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**One-day Seminar**  
on

# **Performance Evaluation and O&M of Solar Power Plants in India**

Project under  
USAID-Partnerships for Enhanced Engagement in Research (PEER)–Cycle 5  
12 July 2018, IIBM, Guwahati

## **Introduction**

The present share of renewable energy in the total installed capacity in India is 20% as of April 2018, of which solar power constitutes 31.4% (21,651.48MW). The Ministry of New and Renewable Energy, Government of India, has come out with a target of 100 GW solar capacity addition by 2022, of which 60GW comprises utility scale power projects, 40GW rooftop installations, and an extra 2GW off-grid power plants. Since the quantum of projects envisaged is large, the probability of increased problems arising due to O&M issues could also be high. Further, with India experiencing diverse climatic conditions in different regions, the performance of solar PV plants tends to vary in accordance to the climatic variations. With the Indian PV industry gaining maturity and endeavoring to meet the 100GW target, the need for enhancing O&M and performance evaluation has become a focal point of attention.

The World Institute of Sustainable Energy (WISE), Pune, was awarded a project under PEER-Partnerships for Enhanced Engagement in Research programme with the support of the United States Agency for International Development(USAID),for “Developing Performance Evaluation and O&M strategy for the Indian Solar Sector”, which is intended to project the need for predictive maintenance and performance evaluation in a strategic manner as opposed to conventional maintenance practices, as well as to develop an implementation strategy.

As part of this initiative, WISE in collaboration with USAID, is organizing a one-day seminar on “Performance Evaluation and O&M of Solar Power Plants in India” on 12th July 2018 at IIBM, Guwahati. The seminar aims to holistically address the challenges in O&M and performance evaluation of Solar Power Projects, seek appropriate solutions to overcome the challenges, and chart a suitable course of action in leading the way forward. Delegates would include solar PV system component manufacturers/integrators/channel partners/EPC contractors/O&M service providers, central and state ministries, not-for-profit organizations, private sector organizations, national laboratories, service industry, etc. The capacity building seminar aims to discuss the O&M of solar PV systems and techniques for performance evaluation which will be useful for the participants during operation of the solar PV systems. One of the outcomes of the project is to launch a dedicated web portal for information dissemination on O&M of solar PV systems and performance evaluation. The initial design of the web portal will be presented for discussion in the seminar.

## **Why You Should Attend**

- Acquire the knowledge and expertise to boost O&M and performance evaluation of solar PV projects, for improved revenue and optimization of resources.
- Gain a deeper insight into the prevalent O&M practices existing in the Indian solar sector along with their associated issues and challenges.
- Get an exposure to global best practices, case studies, and latest trends in performance evaluation and O&M strategy existing in the International solar sector and see how they can be emulated in the Indian scenario.
- Gain ‘cutting-edge’ advantage by enhancing your business opportunities through better understanding of technological developments and the adaptability of solar PV in the Indian scenario.

## Programme

- Basics of solar PV power plants
- Importance of O&M in the Indian context
- Performance evaluation of solar power plants
- General faults with solar PV panels
- How solar power plant maintenance needs to be scheduled
- What is proper maintenance of solar power plants
- Rooftop power plant best practices
- Need for Environmental Health and Safety (EHS) in solar PV operation
- Safety equipment required for solar power plants
- Hazards in solar power plants
- How to structure your O&M team

## About WISE

The World Institute of Sustainable Energy (WISE) is a not-for-profit institution established in 2004 in Pune, India, committed to the cause of promoting sustainable energy and sustainable development, with specific emphasis on issues related to renewable energy, energy security, energy efficiency, and climate change. Influencing public policy through research, advocacy, development of action plans/roadmaps, capacity building, training and outreach activities, is the prime objective of WISE. Some major initiatives pioneered by WISE are:

- Developing a pathway for achieving the target of 15% renewable energy by 2020, as specified by the National Action Plan on Climate Change.
- Developing state level vision documents and renewable energy action plans. Piloting a model Renewable Energy law for India in 2005.
- Capacity building of state RE development agencies.
- Training more than 4,000 personnel in various areas of RE development.

### Registration

Registration is free (limited seats). For details, please send your queries to [abigith@wisein.org](mailto:abigith@wisein.org) or [dibin@wisein.org](mailto:dibin@wisein.org)

## About USAID-PEER Programme

The United States Agency for International Development (USAID) is the US government's pre-eminent foreign assistance agency. It is dedicated to helping nations meet the needs of their citizens by providing health-care, education, and economic opportunity to end extreme poverty and promote democratic, resilient societies. The US Global Development Lab (TheLab) at USAID is bringing together a diverse set of partners to discover, test, and scale breakthrough solutions to address critical challenges in international development. A key element of this strategy is the support of scientific and technological research through the Partnerships for Enhanced Engagement in Research (PEER) programme. PEER is a competitive awards programme that invites scientists in developing countries to apply for funds to support research and capacity-building activities on topics of importance to USAID and conducted in partnership with US Government(USG)-funded and selected private sector partners. GE-General Electricals is an Indian partner organization for PEER projects in India

## Centre for Solar Energy

The Centre for Solar Energy (CSE) is a dedicated and specialised Centre, striving towards the advancement of the solar energy sector in India. It is involved in myriad functions such as techno-economic and resource assessment, preparation of solar roadmaps, incentive structures, model tariff, etc. The Centre is actively engaged in guiding both the corporate and government sectors through various stages of project development for different solar technologies, right from the conception stage upto post-installation certification. Proactive consultancy and technical support provided to various solar power projects has made the Centre a strong advisory force and trusted facilitator in accelerating development of solar power in India.

Seminar Organised by



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