

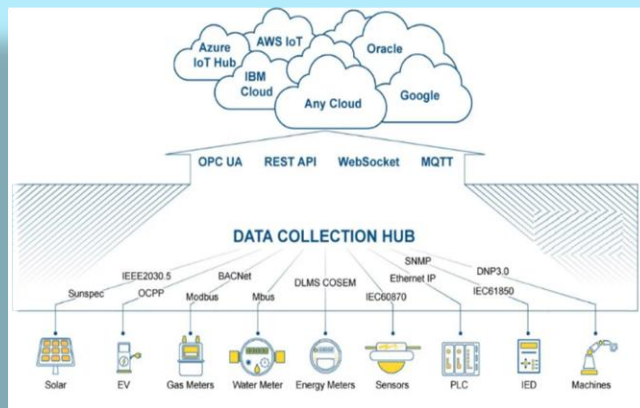
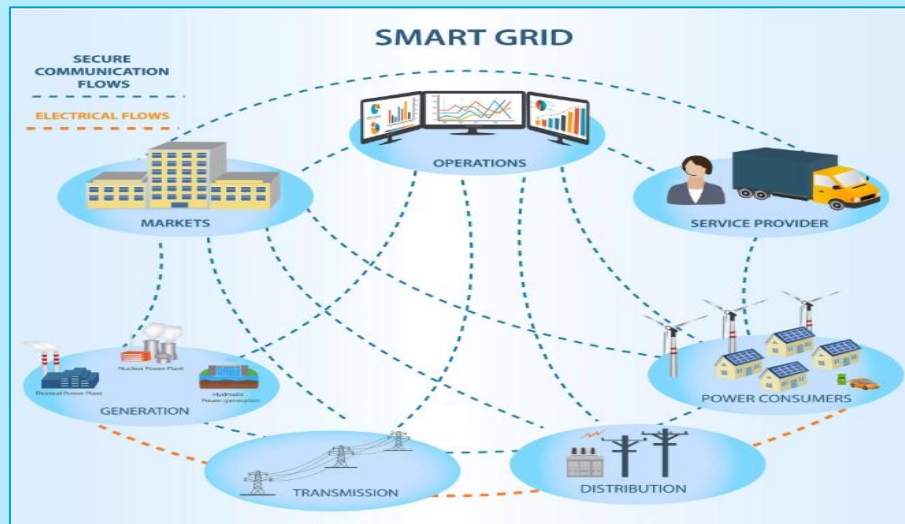
Webinar

On

“Application of Conformance Test and Protocol Testing in AMI System”

Date: 17th December 2024 (Tuesday)

Time: 2:00 PM to 5:30 PM



Organised by
Energy Meter Testing Laboratory
Central Power Research Institute
Bhopal-462023
website: www.cpri.in

“Application of Conformance Test and Protocol Testing in AMI System”

Program Overview:

In modern energy systems, the smart grid emerges as an efficient and sustainable solution. At its core lies a network of communication protocols, enabling the exchange of data and empowering utilities, consumers and grid operators. Also, these protocols enable real-time data exchange, grid monitoring & control and advanced metering. These communication protocols are required to be standardized for ensuring interoperability, scalability, reliability, and security in complex systems like smart grids. The important communication protocol standard used in smart grid include IEC-61850, DLMS/COSEM (Device Language Message Specification/Companion Specification for Energy Metering), IEC 60870 etc. CPRI is providing testing services of Communication Protocol Conformance for Intelligent Electronic Devices (IEDs) / Gateways/ RTUs/Smart Meter as per IEC 61850, DLMS/COSEM, IEC-60870, IEC-62351.

The IEC 61850 is a series of international standards for communication in the substations, which brought a new era in the development of Substation Automation. This protocol standardizes communication within substations and between substations and control centers in smart grids. It enables interoperability between different devices and systems, facilitating efficient data exchange and control.

DLMS (Device Language Message Specification): DLMS is a widely used protocol for communication between utility meters and data collection devices in smart grid deployments. It defines a set of message formats and procedures for exchanging data related to energy consumption, billing and metering. DLMS enables seamless integration of meters from different manufacturers and supports various communication media, including

RS-232, RS-485, and TCP/IP.

