

# CHAYAN PARASHAR

Electrical Engineer | Power Transformer & HV Substation Operations  
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## CAREER OBJECTIVE

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Electrical Engineering graduate with one year of field apprenticeship at Power Grid Corporation of India Limited (PGCIL) in EHV substation and transformer operations. Hands-on exposure to power transformer maintenance, protection systems, oil quality testing, and switchyard safety in live 220/400 kV environments. Seeking a technical role at Waaree Transpower, Alwar, to contribute to transformer manufacturing, quality testing, and commissioning operations — ready to deliver from day one.

## WORK EXPERIENCE

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### Apprentice Engineer — Transformer & Substation Operations

Power Grid Corporation of India Limited (PGCIL) | Manesar, Gurgaon Oct 2024 – Sep 2025

#### Transformer Maintenance & Inspection

- Assisted in preventive maintenance of power transformers (220/400 kV class) — covering bushings, conservator tanks, buchholz relays, radiator cooling banks, and OLTC/tap changers.
- Participated in insulation resistance (IR), polarisation index (PI), and winding resistance measurements during scheduled transformer shutdowns.
- Supported transformer oil sampling and testing: dielectric strength, moisture content, breakdown voltage, and dissolved gas analysis (DGA) to assess insulation health per IEC 60296 / IS 335.
- Studied transformer insulation aging (oil-paper system) under PARTeC training, building knowledge of condition monitoring and remaining life assessment.

#### HV Switchyard & Equipment Operations

- Observed and assisted operations in EHV substations (220/400 kV) — switching sequences, bus bar maintenance, and circuit breaker and isolator operations.
- Supported inspection and functional testing of HV equipment: current transformers (CTs), potential transformers (PTs), surge arrestors, and earthing systems.
- Assisted installation of earthing system (GI plate pits, copper plate pits, chemical earth pits) per IS safety and fault protection standards.

#### Protection, Testing & Safety

- Gained working knowledge of transformer protection schemes: differential protection, buchholz relay, overcurrent, and earth fault relays.
- Performed GC-MS headspace analysis and UV-Vis spectrophotometry on transformer oil samples for volatile compound detection and purity assessment.
- Worked in electronic diagnostic lab: fault analysis, calibration, and testing of protection relays and HV measurement instruments.
- Followed permit-to-work (PTW), lockout/tagout (LOTO), and electrical safety procedures in live high-voltage field environments.
- Prepared test records, inspection logs, and technical reports using SAP — maintaining asset documentation for 286 substations.

## TECHNICAL SKILLS

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<b>Transformers</b>	Preventive Maintenance, Insulation Testing (IR/PI), Oil Testing (DGA, BDV), Buchholz Relay, OLTC, Cooling Systems
<b>HV Equipment</b>	Switchyard Operations, CTs/PTs, Circuit Breakers, Isolators, Surge Arrestors, Earthing Systems
<b>Protection</b>	Differential, Overcurrent & Earth Fault Protection, Relay Testing & Calibration

<b>Lab Testing</b>	GC-MS (Headspace), UV-Vis Spectrophotometry, Winding Resistance, Insulation Resistance
<b>Standards</b>	IEC 60076, IEC 60296, IS 335, IS 3043, IEC 61850
<b>Software &amp; Tools</b>	SAP, MS Excel (Advanced), AutoCAD, Python, SCADA (iFIX Basics)
<b>Safety</b>	PTW, LOTO, HV Safety Procedures, IS Earthing & Protection Compliance

## EDUCATION

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**B.Tech — Electrical Engineering** | Bikaner Technical University | 2024

**Class XII — Science** | Central Academy | 2020

**Class X** | Step By Step Sr. Sec. School | 2018

## CERTIFICATIONS & TRAINING

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- Apprenticeship — Transformer Maintenance, Substation Operations & SCADA | Power Grid Corporation of India Limited (PGCIL), Manesar, 2024–25
- PARTeC Programme — Transformer Insulation Aging, Oil Analysis & Condition Monitoring | PGCIL, 2024–25

## KEY STRENGTHS

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Live HV substation exposure • Transformer field maintenance experience • Strong safety culture (PTW / LOTO)  
• Oil quality testing & DGA knowledge • Local candidate (Alwar) • Available immediately

*References available on request • Open to field, shop floor & commissioning roles*