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Report on Expert Lecture at

**RPSCET, Mahendergarh**

**19/03/2024**

**For 1<sup>st</sup> /2<sup>nd</sup> /3<sup>rd</sup> year EE Students**

An expert lecture on “Demand Side Management and Smart Grids” was conducted at RPSCET, Mahendergarh on 19<sup>th</sup> March, 2024 for the students of 1<sup>st</sup>/2<sup>nd</sup>/3<sup>rd</sup> year of electrical engineering. The main objective behind this expert lecture was to get through the recent developments occurring in the power system grid. 25 students along with the faculty of electrical engineering department participated in this program. The keynote speaker was Dr. Kanwardeep Singh, Prof. & Head, at Guru Nanak Dev Engineering College, Ludhiana (Punjab).

Prof. Singh started his session with discussing about the restructuring of the power system and its need in the upcoming years. He emphasized on the peak demand management, which is one of the major concerns in governing the power system. He talked about the selling and purchasing of power in the decentralized power system, power pricing, and distribution automation that would be implemented for restructured power system. Then Prof. Singh discussed the smart grid and participation of consumers in smart grid utilizing “Demand Side Management” technique. Prof. Singh said that demand side management is the technique of utilizing the power during off-peak hours, which would help in peak clipping, solving the problem of high peak demand, and hence the transmission losses and cost. Prof. Singh also presented a case study to explain the reduction in the cost of electricity consumption through demand side management based on the time-of-use tariff.

The key points of the discussion were:

- Restructured power system
- Peak demand management
- Energy management system
- Energy control centers
- Availability based tariff

- Pricing signal
- Distribution automation
- Smart grids
- Demand side management

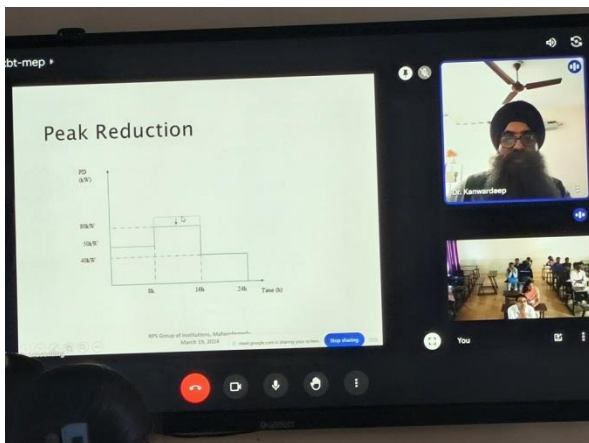
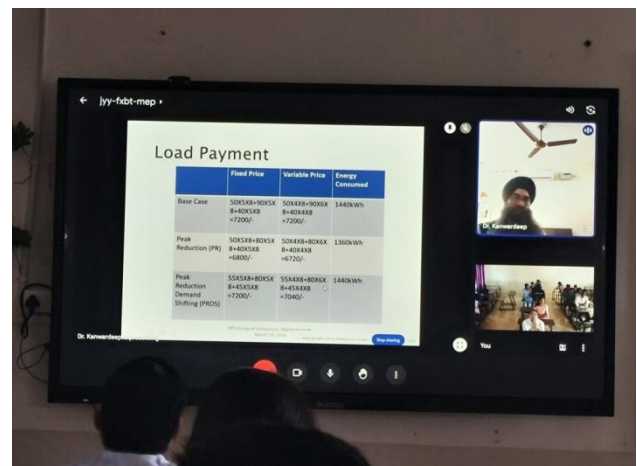
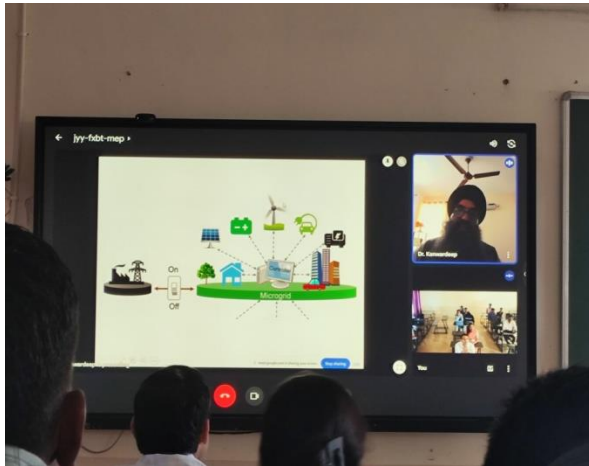
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Department of Electrical Engineering is organizing an Expert Lecture on  
**Demand Side Management and Smart Grid**

**Prof. Kanwardeep Singh**  
Head of Electrical Engineering Department at Guru Nanak Dev Engineering College, Ludhiana

[Date: March 19, 2024  
Time: 1:30 PM - 3:00 PM  
Venue: Seminar Hall]

**E**  
ELECTRIC POWER CLUB



The session did long for 2 hours from 01:30 pm to 03:30 pm. Prof. Singh also suggested some power system modeling software such as MATLAB, MATPOWER, powerworld simulator, ETAP etc. for the students to work upon. Finally Prof. Singh took the doubt session. HOD of the electrical engineering department of RPSCET bid the vote of thanks to Prof. Singh to conclude the session.

Thanks

Er. Vishal Kumar Mittal

(Asstt. Prof. & Head)