



भारतीय प्रौद्योगिकी संस्थान भुवनेश्वर
Indian Institute of Technology Bhubaneswar

Press Release

**IIT Bhubaneswar Commissions Indigenous Digital Substation with
Centralized Monitoring and Protection System**

Bhubaneswar, 10th February 2026: IIT Bhubaneswar has successfully developed and commissioned an advanced digital substation equipped with a Centralized Monitoring and Protection (CPM) system at its 33/11 kV campus substation, marking a significant milestone in indigenous power system innovation. The system will enable real-time monitoring and protection of the Institute's entire electrical distribution network.

The newly developed digital substation was inaugurated by Shri Vishal Kumar Dev, IAS, Additional Chief Secretary, Energy and E&IT Department, Government of Odisha, in the presence of Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar on 10th February 2026.

Other dignitaries present on the occasion included Dr. Satyapriya Ratha, IAS, Managing Director, GRDICO; Prof. S. R. Samantaray, Project Investigator, and Mr. Rutupurna Mansingh, Deputy General Manager (Electrical), GRIDCO.

It is worth noting that the project was undertaken as a demonstration initiative under the National Perspective Plan (NPP) of the Central Power Research Institute (CPRI), Bengaluru, within the Ministry of Power, Government of India. The project was led by Prof. S. R. Samantaray, Department of Electrical Engineering, School of Electrical and Computer Sciences, IIT Bhubaneswar.

The objective of the project was to design, develop, and demonstrate a Centralized Protection and Monitoring (CPM) system for a distribution substation, including integration of Distributed Energy Resources (DERs). Notably, this initiative represents one of the indigenously developed digital substation frameworks in the country, leveraging intelligent merging units that eliminate the need for conventional physical Intelligent Electronic Devices (IEDs) within the substation.

As part of its future-ready architecture, the system also lays the foundation for the development of a Distributed Energy Resource Management System (DERMS) embedded within the CPM framework, enabling enhanced grid intelligence, flexibility, and reliability.

The commissioning of this digital substation reinforces IIT Bhubaneswar's commitment to advancing smart grid technologies, indigenization of power system solutions, and sustainable energy infrastructure aligned with national priorities.
