



Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)

Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. TS, India



POWER & ENERGY DIVISION

Classroom Continuing Professional Development Programme on

Rooftop Solar PV Grid - Design, Erection, Commissioning & Maintenance

03 - 06 October, 2023

at ESCI, Hyderabad



(An IMS Certified (ISO 9001:2015 QMS, ISO 14000:2015 Env'tl. Mgmt., ISO 45001:2018 (OH&SM), ISO 50001:2018 EnM). AICTE & CEA Recognized Institution)

Centre for Promotion of Professional Excellence

INTRODUCTION

India is endowed with vast solar energy potential. At the end of February 2022, the country's installed Solar Power Capacity was 39 GW. National Solar Mission (NSM) was launched on 11th January, 2010. NSM's objective is to establish India as a Global leader in solar energy by creating the policy conditions for solar technology diffusion across the country as quickly as possible. The mission targets installing 100 GW Grid – connected Solar Power Plants (including 40 GW from rooftop solar) by the year 2022. India has established nearly 42 solar parks to make land available to the promoters of solar plants.

Rooftop solar power accounts for 2.1 GW, of which 70% is industrial or commercial. In addition to its large-scale grid-connected solar photovoltaic (PV) initiative, India is developing off-grid solar power for local energy needs.

The International Solar Alliance (ISA), proposed by India as a founder member, is headquartered in India. India has also put forward the concept of "One Sun One World one Grid" and "World Solar Bank" to harness abundant solar power on global scale.

India is one of the countries with large production of energy from renewable sources. As on 31st March 2022, 39% of India's installed electricity generation capacity is from renewable sources (156 GW out of 399 GW).

In order to achieve the above target, Government of India has launched various schemes to encourage generation of solar power in the country like Solar Park Scheme, Viability Gap Funding (VGF) Schemes, Central Public Sector Undertaking (CPSU) Scheme, Defence Scheme, Canal bank & Canal top Scheme, Bundling Scheme, Grid Connected Solar Rooftop Scheme etc.

OBJECTIVE

The objectives of this skill development program are to provide skilled manpower and groom the professionals and technocrats for:

- Understanding of Basic concepts of Grid-connected rooftop solar plant
- Efficient working at every stage of safety, designing, installation, pre- and post-commissioning, O&M, and Understanding the National level policies of Rooftop SPV plants.

COURSE COVERAGE

- Solar photovoltaic modules, its characteristic curves and power generation.
- Inverter and its operation and suitability for grid connected power systems
- Module Mounting Structure, Protection, Safety & Earthing of systems
- Solar battery and its characteristics
- Standards of solar panel and battery
- 1 MW Power Plant Design and Solar Resources availability
- Net metering guidelines (Net metering and Gross metering)
- Operation & Maintenance of Rooftop Solar Plant
- Power Plants Integration issues : FACT devices, spinning reserves.

METHODOLOGY

The programme will be conducted in an interactive environment providing greater scope for discussions. Emphasis will be on a highly participative style of learning. The classrooms are provided with latest audio – visual teaching aids. The ambience in the campus and classrooms facilitate in effective learning by participants.

FACULTY

Apart from Core Internal Faculty, Consulting Firms, Government Organizations, Manufacturing, Academic and Research Institutions etc. will share the sessions.

TARGET PARTICIPANTS

With Target audience as Graduate Engineers with basic knowledge of Electrical Concepts; Solar Entrepreneurs; College / University Professors; Public Sector Undertaking Officials; EPC contractors; MNRE channel partners; Senior Energy Department Officials of Govt. of India and Officers from State Nodal Agencies etc.

PROGRAMME VENUE, DATES & TIMINGS

Engineering Staff College of India (ESCI) Campus, Old Bombay Road, Gachi Bowli, Hyderabad - 500032, Telangana, India.

DATES

03 - 06 October, 2023

TIMINGS

On the first day registration will commence at 0900 Hrs. On all other days the programme timings will be from 0945 to 1715 hrs with breaks in between for tea and lunch.

ACCOMMODATION

Participants will be accommodated in our Executive Hostel located within ESCI Campus. The accommodation will be on twin sharing basis.

COURSE DIRECTOR

Dr. V. Vidyasagar

Sr. Faculty - Power & Energy Division, ESCI
(Mob: 9421801203)

COURSE FEE

Residential Fee is Rs.22,000/- per participant. Residential fee includes Course Material, Course Kit, and Twin-sharing / Single AC accommodation as per availability, Breakfast, Lunch, Dinner, Tea / Coffee and Snacks.

DISCOUNTS

Non-Residential Fee: 10% discount on course fee is allowed for non-residential participants.

Group Discount: 10% discount for three or more participants if sponsored by the same organization.

(All discounts are applicable only if fee is received at ESCI a week before the commencement of the programme)

GST @18% (as applicable) is to be paid extra over and above the training fee.
GST No. 36AAATT3439Q1ZV, PAN Card No. AAATT3439Q.

The course fee is to be paid in favour of “**IE (I) – ENGINEERING STAFF COLLEGE OF INDIA**” in the form of demand draft payable at Hyderabad.

Alternatively the payment may be made by **Electronic Fund Transfer (EFT) to ESCI – Current A/c No. 33705165550** with The SBI, Manikonda Branch, Gachi Bowli, Hyderabad – 500 032 by **NEFT / RTGS / IFSC Code No: SBIN0011076 – MICR No: 500002107**. While using EFT method of payment, please ensure to communicate us your company name, ESCI invoice reference and programme title.

Online registration is available on ESCI website. To register, manually please send your nominations (**10 days** prior to date of commencement of the programme) giving details of name, designation, contact address, email address, mobile number, telephone and fax number of the participant along with the details of mode of payment of fee, addressed to:

Head, Power & Energy Division

Engineering Staff College of India

Gachi Bowli, Hyderabad – 500 032

Phone: 040–6630 4170 to 4176 ; 040-6630 4173 / 4176,

Fax: 040 – 23000336, 66304103

Email:pe.esci@gmail.com / pe@escihyd.org; Website: www.escihyd.org

CERTIFICATE: A certificate of participation will be awarded to each participant on conclusion of the programme.

GENERAL INFORMATION

- ESCI encourages participants to present case studies from their respective organizations.
- For the convenience of the outstation participants ESCI will facilitate pickup and drop from Airport / Railway Station / Bus Stations, if travel plans are received at least 3 days in advance along with mobile number by fax or email. The charges shall be paid by the participants directly to the cab driver.
- ESCI provides complimentary accommodation to participants a day prior to the commencement and following day after the conclusion of the programme. (Check in at 12:00 hrs a day prior to the commencement & check out at 12:00 hrs a day after completion of the programme)
- Overstay charges of @ Rs.990/- per day / per head Food (Bed Tea / Coffee to Dinner) will be charged extra as per actuals.
- Well developed Information Centre and Internet facilities are available to the participants at no cost.