#### Hala Ballouz, P.E.

Hala N. Ballouz is the President and Owner of Electric Power Engineers, Inc (EP), Vice President and Board member of the Texas Renewable Energy Association, and member of the Wind Coalition. Hala is a lead consultant in the Electric Power Industry since 1991, specifically for renewable energy development. She has extensive experience in renewable energy integration and design of wind, solar, biomass, as well as energy storage, with numerous significant publications in the power industry; She is a P.E. in the States of Texas, Idaho and Rhode Island; B.S. (1989) and M.S. (1991) in Electrical Engineering, Texas A&M University.

# **John Adams**

John Adams received his B.S.E.E. from the University of Texas at Austin in 1982 and worked for 15 years with Houston Lighting and Power in Engineering at their control center and system planning. After moving to the ERCOT ISO in 1996, John provided engineering support to ERCOT's control room floor both before and after creation of the zonal market. After over 5 years in zonal grid operations he moved to the nodal market development project, before returning briefly to operations as Director of Grid Operations. In the last two years John oversaw development of business processes for Nodal operations and is now managing ERCOT's Resource Integration department. He has 30 years of experience in power systems operations, is currently a Principle Engineer in Resource Integration, and is a registered professional engineer in Texas.

# **William Peter**

William is a Systems Engineer for SunPower Corporation, providing support to the Utility Power Plants division on Interconnection and Grid Integration issues. He works closely with utilities and regulatory bodies, providing technical support for SunPower in guiding Utility Scale Solar PV projects through the Interconnection process. He is active in the NERC Integration of Variable Generation Task Force (IVGTF) and WECC Renewable Energy Modeling Task Force (REMTF). Prior to working for SunPower, William worked for Australia's electricity market operator and regulator. He later worked for Senergy Econnect, a UK based renewable energy consultancy, where he examined the treatment of wind and solar projects in the Regulatory Reserves market of Western Australia. He received his Doctorate in Electrical Engineering from Stanford University and his Bachelors of Engineering from Dartmouth College.

# John A. Diaz de Leon II, P.E.

Senior Consulting Engineer

Mr. Diaz de Leon joined AMSC in 1999 after working for Alliant Energy/Wisconsin Power and Light Co. for 20 years as a transmission and distribution planning engineer. One of the founding members of the Network Planning group within AMSC, he has been very instrumental in the product development efforts of our FACTS products starting with the initial D-SMES units, followed by the D-VAR<sup>®</sup> systems and the AMSC SVC. At AMSC, he performs planning studies to analyze utility systems for voltage, capacity, stability, transfer capability, harmonic and power quality problems. He also conducts studies to analyze wind and solar farm interconnection requirements that include LVRT and HVRT capabilities, harmonic and power quality problems, voltage regulation and power factor control. He earned his B.S. degree in Electrical Engineering in 1978 from the University of Wisconsin. He received his P.E. license from the State of Wisconsin in 1983, was elected to Senior Member of the IEEE in 2008 and has co-authored and presented papers at IEEE, EUCI and other professional forums.

#### Dr. John W. Zack

Dr. John W Zack is a principal and the director of forecasting at AWS Truepower, LLC. He is also the President, Chief Scientist and co-founder of MESO, Inc., a company that specializes in the development and application of geophysical numerical models in a wide range of industries. In his role with AWS Truepower he has directed the development and operational implementation of AWST's wind and solar power production forecasting system and the MesoMap wind resource assessment system. Dr. Zack is the author of numerous technical articles about wind and solar forecasting as well as other applications of geophysical numerical models, which have been published in the professional journals of the atmospheric sciences and other disciplines. He has earned a BS degree in meteorology and oceanography from New York University and a Ph.D. in atmospheric science from Cornell University.

#### **Elie Nasr**

Elie Nasr is Senior Business Development Manager at SMA America. He is responsible for the development of new opportunities in the North American utility-scale PV market segment and compliance with interconnection requirements for large scale and high penetration DG systems. Prior to joining SMA, Nasr founded Xtensible Power Technology Inc., a consulting company providing a variety of executive-level advisory services to utilities and firms servicing the renewable and T&D segments.

Before that, Nasr served as the vice president of business development for the utility segment of Satcon Technology Corporation, a provider of renewable energy solutions for distributed power markets. Nasr's utility-related career spans almost 25 years. He began as a power systems engineer at GE Energy, where he held increasing levels of responsibility in the development and marketing of EMS and DMS solutions to utilities. Nasr then transitioned to Siemens Power Technology International, a division of Siemens Energy, where he served as Executive Consultant of Business Development and led the go-to-market strategy and architecture of Siemens PTI common information modeling and analysis (CIM) software tools, PSSODMS and "Model on Demand" (MOD).

Nasr holds a BS and MS in electrical engineering and an MBA in finance from Florida Institute of Technology. He is an IEEE member, a frequent speaker/presenter at renewable energy conferences and was recognized as an honor member in the 2008 edition of the Cambridge Who's Who registry of executives and professionals.

# **Tony Daye**

As a senior member of Green Power Labs' Leadership Team, Mr. Daye has a background in electrical engineering and over 15 years experience within the energy and IT sectors. Mr. Daye has extensive

experience in renewable energy projects including resource assessment, utility-scale solar PV/CSP project planning, IT systems integration, solar power forecasting and solar energy management. Professional roles held by Mr. Daye have included; Vice-Chair, Canadian Electrical Code, Renewable and Distributed Energy; member of various ISO technical working groups; and member of Natural Resource Canada's Technical Advisory Committees on Wind Power and Marine Energy.