

COLLEGE OF ENGINEERING

NH-5 Bypass Road, Vatluru (V), ELURU – 534007 (A.P.) (Approved by AICTE, New Delhi and Affiliated to JNT University, Kakinada)

Guest Lecture Report Format:9014/0

Organized by : EEE

Name of the Speaker : Mr.G.V.Ramakrishna

Designation : AE, APTRANSCO, Vijayawada

Topic : Electric Power grid - Modernization trends Challenges and

Opportunities

Venue : Faraday Hall

Date & Time : 15/09/2018, 10 am to 3 pm

Conducted for :

Branch	Year	Semester	No of Students Attended
EEE	IV A & B	I	114
Total No of Students Attended			114

Profile of the Speaker

Mr.G.V.Ramakrishna, is working as AE, in APTRANSCO, Vijayawada for the past 6 years. He started his career with teaching profession. Then he has been selected for the present post. He is having the wide theoretical and practical knowledge in the power grid related issues. He has secured gate rank also. Teaching is his passion. His delivery of lecture is awesome through which students are inspired.

Report

1. Report in brief by Organizer:

The traditional electric power grid connected large central generating stations through a highvoltage (HV) transmission system to a distribution system that directly fed customer demand. Generating stations consisted primarily of steam stations that used fossil fuels and hydro turbines that turned high inertia turbines to produce electricity. The transmission system grew from local and regional grids into a large interconnected network that was managed by coordinated operating and planning procedures. Peak demand and energy consumption grew at predictable rates, and technology evolved in a relatively well-defined operational and regulatory environment. Over the last hundred years, there have been considerable technological advances for the bulk power grid.

While the electrical power system is becoming, and will continue to become, more distributed, it is important to note that today's interconnected grid began as a distributed grid. Interconnected grids were created to improve grid cost-efficiency, reliability, service quality, and safety. As technology



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advancements made it easier to deploy renewable resources and, controllable, more efficient distributed grids, the fundamental benefits of a connected grid still hold and in fact, become more important. While the present grid is generally considered reliable, as dependency on the digital economy grows, users will demand even more reliability from the electric power delivery in the future, including resilience during major weather or security events. Transmission and distribution systems are an enabler to deployment of renewable resources, providing pathways for the transport of clean energy between production and consumption centers and a means for resource movement and delivery, while at the same time fortifying electric system efficiency, stability, and reliability of supply. Integration of DER and distributed grids can increase efficiencies in the use of the existing grid, as well as become part of the overall development strategy to balance the supply-and-demand uncertainties and risks in a variety of different resources. In cases where distributed grids become predominant (e.g. renewable intermittent DER plus energy storage), and grid usage becomes equally as variable, assuring a safe and reliable supply will require an intelligent, modern, resilient, flexible and safe grid.

2. Photos:



At the time of Inaugural



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During guest lecture



students are attending guest lecture



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Felicitation to the guest speaker

3. Feedback from students:

The students of IV- EEE feel that it is a wonderful and contented lecture from the eminent person. And also they expressed that they came to know about the new emerging technology of electrical engineering which will be very useful for them to do some research work on it. And also they requested to conduct this kind of programs once in the semester.

4. Remarks from Resource Person:

The resource person Mr.G.V.Ramakrishna express that the students are very keen in knowing about the concepts. And the session is very nice and interactive. And also he says that he will extend his help for the students who are really interested to do projects in the above mentioned area.

Signature of the Organizer

Signature of the Principal