indoor and outdoor equipment such as Line Traps, Coupling Capacitors, and Carrier Terminals to ensure reliable communication.
- **Participated in testing and troubleshooting procedures:** I learned to identify and resolve issues with signal attenuation, noise interference, and equipment faults, which are crucial for maintaining the integrity of the communication link.**Skills applied/developed:** [Mention any specific skills you used or gained, such as understanding safety protocols, working with specific software, or following industry standards.]

Key Learnings: I learned that PLCC systems are critical for reliable communication and protection in electrical substations by utilizing existing power lines to transmit high-frequency signals.

Outcome: Gaining a practical understanding of PLCC systems reinforced the critical role of reliable communication in ensuring the efficient and safe operation of a power grid.