THREE DAY TRAINING PROGRAMME ON CONCEPT TO COMMISSIONING OF SOLAR POWER PLANTS (INCLUDING 0&M)

# 26<sup>TH</sup>-28<sup>TH</sup> JUNE, 2019



**REC INSTITUTE OF POWER MANAGEMENT AND TRAINING** 



OF REC LIMITED

(Formerly known as Rural Electrification Corporation Limited) (A Government of India Enterprise)

# **INTRODUCTION**



India being in the tropical region and given the average solar insolation of 5 kwhr/m2/day in most parts of India, the potential to tap solar energy is huge. Realizing this and also to reduce dependence on the depleting fossil fuel sources (coal, oil and gas), Governmant of India set target of 100GW solar power generation by 2022, and achieving the installed capacity of 175 GW of renewable power aims to transform India through rapid strides in the renewable energy sector, job creation and skill development.

All the stakeholders in achieving the above targets are to coordinating to ensure for the timely completion, and quality of the various projects awarded to the developers. Similarly, the respective state governments have been carrying out these tasks for the State awarded projects. However, lack of experienced/trained work force is a major drawback.

About 90% of the projects awarded are solar PV, MW size, Grid Enabled projects, with energy fed to 33 kV or above through the existing substations, with about 10% comprising mostly solar PV roof tops tied to the grid.

International Solar Alliance (ISA) is part of Prime Minister's vision to bring clean and affordable energy within the reach of all and create a sustainable world. It will be a new beginning for accelerating development and deployment of solar energy for achieving universal energy access and energy security of the present and future generations. ISA will be India's first international and inter-governmental organization headquartered in India. ISA will be dedicated to promotion of solar energy for making solar energy a valuable source of affordable and reliable green and clean energy in 121 member countries.

Considering the above, RECIPMT is conducting a training programme on "Concept to Commissioning of Solar Power Plants" (Including O&M) to create better awareness on solar power and technologies among the executives of power utilities of both public and private sector, on the likely challenges and available solutions, through interaction with experts in the field for enhancing their skill on the subject with the following objectives.

# PROGRAMME OBJECTIVES

- To create awareness on the need for solar power generation -issues, challenges and remedial measures.
- To familiarize with the latest initiatives and Policies of Govt. of India incentives and concessions available.
- To gain insight to the various Solar PV and Solar Thermal power generation technologies.
- Best practices of Erection, testing, commissioning and O&M





# PROGRAMME CONTENTS

The programme will cover the following broad areas:

- Over view of Solar Power Generation.
- Review of Government Policies- opportunities and challenges
- Operating principle of solar PV Cell, Other PV technologies Comparison of efficiencies-Trends, Design aspects
- Selection of modules, inverters and Safety considerations, Tacking systems and benefits
- Large MW scale plants, greater emphasis on quality in commissioning, operation and maintenance
- Inspection and monitoring techniques, Diagnostics and analysis
- Typical faults and diagnosis- Performance measurement, Reliability testing
- Life Cycle Cost analysis
- Preparation of detailed project reports, financing, clearances, tariff fixation and CDM benefits
- Field visit to an operating solar power plant to gain first-hand knowledge

# **TARGET GROUPS**

Private Entrepreneurs, Industries, Manufacturers, Project implementers, Research/Academic Institutions, Nodal agencies, Energy Planners, Renewable energy companies, etc.

### **FACULTY**

Experts from the field are invited to take sessions on the identified topics.

# PROGRAMME DATE, TIMINGS AND VENUE

**26<sup>th</sup> – 28<sup>th</sup> June, 2019** from 9.45 am to 5.15 pm with a break for lunch, tea and refreshment. The venue will be RECIPMT Campus, Aramgarh, Shivarampally, Hyderabad-500 052.

### PROGRAMME FEE

Category	Course fee per participant	GST @ 18%	Total Fee per participant
Residential*	Rs. 25,500	Rs. 4,590	Rs. 30,090
Non Residential**	Rs. 22,500	Rs. 4,050	Rs. 26,550

\* Includes Boarding and Accommodation.

\*\*Includes working lunch. No accommodation will be provided.

\*\*\*Only on Participation basis

Course fee shall be paid in the form of a demand draft in favor of "**REC Institute of Power Management and Training**" payable at Hyderabad in advance or at least at the time of registration. The course fee may also be paid by NEFT/RTGS transfer to **HDFC Bank Account No: 00210350000930, IFSC Code: HDFC0000021, GSTIN of** 

Organization: 36AAACR4512R3Z0.

### HOW TO REGISTER

Please send the nominations on or before **20<sup>th</sup> June**, **2019** along with DD/ NEFT transfer to: The Director, REC Institute of Power Management and Training, N.P.A. Post, Shivarampally, Hyderabad-500052. E-mail: recipmt@gmail.com. Participants are advised to commence their journey, after receiving the confirmation from RECIPMT. Please contact Mr. G Shankar, Course Director, 040-29885851 for further information, if any.



#### ABOUT REC

Since its inception in 1969, Rural Electrification Corporation Limited (REC), a Navaratna PSU, has been playing a significant role in financing and promoting electrification projects across India. Within a span of 50 years, REC has emerged as India's leading finance company in power sector. Be it generation, transmission, distribution or renewable energy, REC has always created benchmarks in its every performance by supporting National power sector organization by providing funding for implementation of projects. Based on the MOU with Ministry of Power, the performance of REC Limited is rated as "Excellent" consistently for the last 21 years.

### **ABOUT RECIPMT:**

REC Institute of Power Management and Training (RECIPMT) earlier known as Central Institute for Rural Electrification (CIRE) was established at Hyderabad in 1979 under the aegis of Rural Electrification Corporation Limited to cater to the training and development needs of Engineers and Managers of Power and Energy Sector. RECIPMT is relentlessly engaged in capacity building to strengthen the human resources development initiatives of Power Sector. RECIPMT has been conferred with Educational Award for 3 years in recognition of Leadership, Development, Innovation and Industry interface. The Institute is spread over an area of about 14 acres, with administrative, teaching and hostel blocks. Classrooms and hostel rooms are air-conditioned. An Energy Park has been set up to develop awareness on Renewable Energy Sources System and High Voltage Distribution System.



Up to Mar 2019, the Institute has organized 2106 Programmes and 47771 executives from various Power Utilities, like Generation, Transmission & Distribution Companies, Electricity Departments, RE Cooperatives, Regulatory Commissions, Rural Development Agencies, Banks, CPUs, etc., participated in the programmes. The Institute has organized 95 International Training Programmes under ITEC/SCAAP of Ministry of External Affairs, GOI and trained 1539 executives from 90 countries.

