Transformative Role of Local Direct Current Power for Nearly Free Electric Power

Panel Organizer: Dr. Rajendra Singh, Clemson University, USA

When: Wednesday September 5th, 2018, 1.30 pm – 3.30 pm

Where: Ballroom B

Providing sustainable and clean electrical power to current global population of about 7.6 billion and potential population of 11.5 billion by the end of 21st century is a huge challenge. The cost of local direct current power generated by free fuel based on photovoltaic systems and wind turbines and stored in batteries has reached to a point that with appropriate national and global policies, we can provide sustainable and clean electric power to everyone. Other than climate change mitigation, solving water and electrical mobility challenges, we can also eradicate energy poverty in general and global poverty in particular. In this panel, we will present pathways and potential directions for obtaining clean, sustainable, resilient, reliable and nearly free electrical power that has the potential of transforming the global social and economic structure.

Panelists:

- Nearly Free Sustainable and Clean Local DC Power for All

  Rajendra Singh, Clemson University, USA

- DC Microgrids for Safe, Resilient, and Economical Power Anywhere

  Daniel Gregory, Pos-En, USA

- Protection considerations in DC Microgrid
  Sukumar Brahma, Clemson University, USA

- Situational Intelligence for Real-Time Optimal Operations of DC Microgrids
  G. Kumar Venayagamoorthy, Clemson University, USA