Job Description – Solar Technician

Location: Guwahati / Northeast India

ABOUT 7HILLS NEXGRAM LIMITED

7Hills Nexgram Limited (7HNG) is a multi-platform company committed to strengthening the First Mile ecosystem across North East India. Through technology, healthcare, education, renewable energy, market intelligence, logistics solutions, entrepreneurship development, and infrastructure initiatives, we create opportunities that connect communities to sustainable growth.

1st Power, a renewable energy vertical of 7HNG, focuses on delivering reliable solar energy solutions across North East India, supported by a district-level network for installation, technical support, after-sales service, and system maintenance.

As part of our expanding renewable energy operations, we are looking for a hands-on and safety-conscious Solar Technician to support the installation, wiring, testing, commissioning, maintenance, and field service of On-Grid, Off-Grid, and Hybrid Solar PV systems.

ROLE OVERVIEW

The Solar Technician will be responsible for the practical execution of solar installation and field technical activities under the guidance of the technical team. The role includes solar module installation, mounting structure work, DC/AC wiring, inverter and battery installation, basic testing, commissioning support, troubleshooting, maintenance, and site documentation.

The candidate should have strong hands-on electrical skills, understand basic solar PV systems, follow installation drawings and technical instructions, and maintain high standards of workmanship and safety.

The role will involve regular field deployment and coordination with Solar Technical Engineers, 1st Power partners, customers, vendors, and district service teams.

KEY RESPONSIBILITIES

Solar Installation & Site Work

- Install solar PV modules, mounting structures, rails, clamps, fasteners, and associated mounting hardware.
- Assist in site preparation, module layout, structure alignment, leveling, and safe material handling.
- Carry out PV module installation and ensure proper mechanical fixing and cable management.
- Follow approved installation drawings, layouts, technical instructions, and site-specific safety procedures.
- Maintain proper housekeeping and safe working conditions at installation sites.

DC & AC Wiring

- Carry out DC wiring between PV modules, strings, DCDBs, isolators, and inverters/PCUs.
- Carry out AC wiring between inverters, ACDBs, distribution boards, and designated connection points.
- Perform MC4 connector assembly, crimping, cable cutting, dressing, tagging, and termination.
- Ensure correct cable polarity, routing, insulation, and termination as per technical instructions.
- Assist with installation of MCBs, MCCBs, fuses, SPDs, isolators, earthing conductors, and other protection equipment.

KEY RESPONSIBILITIES

Inverter & Battery Installation

- Install and connect on-grid inverters, off-grid PCUs, and hybrid inverters under technical supervision.
- Assist in installation and connection of lead-acid and lithium battery systems.
- Carry out battery-bank wiring, series/parallel connections, cable termination, and polarity checks.
- Ensure inverter and battery installations are mechanically secure, properly ventilated, and accessible for maintenance.
- Follow manufacturer instructions and technical team's configuration requirements.

Testing & Commissioning Support

- Conduct basic pre-commissioning checks of installed solar systems.
- Check DC string polarity, voltage, continuity, cable connections, and visible installation defects.
- Assist with AC voltage, current, phase, earth continuity, and protection checks as instructed.
- Use basic electrical testing instruments such as multimeter and clamp meter correctly and safely.
- Support the Solar Technical Engineer during system commissioning and performance verification.
- Record test readings and site observations accurately.

Troubleshooting & Field Service

- Identify and report basic faults in solar modules, cables, connectors, batteries, inverters, and protection devices.
- Assist in diagnosing loose connections, damaged cables, connector failures, tripping, low generation, and other field-level issues.
- Carry out approved corrective work under the direction of the technical team.
- Support breakdown maintenance and emergency service visits.
- Escalate technical faults that require engineering-level diagnosis or configuration.

Operations & Maintenance

- Carry out routine inspection and maintenance of installed solar systems.
- Clean and inspect PV modules and check for visible damage, shading, loose connections, and cable issues.
- Inspect mounting structures, cable routes, connectors, batteries, inverter surroundings, and electrical panels.
- Assist with preventive maintenance and replacement of faulty components.
- Maintain tools, equipment, spare materials, and installation accessories in proper condition.

Site Documentation & Reporting

- Capture installation and service photographs as required.
- Complete installation checklists, service reports, testing records, and material usage records.
- Report daily work progress, site issues, required materials, and pending activities to the reporting technical team.
- Maintain accurate records of replaced components and field observations.

ELIGIBILITY

- ITI / Diploma in Electrical, Electrician, Electronics, Renewable Energy, or a relevant technical trade.
- 1–3 years of experience in solar installation, electrical works, electrical contracting, or related field operations preferred.
- Basic practical knowledge of On-Grid, Off-Grid, and Hybrid Solar PV systems.
- Hands-on experience in electrical wiring, cable termination, earthing, and installation work.
- Basic knowledge of solar modules, inverters, batteries, ACDB/DCDB, MCB/MCCB, SPD, isolators, and electrical protection.
- Ability to use basic electrical tools and testing instruments such as multimeter and clamp meter.
- Ability to read basic electrical/solar wiring diagrams and follow technical drawings or instructions.
- Willingness to work at heights and travel to project sites across North East India.
- Basic communication skills in English/Hindi; knowledge of a local North East Indian language will be an advantage.

PREFERRED QUALITIES

- Strong hands-on approach and practical electrical skills.
- Good understanding of solar installation practices.
- Attention to detail in wiring, connections, cable dressing, and equipment installation.
- Safety-conscious and disciplined in field operations.
- Good troubleshooting attitude and willingness to learn.
- Ability to work effectively under the supervision of technical engineers and site supervisors.
- Physically fit for field installation, rooftop work, material handling, and travel.
- Reliable, punctual, team-oriented, and responsible towards assigned site activities.
- Willingness to travel extensively across North East India for installation, service, maintenance, and field support.

CORE TECHNICAL SKILLS

- Solar module and mounting structure installation
- DC and AC solar wiring
- MC4 connector assembly and crimping
- Inverter and PCU installation support
- Battery installation and battery-bank wiring
- Earthing and electrical protection installation
- Basic electrical testing and measurement
- Solar system commissioning support
- Solar O&M and corrective maintenance
- Field troubleshooting and technical reporting

KEY PERFORMANCE INDICATORS

- Installation quality and workmanship
- Completion of assigned site activities within timelines
- First-time installation acceptance
- Testing and checklist compliance
- Safety compliance
- Service response and resolution support
- Material and tool handling discipline
- Accuracy of field reports and documentation

HOW TO APPLY

Send your resume with the subject line:

“Application – Solar Technician – [Your Name]”

careers@7hng.in

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