One Day Pre-Conference Tutorial
on
SMART GRID SYSTEMS
26.08.2011
as a part of the
INTERNATIONAL CONFERENCE ON RENEWABLE ENERGY UTILIZATION (ICREU) - 2012
Organized by
Department of Electrical and Electronics Engineering,
COIMBATORE INSTITUTE OF TECHNOLOGY: COIMBATORE – 14
Jointly Organized with
Oklahoma State University, Stillwater, USA

REPORT

The electrical power generation, transmission and distribution system has survived for decades with limited intelligence. But the emergence of the independent power producers, green power sources and new regulatory regimes are making it imperative to add smartness to the grid. Utility companies are embarking upon the most sweeping modernization of the power grid in a century through the deployment of smart grid technologies. Smart grid system encompasses a more flexible, more intelligent and more accommodating network that enables massive amounts of intermittent renewable energy resources to be absorbed while allowing distributed generation and a host of other innovations. To address the environmental pollution and the global climate changes the renewable energy resources are expected to play a growing role in the foreseeable future as well as other low-carbon generation options. These developments as well as variable pricing schemes will mean that the future smart grid must act as a two-way conduit and as an integrator as opposed to its current one-way role delivering power from central generation sources to load centers. Aside from examining the future role of smart grid, this one day pre-conference tutorial will focus on an evolution involving the application of smart meters to deliver smart energy to an increasing array of smart devices. The tutorial also provides a platform to discuss engineering-

dominated views with appropriate network integration which will result in smart energy consumption, reduce peak demand, and encourage energy efficiency and lower GHG emissions.

The one-day preconference tutorial on Smart Grid held on 26th august 2011 in the library AC conference hall, library building at 9.30am was inaugurated by Dr.V. Selladurai, Principal, Coimbatore Institute of Technology with his presidential address.

Dr.S.Vasantharathna, Head, Department of EEE the welcomed the gathering. Dr.S.Shanmugam, Administrative officer, Coimbatore Institute of Technology offered his felicitation.

Organizing Secretary of this one day preconference tutorial Dr. E. Chandira Sekaran presented the overview of the program.

Joint secretary of this program Er. S. Elango proposed vote of thanks.

The one-day preconference tutorial planned for two technical session in the morning and three technical sessions in the afternoon as mentioned below.

First technical session was handled by Dr. Sishaj.P. Simon, Assistant Professor, Dept. of Electrical Engg., National Institute of Technology, Trichy on the topic of Evolution of Smart Grid Systems.

Second session was presented by Prof.S. Kumaravel, Assistant Professor, Dept. of Electrical Engg. National Institute of Technology, Calicut on the topic of Design, Modeling and Simulation of Smart Grid Systems.

Dr.M.P. Selvan, Assistant Professor, Dept. of Electrical Engg. National Institute of Technology, Trichy delivered expert lecture on Placement of Distributed Generated Systems for Smart Grid.

Er. V. Chandra Sekar, Scientist-E/Joint Director, Power Electronics Group, C-DAC, Trivandrum delivered expert lecture on Concept of Vehicle to Grid Energy Conversion.

Sri.P. Rajesh Kumar, Head & Program Manager, Nest Network Systems Technology (P) Ltd., Trivandrum explained briefly on the topic of Smart Meters for Smart Grid Systems with practical demonstration.

The overwhelming response of this one day preconference tutorial was received and the total number of participants is 169, among which one industrial participant, 25 academic participants and 143 student participants from various institutions.

We express our sincere thanks to all the experts coming from various reputed institutions and industries who have accepted our invitation and given excellent presentation and interactions to the participants.

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