## MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

**(UGC - AUTONOMOUS)** 

# Report on a One-day Workshop Practical Implementation of Microgrids 21 July 2018



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The Department of Electrical & Electronics Engineering organized one day workshop on Practical Implementation of Microgrids on 21st July 2018.

## Theme of Workshop:

Recently, Microgrids have earned numerous research interests due to their flexibility. They can provide high quality uninterrupted power supply to consumers with a capability to operate autonomously. Currently, several research groups across the globe are investigating the feasibility and benefits that microgrids may provide to the consumer. This workshop will give an insight knowledge about the practical implementation of microgrids. Also, this will enable the participants to be familiar with various concepts of microgrid which includes difficulties in implementation, operation, troubleshooting, maintenance and also recent developments.

Inaugurated the seminar by lighting the lamp. 37 participants attended the workshop. The Faculty from various colleges and students attended the workshop.

Program Co-coordinator, Dr. Asha Rani (HOD EEE) gave the opening remarks about the theme of workshop, details of participants, detailed schedule of the program and expertise of the resource person.

Dr. Keshwan Dean (ECE & EEE) presented the profile of the institute along with the various activities of the institute. Sir also gave a brief profile of E.E.E department including the programmes offered by the department and various activities conducted by the department.

## **Technical Session-I**

During the first session, Dr. Debapriya Das Professor, School of Electrical Engineering, IIT Kharagpur discussed about "Overview of Microgrids" he mentioned details about the conventional grid, drawback of existing centralized grid system and necessity of Microgrids for rural electrification also he discussed about the basic component of automation, necessity of automation, efficient method of power utilization and street light automation.

## **Technical Session-II**

In second session, he explained about the necessity of change in the protection philosophy, calls for advance technology to improve the performance of protection scheme, protection of various transmission system equipment's from various faults, necessity of special protection scheme, its design, implementation, case studies, WAMS based protection scheme, its components and wide area protection.

### **Technical Session-III**

In third session, he discussed regarding "Automated Fault Analysis System". In this session, he discussed about the ability of a specialized computer program to correlate and analyze available data regarding power system faults as well disturbances. He also discussed about the information extracted from automated fault analysis and its usage by operating personal, protection engineers as well as maintenance crew.

#### **Valedictory Function**

The valedictory session of the Workshop held on 21<sup>st</sup> July, 2018 at 4:00 P.M in seminar hall. The chief resource person Dr. Keshwan Dean (ECE & EEE as Dean, program coordinator Dr. Asha Rani (HOD EEE), program convenor Dr. Hira Singh Sachdev and all the other faculty members from E.E.E department attended the valedictory function. Drdean gave valedictory speech and appreciated the department of the efforts to conduct the workshop effectively. He congratulated all the participants for their active participation during the workshop.