INVITED SEMINAR
Wednesday, October 17th, 2012, 3:00pm – 4:00pm, Zachry 203

TITLE
FROM POWER FAULT ANALYSIS TO PROGNOSTICS
Mr. Bert Wank, Arthur Morris
infiniRel Corporation

Abstract
This talk illustrates the current issues of our power grid, the challenges arising from renewables integration, and the limitations of current technologies that attempt to support a stable grid, including synchro-phasors. A historical approach of short circuit current determination, grid integration utilizing power electronics to add VAR control, and response time requirements to support a dynamic control system are highlighted in a proposal to integrate a variety of energy storage solutions. Demands for the new grid, such as power quality, grid awareness of participating energy nodes, and standardization efforts are introduced. The session objective is to motivate areas of applied research that will help transform our outdated grid architecture of the 20th Century into a digitally enabled, yet secure 21st Century solution, which efficiently integrates alternative energy resources with traditional infrastructure, bringing distributed intelligence to distributed generation. The session will connect technologies with economic, regulatory, and organizational observations, which can hinder or accelerate new technology adoption.

Speakers Bio
Mr. Wank is founder and CEO of infiniRel Corporation. A 19-year veteran of the power semiconductor industry, global innovator and entrepreneur, Bert defined and launched 14 power and battery management product lines for companies such as Texas Instruments and Dallas Semiconductor. He currently serves as an outside Director on the Board of Pancon Corporation, a privately held, global manufacturer of high reliability film capacitors and connectors. During his career, Mr. Wank has published 12 technical articles in both English and German, presented at PCIM, Comdex, and Photon conferences, and co-authored a widely-cited business article on knowledge supply chain issues in Intellectual Property Management. In 2001, Mr. Wank also served as expert witness for battery management in an asserted patent infringement for Silicon Valley law firm Blakely Sokolof Taylor & Zafman, and in 2012 was hired as trainer for a 3-day workshop on power fault analysis by Uni-Strategic, Kuala Lumpur, Malaysia. Earlier in his career he served as Lieutenant in the German NAVY assigned to power plant operations. Mr. Wank holds an MBA in International Business from Thunderbird, Glendale, AZ, and a B.S.E.E. in Control Systems Engineering from the University of Cooperative Education in Lorrach, Germany.

Arthur Morris brings to infiniRel 40-years of power plant engineering, operations & maintenance experience at companies such as Babcock & Wilcox, Florida Power & Light, Raytheon, Lakeland Electric, and Dynergy. As senior project manager, Arthur has completed all phases from concept to start-up of power plants across multiple energy domains in the United States and abroad. As course facilitator, he designed the training course on ASME efficiency testing and instructed over 300 Utility and EPC Engineer personnel.