

Paper Session VI Thursday, March 10th, 2016 8:00 am-10:00 am Grand Ballroom C
Distribution Networks

Chair: *Aroldo Couto (ABB, USA)*

Co-Chair: *A. Benigni (University of South Carolina, USA)*

8:00-8:20: Smart Grid: Underground Distribution Feeder Automation Using Digital Technology
David G. Hart, Mike Kockott, Jared Gregory, Aroldo Couto (ABB, Raleigh, USA)

8:20- 8:40: Benders' Decomposition Applied to Energy Resource Management in Smart
Distribution Networks
*J. Soares, Bruno Canizes, Zita Vale (Polytechnic of Porto, Portugal), G. Kumar Venayagamoorthy
(Clemson University, USA)*

8:40-9:00: Calculation of Relay Currents in Active Weakly-Meshed Distribution Systems
Luka Strezoski, Marija Prica (Case western Reserve University, USA)

9:00-9:20: Probability of Distribution Network Pole Failure under Extreme Weather Conditions
Rajatha Bhat, A. P. Meliopoulos (Georgia Institute of Technology, USA)

9:20-9:40: Impact Analysis of Landfill Gas to Electricity Distributed Generation on Existing
Distribution Networks to Mitigate SA Energy Shortages
*Sanjeeth Sewchurran (eThekweni Electricity, South Africa), Innocent E. Davidson (University of
KwaZulu-Natal, South Africa), Olorunfemi Ojo (Tennessee Technological University, USA)*

9:40-10:00: Feasibility of NB-PLC in LT Power Distribution Network of Electric Utility in Pakistan
*Abdullah Asghar Sheikh, Qasim Idrees, Massab Ahmad, Muhammad Assad Arshad, Imran
Mahmood, Ubaid Ullah Fayyaz, Inam Elahi Rana, Nauman Ahmad Zaffar (SBA School of Science
& Engineering, Pakistan)*