# **Department of Electrical Engineering**

Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur Organized

## **AICTE SPONSORED**

**Two Day National Conference** 

on

# "Design Aspects, Operation and Control of Smart Grids"

27th - 28th October, 2017

#### Venue:

Gyan Mandir Seminar Hall, Swami Keshvanand Institute of Technology, Management & Gramothan, Ramnagaria, Jaipur

# **Conference Proceedings**

The two day national conference on "Design Aspects, Operation and Control of Smart Grids" was organized on 27<sup>th</sup> – 28<sup>th</sup> October, 2017

# **INAUGURAL SESSION** (27<sup>th</sup> October, 2017)

Venue: Gyanmandir Auditorium, Swami Keshvanand Institute of Technology, Management & Gramothan, Ramnagaria, Jaipur

**Chief Guest** : **Prof. B.K. Panigrahi,** Professor, IIT Delhi

Guest of Honour : Dr. Udaykumar Yaragatti, Director, MNIT, Jaipur

### Dignitaries on the Dais:-

**Chief Guest**: **Dr. B.K. Panigrahi,** Professor, IIT Delhi

Guest of Honour : Dr. Udaykumar Yaragatti, Director, MNIT, Jaipur

**Dr. S. L. Surana**: Director (Academics), SKIT, Jaipur

**Dr. S.K. Calla** : Director (D & W),SKIT, Jaipur

Mr. Jaipal Meel : Director SKIT

**Dr. Ramesh Pachar:** Principal, SKIT, Jaipur

The programme started with lamp lighting followed by the floral welcome of the Chief Guest and Guest of Honour.

**Dr. Ramesh Pachar** presented bouquet to guest of honor, Dr B.K. Panigrahi and Dr. S.K. Calla presented bouquet to Prof. Udaykumar Yaragatti.

The welcome note was delivered by the Director of the Institute **Mr. Jaipal Meel**. He stated that to contribute to the electrical power sector development and generation of electrical power, every individual needs to pay his bill, by saving electricity and stop it's wasteful utilization. He also stressed on the importance of moral education among the youth.

After that **Dr. S.L. Surana** addressed the audience about the objective of the conference. He told a brief history of electrical power infrastructure development over the world. He also told about Smart Grid and its implementation in Northern India and told about the ongoing discussions in the world, on the Installation of HVDC networks. He proudly announced that SKIT has been declared number one engineering college among all RTU affiliated colleges.

Dr. Ramesh Pachar enumerated the sub topics of conference namely architecture of smart grid, smart sensors, smart energy storage, renewable energy sources and many more.

A motivational talk was given by the Guest of Honor **Dr. B.K. Panigrahi,** Professor, IIT Delhi. He threw light on the importance of smart grid and allied projects undertaken by government of india. After that the Chief Guest, **Prof Udaykumar Yaragatti,** Director, MNIT, Jaipur enlightened with his knowledge and wisdom.

To express gratitude to the learned guests, **Mr. Jaipal Meel** presented a shawl and memento to **Dr. B.K. Panigrahi** and **Dr. S.L. Surana** presented the shawl and memento to **Prof. Udaykumar Yaragatti** as a token of remembrance.

After that dignitaries unveiled souvenir of the conference and then **Vote of Thanks** for the Inaugural Session was delivered by **Dr. S.K. Calla.** 

The Inaugural session concluded at 11:00am. The function was very well attended by around 500 persons.

# Friday, 27th October, 2017

### **TECHNICAL SESSION** -1 (11:30 am -1:15pm)

**<u>Keynote Address :</u>** (10:45 am – 11:15 am)

After high tea in the technical session a keynote address on the topic "Research and Development Areas on Smart Grids" was presented by Prof B.K. Panigrahi. The goal of the presentation was how to upgrade the grid in smart way. He also threw light on load demand management, forecasting techniques, importance of smart grids, integration of computer with electric grid and more. With a added tinge of humor he concluded his speech by telling us about fuzzy logic.

Total 10 papers were presented in the Technical Session I.

Chairperson: Dr. B.K. Panigrahi, Professor, IIT Delhi

The Technical Session-I was followed by lunch, before the starting of the Technical Session-II.

TECHNICAL SESSION - II (2:15pm-4:00pm)

Keynote Address: (2:15pm-2:45pm)

After lunch **Prof. Ranjan Maheshwari**, Principal, Govt. Engineering College Ajmer presented a talk on the topic "Hybrid Electrical Vehicles in Synergy with Smart Grids". Some of the topics that he elaborated were conventional grid technology, smart grids, carbon footprint and hybrid versus electric automotive.

Total 08 papers were presented in the Technical Session I.

Chairperson: Prof. Ranjan Maheshwari, Principal, Govt. Engineering College Ajmer

# Saturday, 28th October, 2017

TECHNICAL SESSION — III (08:00— 11 am.)

### **Keynote Address:**

Day 2 of conference was beautifully started with a Keynote Speech by **Dr. Rajesh Kumar, MNIT**. He classified challenges of existing energy systems as technical, commercial and regulatory. Speaker told us about evolution of energy systems augmented with motivations of energy internet infrastructure. Session was concluded with interesting question answer session.

An expert talk was followed by **Dr. Virendra Sangtani, Professor EE Dept., PCE Jaipur.** He discussed about power system components, micro grids, matrix converters and modeling of induction motors.

Next talk was delivered by Mr. Vinod Tiwari from Genus Power Infrastructure Limited on "Smart Metering Solutions". He spoke about new technologies like temper logging and alarts. His presentation was embellished with simple block and schematic diagrams.

Total 12 papers were presented in the Technical Session I.

Chairperson: Dr. Rajesh Kumar, MNIT Jaipur

The Technical Session-III was followed by High Tea, before the starting of the Technical Session-IV.

TECHNICAL SESSION – IV (11:30 am-2:00pm)

#### **Keynote Address:**

After high tea **Dr. M.P. Sharma,** Asst. Engineer, RRVPN Ltd., Jaipur presented his talk on "Challenges in Integration of Large scale wind and solar power plant with Rajasthan grid". In this key note he overviewed the rajasthan power sector. He included reactive power management in RRVPNL and generating switch yard. He concluded by proposing possible technical solutions for frequency control.

Total 16 papers were presented in the Technical Session I.

Chairperson: Dr. M.P. Sharma, Asst. Engineer, RRVPN Ltd., Jaipur

There was a lunch break from 2:00 pm to 3:00 pm after which the technical session IV was resumed.

# VALEDICTORY SESSION (3:00pm)

**Brief report of seminar:** Brief report of the Two Days National Conference was presented by Convener who summarized the events of each of the technical sessions.

### **Distribution of Certificates:**

The Certificates are distributed by **Dr. M.P. Sharma, Dr. S.K. Calla, Dr. S.L. Surana and Dr. Akash saxena** to all participants who had presented technical papers in the Conference.







