

Career Abstract

Senior Power Systems & Data Center Commissioning Engineer with ~10 years of experience in design, testing, and commissioning of mission-critical electrical infrastructure. Holds a Master's in Power Systems and extensive hands-on expertise across power generation, transmission, distribution, and data center systems.

Proficient in L1–L4 commissioning, including UPS, DG, LV/MV switchgear, transformers, and protection & control systems, with experience supporting As-Built Turnover validations and IST. Skilled in functional testing, black building tests, and system integration (BMS/EPMS/DCIM).

Strong knowledge of IEC, IEEE, ASHRAE, NFPA, and international commissioning standards, combined with experience in relay configuration, SCADA systems, and advanced communication protocols (IEC 61850, DNP3, Modbus). Adept at leading cross-functional teams, preparing commissioning scripts (L2/L3/L4), and ensuring zero-defect project handovers.

Passionate about bridging power systems theory with real-world mission-critical infrastructure, delivering high uptime, operational reliability, and compliance with industry standards.

Core Competencies

Power Systems Expertise

- Power generation, transmission, and distribution systems
- MV/LV switchgear, transformers, bus ducts, and protection systems
- Power system analysis, load flow, fault calculations, and relay coordination

Data Center & Critical Power

- L1–L4 commissioning of UPS, DG, STS, ATS systems
- Black building testing, failover simulations, and integrated system testing (IST)
- As-built validation, L5 handover support, and punch closure management

Controls & Automation

- BMS, EPMS, DCIM integration
- SCADA system commissioning and monitoring
- IED configuration & testing (ABB, Siemens, SEL, GE, Schneider)
- Communication protocols: IEC 61850 (GOOSE), Modbus, DNP3

Project & Compliance Management

- Commissioning script preparation (L1/L2/L3/L4)
- QA/QC, method statements, test packs, and progress reporting
- Knowledge of IEC, IEEE, ASHRAE, NFPA, and CEIG standards
- Team coordination, resource management, and zero-defect handovers

Professional Experience

Senior Commissioning Engineer – Commtech Asia | Jan 2025 – Present

Focus: Data Center & Critical Power Commissioning

- Lead L1–L3 commissioning for mission-critical data center systems, supporting L4 IST and L5 turnover validations.
- Prepare, review, and execute L2/L3/L4 commissioning scripts, ensuring zero-defect handover.
- Commission and validate UPS, DG, LV/MV switchgear, transformers, bus ducts, and auxiliary systems.
- Conduct functional performance testing, black building tests, and failover simulations.
- Integrate and validate BMS/EPMS/DCIM systems, including alarm mapping, trending, and interlocks.
- Collaborate with clients, consultants, and vendors for site walk downs, punch closure, and final documentation.
- Ensure compliance with IEC, IEEE, ASHRAE, NFPA, and client standards.

Key Achievements:

- Successfully executed multiple L3 commissioning projects ahead of schedule.
- Reduced punch closure time by 20% through optimized commissioning workflows.

Assistant Commissioning Manager – AlphaTEC | Mar 2022 – Jan 2025

Focus: Electrical Projects & Field Commissioning

- Assisted Project Manager in planning, monitoring, and executing commissioning of MV/LV systems.
- Conducted FAT, SAT, and site acceptance testing of transformers, switchgear, and protection systems.
- Validated SLDs, as-built drawings, BOQs, and GADs for compliance with client specifications.
- Led QA/QC initiatives to ensure adherence to IEC, IS, and CEIG standards.
- Performed retrofit and upgrade activities on circuit breakers and numerical protection relays.
- Prepared daily progress reports, MOMs, and test certificates for stakeholders.

Amareesh A (Senior Commissioning Engineer)

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Key Achievements:

- Streamlined commissioning documentation, enabling faster client approvals.
- Mentored junior engineers, improving team efficiency and testing quality.

Commissioning Engineer – MSN Engineering | Apr 2018 – Mar 2022

Focus: Power Systems & Industrial Projects

- Installed, tested, and commissioned transformers (up to 220kV, 100MVA), MV/LV switchgear, and protection panels.
- Performed high voltage testing for cables and breakers; conducted SATs for solar power plants (5 - 200MW).
- Provided commissioning support for power generating stations, transmission lines, and distribution networks.
- Configured and tested IEDs and numerical relays (ABB, Siemens, SEL, GE).
- Executed annual maintenance and preventive testing for power plants, data centers, hospitals, and industrial facilities.

Key Achievements:

- Successfully commissioned multiple large-scale power & solar projects, ensuring compliance and reliability.
- Improved system testing efficiency by developing checklists and procedures for recurring tasks.

Engineer Intern – i-Max IAT | Apr 2016 – Mar 2018

Focus: Electrical Design & Installation

- Performed engineering calculations, sizing, and selection of switchgear, transformers, panels, and protection systems.
- Drafted, reviewed, and validated 2D electrical drawings and SLDs.
- Assisted in installation of LV/MV switchgear, SCADA/PLC control centers, UPS, DGs, and battery systems.
- Supported commissioning and testing of MCC/PCC, transformer control panels, and relay panels.

Key Achievements:

- Gained hands-on experience with installation, testing, and validation of power systems across industrial and commercial projects.

Education

Masters in Power Systems at Annamalai University | *OGPA 7.29 (Mar 2014 – Apr 2016)*

Coursework: *Generation, Transmission, Distribution, Operation & Control, Stability, Power plant engineering, Neural networks, Power electronics, Grid stability, Harmonic studies, Arc-flash analysis, Standards, Certifications, Power system reliability, HVDC and FACTS*

Thesis: Power systems Transmission Reliability Margin enhancement through advanced neural networks (110 kV transmission line system)

Technical Skills & Tools

IED Management / Software MiCom S1 Agile, Easergy Studio, Vampset (VAMP), SFT2841 (SPAM), PCM 600 (ABB), Enervista (GE)

Numerical Relays Configured ABB, Siemens, GE, Alstom, MiCOM, Schneider Electric, SEL, L&T, Ashida, Voltech, ERL, JVS, CG, C&S, Acrel, English Electric, Areva

Installed Switchgear & Systems Feeder Pillars, ACDB/DCDB, SCBs/SMBs, PCC, MCC, APFC panels, DG AMF panel, DG Sync panel, Control & Relay panels, MIMIC & Control desks, Compact Substations, LASCVT & NGR panels, LBS panels, Metering Cubicles, MV Capacitor Banks, PLC/SCADA panels, Outdoor/Indoor ICOG & RMUs, UPM, PDU, EFU, MCB, ADP, CC/CP, ATS, TCP, NLP/ELP, Outdoor & Indoor Lineup Panels

Electrical Design & Simulation 2D CAD, EPLAN Electric P8, ETAP, PVSYST, PSS®E, MiPower

Project / Productivity Tools MS Office, MS Projects, MS Planner, Primavera P6, SAP SCM, Oracle Cloud SCM, Nexus, Procore, Power BI

Certifications Certified Automation Engineer (Process & Substation), Data Center Design & Consultant (DCDC – In Progress)

Declaration: *I hereby declare that all the information given above is true and correct to the best of my knowledge.*