

1. Title of the special session:

Bidding Strategies in an Emerging Electricity Market.

2. Objective of the special session:

During the recent years, the renewable energy usage around the globe has been on the upward swing due to low carbon emission. Electrical power productions and percent of installed capacities of renewable power plants go higher and will turn into the significant power generators soon. Owing to this reason, Renewable Energy Sources are under prime concern with the annihilation of fossil fuels along with carbon emissions. This has led to new dimensions of exploration in optimal bidding strategy with amalgamation of renewable based power generation, which further draw the interest of researchers. The main disadvantages of renewable power production are its uncertainty and unpredictable nature which always result in deviation from the actual generation. In the deregulated environment, the uncertainties of renewable power have increased the problems manifold for the producers in devising an optimal bidding strategy with Conventional Power Sources. Hence there is a need of novel energy policies, optimization techniques, modelling of renewable energy sources and evolving technologies to support the enhancement of renewable energy sources and provide solutions to the techno-economic challenges of emerging electricity market.

3. Topics of the special session (Not limited to)

- I. Bidding strategies.
- II. Technical issues and solutions for renewable energy sources in light of the destruction of fossil fuels and reduction of carbon emissions.
- III. Methods of optimisation and approaches to the solution of bidding strategies.
- IV. Flexibility issues in an emerging electricity market
- V. Technology advancements to support renewable energy sources.
- VI. Policies and regulations for emerging electricity market.
- VII. Handling of Uncertainty related to the renewable.
- VIII. Modelling of renewable energy sources.

4. Proposer full name and affiliation (Chair of the special session)

Dr. Satyendra Singh, Assistant Professor I, Faculty of Electrical Skills Education,
Bhartiya Skill Development University Jaipur, Rajasthan, India