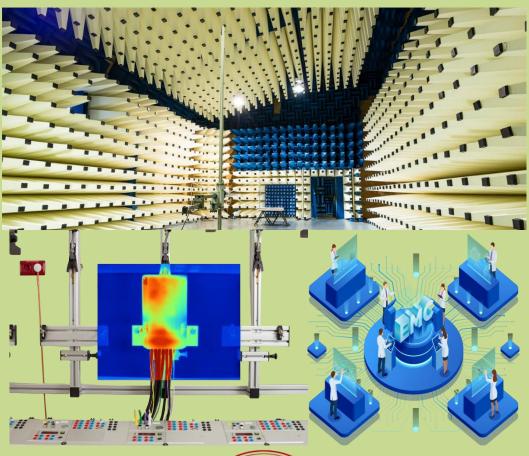
# Webinar

### On

# " EMI/EMC Test on Smart Devices"

Date: 23<sup>rd</sup> January, 2024 (Tuesday)

Time: 2.00 PM to 5.00 PM





### Organised by

Energy Meter Testing Laboratory Central Power Research Institute Bhopal-462023

website: www.cpri.in

#### **EMI/EMC Test on Smart Devices**

The deployment of Electronic Smart meters is on the verge of abolishment of Static meters in Electrical network. As per RDSS scheme of Government of India, near about 25 crores of smart meters are planned to be installed in India. In smart grid, smart meters operate in parallel with Photovoltaic inverters, RTUs and other power electronic devices. As the smart grid is expected to depend heavily on renewable energy sources with switching and fluctuation concern, electromagnetic issues related to smart meters are bound to be more severe. A device can be vulnerable to electromagnetic interference if the levels of electromagnetic energy in its environment exceed the electromagnetic immunity to which the device was designed. The different forms of electromagnetic energy that can cause electromagnetic interference are conducted, radiated and electrostatic discharges. Smart meter contains relays, CTs, PTs, micro controllers and IOT based devices working on a range of frequencies, these components may cause the EMI/EMC issues in the smart grid hence before launching the smart meter into the real scenario, the EMI/EMC testing of smart meter needs to be done. The different EMI/EMC tests on smart devices includes Electrostatic discharge, High frequency immunity, Radiated emission and Fast transient burst test. CPRI is having almost all test facilities of smart meters at various units. Along with the present EMI/EMC test facility, Radiated Emission test facility as per IEC/CISPR standards for smart meters, Intelligent Electronic Devices (IEDs), RTUs, Relays, Circuit breakers and other commercial devices will be established soon at CPRI Bhopal.

#### **PROGRAM OBJECTIVE:**

The objective of this program is to cover the need of EMI/EMC testing, CISPR, IEC testing standards, procedures for testing and case studies of EMI/EMC testing on IEDs, RTUs, Automotives and commercial devices. The program will also include the EMI/EMC issues related to advance metering infrastructure (AMI) in smart grids.

### **PROGRAM PROFILE:**

- Fundamentals of EMI/EMC.
- 2. CISPR/IEC standards and testing procedures for Smart meters.
- 3. Radiated Emission test on commercial devices.
- 4. Functionalities of Semi Anechoic Chamber (SAC)
- EMI/EMC issues in smart grid.

## **Registration Charges**

SI.No.	Institutions	Fee per person per day (in INR)
1.	State Power utilities / Government	₹ 750 + GST 18%
	agencies up to 5 participants:	
	Group discount for nomination of:	
	a) More than 5 participants up to 10	₹ 650 + GST 18%
	participants.	
	b) More than 10 participants.	₹ 600 + GST 18%
2.	Private Sector up to 5 participants.	₹ 1000 + GST 18%
	Group discount for nomination of:	
	a) More than 5 participants up to 10	₹ 750 + GST 18%
	participants.	
	b) More than 10 participants up to 30	₹ 600 + GST 18%
	participants.	
3.	Students & of Educational Institutions	₹ 500 + GST 18%
4.	Faculty Members of Educational	₹ 500 + GST 18%
	Institutions	
5.	Lump sum amount if the participation is	₹ 7500 + GST 18%
	more than 10 people up to 50 people per	
	batch for academic institutes.	
6.	Charges for foreign delegates	₹ 1500 + GST 18%

## **Payment of Registration Charges:**

- Registration charges shall be paid in advance by online mode. Link for Online payment is <a href="https://cpri.res.in/online-testing/pay\_online">https://cpri.res.in/online-testing/pay\_online</a> OR from CPRI website through PAYONLINE Tab
- Details of digital transactions made against webinar shall be intimated immediately after payment is made

### Click the below link for registration:

https://forms.gle/RZ7W7YP4GkirHfqV9

Link for attending the webinar will be shared one day prior to webinar.

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

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