

AI AND MACHINE LEARNING BASED APPLICATIONS TO PLAY PIVOTAL ROLE IN TRANSFORMING INDIA'S POWER SECTOR, SAYS SHRI MANOHAR LAL

SAYS ACTIVE CONSUMER ENGAGEMENT IS KEY TO SUCCESSFUL TECHNOLOGY ADOPTION

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Artificial Intelligence (AI) and Machine Learning (ML) based applications will play a pivotal role in building intelligent, consumer-centric, self-optimizing distribution networks, said Shri Manohar Lal, Minister of Power. The Minister was addressing the participants of the Two-day National Conference focusing on the use of AI/ML technologies in the power distribution sector, at Bharat Mandapam, New Delhi today.

He noted that the AI/ML based solutions, smart meter analytics, digital twins, predictive maintenance, theft detection intelligence, appliance-level consumer insights, automated outage prediction and GenAI-based decision support can transform both consumer experience and operational efficiency.



Shri Manohar Lal lauded the active participation of industry, states, innovators, academia, and technology partners at the National Conference. He appreciated the AI/ML solutions presented by Distribution Companies (DISCOMs), Advanced Metering Infrastructure Service Providers (AMISPs), Technology Solution Providers (TSPs) and Home Automation Solution Providers (HASPs).

The Minister urged all DISCOMs to work closely with ecosystem stakeholders to transition towards smart, reliable, and consumer-focused distribution systems. He remarked that there was also a need to actively engage consumers. It is important to remove misinformation that sometimes surrounds new technologies and to win the valuable support of consumers for technology adoption in the sector.

Shri Lal noted that the AI/ML based solutions highlight a powerful narrative of technology restoring trust, empowering households to manage their consumption better, preventing outages before they occur, protecting honest consumers from theft burdens and enabling DISCOMs to reduce losses, optimise power purchase costs and reinvest in stronger infrastructure—positioning India as a global leader in digital electricity reform and future-ready grid governance.

Speaking at the National Conference, Shri Pankaj Agarwal, Secretary, Ministry of Power, highlighted the Ministry's commitment to strengthen digitalisation across DISCOMs and promote adoption of AI/ML-based solutions that deliver measurable operational and financial improvements. He stressed the importance of capacity building, secure data-sharing frameworks, and interoperability to ensure that innovations showcased during the conference can be scaled nationwide to facilitate the energy transition across the country.



The Conference, involved a national call for innovation, and 195 applications were received from DISCOMs, AMISPs, Technology Solution Providers (TSPs), and Home Automation Solution Providers. After initial screening, 51 solutions were shortlisted for detailed jury evaluation on Day 1 (December 6, 2025) of the Conference.

Following detailed evaluation, the TNPDC (Tamil Nadu), MP East (MP) in the DISCOMs category, the Tata Power and Aprava in the AMISP category, the Pravah and the Flock Energy in the Solution provider category and Tata Power in the Home automation Solution category were declared the winners.

Today, the winners made their presentations which highlighted various data driven innovations like advanced smart meter analytics for revenue protection by Tamil Nadu, accurate consumer indexing to reduce Losses by MP East. AMISPs like TP Power Plus and Aprava Energy demonstrated behavioural demand response and AI-based operational automation, while TSPs such as Pravah and Flock Energy showcased unified real-time grid intelligence and consumer appliance analytics. Tata Power showcased futuristic and user-friendly solution for monitoring and controlling energy use.

The winners were felicitated by the Minister of Power and he encouraged them to scale-up of such solutions across states.



Shri Manohar Lal, Minister of Power also launched the STELLAR (Strategic Expansion for Long Term Load Adequacy and Resilience) developed by Central Electricity Authority (CEA) which will empower DISCOMs to carry out resource adequacy studies and prepare long term adequacy plans. Also, India Smart Grid Forum (ISGF) presented the Handbook on AI, ML, AR/VR and Robotics Solutions and Roadmap for Electric Utilities highlighting 174 use cases, including 45 from Indian utilities.

May also refer to PIB's earlier press release:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2199368®=3&lang=2>

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