IEC 60870: IEC 60870 is a family of standards that defines communication protocols for telecontrol (telemetry and control) applications in smart grid. It includes several parts, such as IEC 60870-5-101 and IEC 60870-5-104, which specify protocols for serial and network communication, respectively. IEC 60870 protocols are widely used in supervisory control and data acquisition (SCADA) systems for monitoring and controlling substations, power generation plants, and distribution networks.

These protocols play crucial roles in enabling communication and interoperability across different components of smart grid infrastructures, facilitating efficient management and optimization of energy resources.

Program Objective:

The aim of the seminar is to provide a platform to exchange engineering knowledge, experiences and information on communication protocol used in smart grid and the applicable standards.

Program Profile:

The program will cover:

- Introduction to IEC- 61850 protocol and overview of substation automation system
- DLMS testing procedure for energy meters used in smart grid
- IEC 60870 communication protocol of RTU/FRTU
- Cyber security in smart grid and Security conformance Testing of RTU/FRTU as per IEC 62351.
- Advanced Metering Infrastructure (AMI)

Methodology:

Lectures through power point presentation, discussion and case studies.

Who may Attend:

Engineers involved in modern grid, Utility engineers, Manufacturer of RTU/FRTU/IEDs, Academicians and students.

Date & Time of Webinar: 17th December 2024 (Tuesday) - 2:00PM to 5:30 PM

Last Date of Registration: 16th December 2024.

Sl.No.	Institutions	Fee per person per day (in INR)
1.	State Power utilities / Government agencies up to 5 participants:	₹ 750 + GST 18%
	Group discount for nomination of:	
	a) More than 5 participants up to 10 participants.	₹ 650 + GST 18%
	b) More than 10 participants.	₹ 600 + GST 18%
2.	Private Sector up to 5 participants.	₹1,000 + GST 18%
	Group discount for nomination of:	
	a) More than 5 participants up to 10 participants.	₹ 750 + GST 18%
	b) More than 10 participants up to 30 participants.	₹ 600 + GST 18%
3.	Students & of Educational Institutions	₹ 500 + GST 18%
4.	Faculty Members of Educational Institutions	₹ 500 + GST 18%
5.	Lump sum amount if the participation is more than 10 people up to 50 people per batch for academic institutes.	₹ 7,500 + GST 18%
6.	Charges for foreign delegates	₹ 1,500 + GST 18%

Details of Online Payment:

The on-line payment portal is available on the CPRI website <http://www.cpri.res.in> or by clicking the following link

<https://payment.cpri.res.in/pmt/index.php>

Please select Payment made against: Training/Workshops/Seminars/Conferences/ Webinars Unit: Central Power Research Institute, Bhopal Departments: STDS-Energy Meter Test Laboratory Title of Event: Application of Conformance Test and Protocol Testing in AMI System”

Please enter “EMTL, Bhopal” in remarks while doing transaction which is mandatory.

Details of Online Registration:

[Click Here for Registration](#)

The link for attending the webinar will be shared one day prior to schedule to the registered email ids.

Chairman: Smt. Sumbul Munshi, Additional Director (Unit Head) STDS, CPRI Bhopal

Organizing Committee:

Mrs. Leena H Roy	Mrs. Deepa Warudkar	Dr.Priyamvada Chandel
Mr. Shyam Agarwal	Mr. Gyan Prakash Nirmal	Mr. Pulipati Venkata Sai Krishna
Mr. Rajesh Kumar Sharma	Mr. Aaditya Raj	

Program Co-Ordinator:

Mrs. Deepa Warudkar, Joint Director (Mob: 9425370622, Email: warudkar@cpri.in)

Contact:

Mr. Shyam Agarwal, Engineering Officer (Mob:7060257755, Email: sagarwal@cpri.in)
Mr. Gyan Prakash Nirmal, Engineering Officer (Mob:9451113612, Email: gyanpn@cpri.in)
Mr. Pulipati Venkata Sai Krishna, Engineering Officer (Mob:9494563960, Email: pvskrishna@cpri.in)

email: stdsemtl@cpri.in