



**National Power Training Institute
Power Systems Training Institute
(Ministry of Power, Government of India)
(An ISO 9001: 2015 & ISO 14001:2015 Organization)
Bangalore - 560070**



02 Days Training Program for Trainers on Grid Connected Rooftop Solar System

07th and 08th October, 2024; Time: 10.00 Hrs to 17.00 Hrs

Venue: NPTI (PSTI), Bangalore

PM Surya Ghar Muft Bijli Yojana

Objectives:

1. **Free Electricity:** Eligible households can receive up to 300 units of free electricity per month.
2. **Sustainable Development:** The scheme encourages the use of solar energy, which helps reduce the carbon footprint and contributes to a more sustainable energy mix.
3. **Economic Empowerment:** Lower electricity bills can lead to mor disposable income for families.
4. **Employment Generation:** The installation and maintenance of solar panels can create jobs.
5. **Capacity Building:** The scheme aims to create more than 3 lakh skilled people, including at least 1,00,000 solar PV technicians.
6. **Government cost savings:** The scheme is expected to save the government an estimated Rs. 75,000 crore annually in electricity costs.
7. **Increased use of renewable energy:** The scheme encourage the use of renewable energy sources

Whom to be trained?

The training program is to be implemented for DISCOMs (Govt. owned as well as Private) officials at the level of Lineman, Supervisor, JE, AE, XEN/EE and above. These officials can be permanent or contractual staff of DISCOM. The institute shall take declaration in the nomination letter issued by the DISCOM stating "The nominated participants are permanent/contractual employees of this organization".

Mode of Program: Classroom (non-residential) – Onsite DISCOM location

Please fill the registration form to complete registration:

<https://forms.gle/c12oUfeMozhgewbh6>

Course Content of ToT

Overview of National Portal and Registration Procedure, Customer eligibility criteria, Scheme benefits, Online application process

Overview of Rooftop Solar PV : Potential of RTS in India, State wise breakup, About Grid Connected SPVRT, Components, Area requirement, Shadow free calculation, Daily energy generation calculation, advantages of RTS, factors affecting RTS generation. Stages of installation

RTS System design: Technology selection, cost of system and sizing, site survey, Cell parameters, BoQ, Single line diagram and procedure to submit the data to DISCOM.

Grid connectivity and inspection procedure: Interconnection technical specifications and requirements (as per IEEE 1574 & CEA regulation 2013), interconnection parameter checklist, component inspection checklist, Grid connection functional checklist, commissioning tests, standards for design of RTS, challenges in integration of RTS with utility during planning, implementation and operational stage. Connected DT capacity analysis for Rooftop solar connection

Safety standards: Importance of earthing, earthing standards, types of earthing, Anti islanding grid protection, need of SPVRT and lightning arresters as per safety standards, Quality Management and Monitoring, Connections with Net metering connections, Smart meter and Generation/Utility meters. / Video Lecture Demonstrations

Administrative procedure: Roof Top policy, regulation, Calculation of Central Finance Assistance (CFA)/Subsidy for a Customer, Co-ordination with different government like municipalities, Signing of Agreement with DISCOMs, Checking of Safety Certificate and Work Completion Certificate, Consumer Grievances and Redressal.

Net metering: Net meter connection application, Connection Site Inspection & Verification report, Consumer Declaration Certificate, Vendor agreement with all related annexures, Safety checks, joint inspection report, Sanction of connection order, Billing and Documentations, periodic check for healthiness of the system, Indicative reward system for roof top solar promotion.

Inspection Procedure: Inspection and Testing of PV Modules, Structure, Inverter. Best Operation & Maintenance of RTS Systems & Troubleshooting. Issues and challenges during RTS installation, way-out to address these challenges through technical institutional capacity building.

Course Fee: Nil

Certificates will be issued for all Trainers after submitting Pre and Post assessment.

Contact Details

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