Online Training Program on
ADVANCED METERING INFRASTRUCTURE (AMI)
20 May - 09 June 2020
A. Introduction

Since inception in 2011, India Smart Grid Forum (ISGF) has been spearheading the movement towards digitalization of utilities in India. Although, the actual implementation in many utilities may still be not satisfactory, there is already a unanimous voice for taking this journey to full digitalization. The DISCOMs that have proper billing and collection systems and online payment facilities are able to collect their dues much better than those who do not have such systems. Similarly, where ever smart metering systems are in place, utilities are able to issue bills based on actual consumption. In the aftermath of COVID-19, these digital platforms have become the coveted assets for utilities in their business continuity and resiliency.

Advanced Metering Infrastructure (AMI) or smart metering system eliminate the need for physical meter reading by the utility’s personnel visiting the customer premises which most customers would detest in the present scenario. Even before COVID-19, Ministry of Power (MoP), Government of India was planning to launch a ground breaking program mandating smart meters for all 250 million+ electricity customers in India. This is expected to be announced very soon. AMI is an integrated system of smart meters, communication networks and data management systems that enables two-way communication between utilities and customers. To Rollout of 250 million smart meters all across India in 4-5 years would require massive capacity building in all areas – meter design, manufacturing, meter installation, communication and IT systems planning and design, implementation and system integration, project management and change management. AMI is a new concept that require in-depth knowledge of three distinct technologies: metrology, telecommunications and IT for its successful implementation and operations. The DISCOMs are well versed with the electrical technologies of the electricity grid, but when it comes to telecommunications and IT, their expertise is limited. Besides the fact that AMI is an evolving technology adds to the challenge.

With this background ISGF is pleased to announce Online Training Program on Advanced Metering Infrastructure from 20 May - 09 June 2020.

B. Objectives

- To Learn how to design successful AMI projects
- To understand the challenges of AMI Data Integration with Billing and Customer Care System, GIS, OMS, SCADA etc
- To learn Project Management challenges in large AMI rollouts
- Provides the participants a platform for Peer to Peer discussions on technology and project experiences with experts
- Develop an effective AMI Business Strategy and Business Case for utility’s unique requirements
**C. Course Modules**

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<th>Topic</th>
<th>Description</th>
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<td>AMI – Key Components; Smart Meter, Two Way Communication System, MDMS &amp; System Integration</td>
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<td>AMI System Design Principles</td>
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<td>Technical and Business Benefits</td>
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<td>Common Interfaces and Integration</td>
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<td>AMI Project Management and Planning</td>
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<td>AMI Initiatives in India and International Case Studies</td>
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<td>AMI Data Analysis/Analytics (Deriving Business Value from AMI Data)</td>
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<td>Smart Grid Readiness - Self Assessment Tool</td>
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<td>Rollout Challenges in AMI</td>
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<td>AMI Procurement Strategy and Business Models</td>
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**D. Target Audience/Eligibility**

- Engineers from Transmission and Distribution Utilities executing/intending to execute Smart Metering
- Engineers from Regulatory Commissions and Smart Grid Project Management Units in state energy/power departments.
- Engineers from Technology Companies
- Fresh Engineering Graduates looking for a career in Smart Grids domain

**E. Course Schedule**

20 May - 09 June 2020

**Live Sessions on Following Days:**
20 May, 22 May, 23 May, 26 May, 28 May, 30 May, 02 June, 04 June, 06 June and 09 June

Daywise session timing will be shared to registered trainees

**F. Training Methodology**

- **Live Lectures on ISGF WebEx Platform**
- **Course Material/ Presentations of the Session** will be emailed to the participants a day in advance and will be uploaded on the ISGF Training Portal for reference
- **Recording of live lectures** will be available on ISGF Portal to view or access at anytime
- **Post session queries** can be posted in Google Form to be answered by tutors in one document and emailed to trainees. Group of trainees can schedule interactive (audio/video) session with tutors as per mutual convenience to clear their doubts

**Assessment & Certification**

An online examination will be conducted and Certificate of Merit* will be awarded to the online trainees. Trainees undergoing Offline Training Course will receive a Certificate of Completion after examination

*ISGF is in consultation with IEEE and some universities for academic credit for ISGF Training Courses
India Smart Grid Forum (ISGF) was established as a Public Private Partnership (PPP) initiative of Government of India for accelerated development of smart grid technologies in the Indian power sector in March 2011. It is registered under Indian Societies Registration Act (Act XXI of 1860). ISGF was set-up to provide a mechanism through which academia, industry, utilities and other stakeholders could participate in the development of Indian smart grid systems and provide relevant inputs to the government’s grid modernization program.

ISGF work closely with the Ministry of Power, Ministry of New and Renewable Energy, Department of Telecom, Ministry of Heavy Industries, Department of Science and Technology and Ministry of Urban Development and NCIIPC. With 180 + members comprising of ministries, utilities, technology providers, academia and students, ISGF has evolved as a globally reputed think tank in smart grids and smart cities.