

# **2015 IEEE Green Energy and Systems Conference (IGESC 2015)**

**Long Beach, California, USA  
9 November 2015**



**IEEE Catalog Number: CFP1531Y-POD  
ISBN: 978-1-4673-7264-0**

## Registration

## Keynote Speech

Renovating the Power System

## Morning Session (Track 1 and Track 2)

### ***A Comprehensive Economic Optimization Plan for Microgrids Considering Grid Interconnection and Line Congestion***

Somayeh Abbasi and Arash Jamehbozorg (California State University Los Angeles, USA)

pp. 1-6

### ***A multi-objective optimization approach for efficient energy management in smart grids***

Ramesh Rajagopalan (University of Saint Thomas, USA)

pp. 7-10

### ***A Review of AC/DC Microgrid- Developments, Technologies, and Challenges***

Reza Sabzehgar (San Diego State University, USA)

pp. 11-17

### ***Power Flow Optimization Methods for Distribution Systems***

Paula Quintana-Quiros (California State University, Long Beach, USA); Hen-Geul Yeh (California State University Long Beach, USA)

pp. 18-23

### ***Thermal Behavior of Aged Lithium-Ion Batteries: Calorimetric Observations***

Jan Geder (TUM CREATE, Singapore); Raghavendra Arunachala (TUM CREATE LTD, Singapore); Shishir Jairam (TUM CREATE, Singapore); Andreas Jossen (Technische Universitaet Muenchen, Germany)

pp. 24-29

### ***Performance Analysis of Energy Storage Systems connected to a Double-Fed Induction Generator***

Youngil Kim, Junda Zhao and Robert Harrington (The George Washington University, USA)

pp. 30-34

### ***Siting and Sizing Dispersed Energy Storage in Power Transmission Networks***

Miguel Silva and Ricardo Pastor (R&D Nester, Portugal); Tao Shi (China Electrical Power Research Institute, Portugal); Liang Zhao and Jilei Ye (China Electrical Power Research Institute, P.R. China)

pp. 35-40

### ***Development of A Nonlinear Wind-turbine Simulator for LPV Control Design***

Xiangming Xue, Yiming Bu and Bei Lu (CSU Long Beach, USA)

pp. 41-48

## Lunch and Poster Session

## Sustainability Project of CSULB

## Lunch Talk: The Electric Warship as a Microgrid

## Afternoon Session

***The optimal planning and dynamic operation of distributed generation method based on modified multi-objective optimization in power distribution system***

Tairen Chen, Olga Lavrova and Jane Lehr (University of New Mexico, USA)  
pp. 49-54

***A Distributed Framework for Frequency Regulation in Large-scale Prosumer-based Power Systems***

Masoud Honarvar Nazari (Georgia Institute of Technology, USA)  
pp. 55-60

***Defining Techniques For Developing an Energy Analysis Service on a Middleware For Technical Optimism of Green Buildings***

Alan Redmond (Sigma-Orionis, France); Peno Pan (UC Irvine Extension, USA)  
pp. 61-66

***Economics of Residential Energy Arbitrage in California using a PV system with directly connected Energy Storage***

Richard Lam (California State University, Long Beach, USA); Duc Tran and Hen-Geul Yeh (California State University Long Beach, USA)  
pp. 67-70

***Decision Tree-based Machine Learning Algorithm for In-node Vehicle Classification***

Kyle Ying (California State University, Long Beach, USA); Alireza Ameri Daragheh, Ankit Trivedi, Dilip Ravindra, Darshan Patel and Mohammad M Mozumdar (CSU Long Beach, USA)  
pp. 71-76

## Award for Student Poster Session and Closing Remark

## Ice Cream Social Sponsored by IEEE Women in Engineering