Classroom Continuing Professional Development Programme on

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

28 - 31 May, 2024

at ESCI, Hyderabad

INTRODUCTION

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 a global scale. Rooftop solar power accounts for 10.9 GW, about 15% of the total solar installation of the India. In addition to its large-scale grid-connected solar photovoltaic (PV) initiative, India is developing off-grid solar power for local energy needs.

India is one of the countries with large production of energy from renewable sources. As on 29th February, 2024, 42.17% of India's installed electricity generation capacity is from renewable sources (183 GW out of 434 GW). Over the course of the past year, the renewable energy sector has experienced a remarkable upswing, primarily driven by the dominance of solar power. This dedication to solar energy is underscored by the approval of 57 solar parks, boasting a cumulative capacity of 39.28GW, reflecting a strategic emphasis on expanding solar infrastructure. Behind these accomplishments lie a series of government initiatives actively promoting renewable energy. These encompass a spectrum of measures including policies, financial incentives subsidies and regulatory support.

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) - PM Surya Ghar Muft Bijli Yojana
- 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
28 - 31 May, 2024

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.