# Electricity Advisory Committee Meeting October 19 & 20, 2011 Speaker Bios

### **Panel Discussion on Micro-Grids**

### **Thomas Owen Bialek,** Chief Engineer – Smart Grid, San Diego Gas & Electric

Tom Bialek is currently employed by San Diego Gas & Electric Company (SDG&E) as a Chief Engineer on the Smart Grid Team. His present responsibilities involve smart grid strategy and policy for transmission and distribution issues including equipment, operations, planning, distributed generation and development of new technologies. He is also the Principal Investigator on DOE and CEC funded Micro Grid projects. Mr. Bialek has held various positions with other North American utilities and equipment manufacturers since graduating in 1982. His experience includes electric utility design, planning and operation and equipment design, development and manufacturing. Mr. Bialek is an IEEE Power Engineering and Dielectric and Electrical Insulation Society member. Mr. Bialek was also the former Failure Mechanism Technical Committee Chair and Secretary of the Dielectrics and Electrical Insulation Society and Working Group Member for Surge Arresters. Mr. Bialek is also a member of Phi Kappa Phi Honors Society. He is also a registered Professional Engineer, Electrical Engineering, in the State of California. He has authored several papers on surge protection of equipment and testing of cables. Mr. Bialek received a Bachelor and Master of Science Degree in Electrical Engineering from the University of Manitoba in 1982 and 1986 respectively. He also obtained a Doctor of Philosophy in Electrical Engineering from Mississippi State University in 2005.

# Robert Lasseter, Emeritus Professor, College of Engineering, University of Wisconsin-Madison

Robert H. Lasseter (F'1992) received a Ph.D. in Physics from the University of Pennsylvania, Philadelphia in 1971. He was a Consulting Engineer at General Electric Co. until he joined the University of Wisconsin-Madison in 1980. His research interests focus on the application of power electronics to utility systems. This work includes microgrids, Flexible AC Transmission Systems (FACTS) controllers, use of power electronics in distribution systems, and harmonic interactions in power electronic circuits. Professor Lasseter is a Life Fellow of IEEE, past chair of IEEE Working Group on Distributed Resources and IEEE distinguished lecturer in distributed resources.

### Merrill Smith, Program Manager, DOE Office of Electricity Delivery and Energy Reliability

Merrill Smith has been a program manager in the R&D Division of the Office of Electricity Delivery and Energy Reliability since 2006, working on Smart Grid and related technologies. Ms. Smith's focus area is on microgrid technologies including utilization and integration of clean power generation into the distribution system and its effects on energy efficiency, security, and impact to the grid. In addition her work includes the Smart Grid Demonstration Program which is examining the integration and optimization of a variety of smart grid technologies. Ms. Smith was one of the founding members (founded in 2000) of the Distributed Energy Office at the Department of Energy where her primary responsibility was managing the National Combined Heat and Power program. In addition, she has managed several other programs including work in materials development and development of low emissions technologies for Advanced Turbines and Microturbines. Ms. Smith is formally from the Industrial Technologies Program where she worked on a number of DOE initiatives targeting the promotion of advanced power systems, bioenergy and Industries of the Future. Ms. Smith joined DOE in 1991 after working as a design engineer and construction manager with several engineering firms. Ms. Smith earned a Civil Engineering degree from Virginia Tech and received a Masters in Engineering Management from the George Washington University.

### Panel Discussion on Interconnection-Wide Transmission Planning Processes

### David Whiteley, Consultant, Eastern Interconnection Planning Collaborative

David Whiteley is engaged as a consultant to the group of Planning Authorities from the Eastern

Interconnection that are currently advancing the concept of an open and transparent approach to performing transmission system analyses at the interconnection level based on the roll-up of existing regionally developed plans. This effort is known as the Eastern Interconnection Planning Collaborative. Prior to starting his own consulting company, Mr. Whiteley was employed by the North American Electric Reliability Corporation (NERC) as Executive Vice President from March, 2007 to March 2009. In that position, he was responsible for overseeing NERC's activities in Standards; Reliability Readiness; Training, Education, and Personnel Certification; Event Analysis; Metrics and Benchmarking; and Members' Forums. Prior to NERC, Mr. Whiteley was Senior Vice President - Energy Delivery Services for Ameren Corporation – a position he assumed in January 2005 after serving as senior vice president, Energy Delivery, since October 2003. At Ameren, he was responsible for the planning, design, construction and technical support for all electric transmission and distribution systems for Ameren's operating utility companies. Mr. Whiteley was also responsible for transmission operations and the transmission interface with the Midwest Independent System Operator (MISO). He also led the company's transmission policy area and served on various task forces and committees of the Edison Electric Institute, the North American Electric Reliability Council, and the Association of Edison Electric Illuminating Companies. Mr. Whiteley started his career as an assistant engineer in the System Planning Department of Union Electric Company in 1978. Mr. Whiteley earned a Bachelor's degree in electrical engineering from Rose- Hulman Institute of Technology, Terre Haute, Indiana. He holds a Masters degree in Electrical Engineering from the University of Missouri-Rolla. He was granted a Professional Degree in Engineering from the Electrical Engineering Department of the University of Missouri-Rolla. Mr. Whiteley is a registered professional engineer in the states of Missouri and Illinois. He is also a member of the National Society of Professional Engineers and the Institute of Electrical and Electronics Engineers.

### Brad Nickell, Director of Transmission Planning, Western Electricity Coordinating Council

Bradley Nickell currently serves as the Director of Transmission Planning at the Western Electricity Coordinating Council (WECC). In this capacity, he leads the effort to support WECC members in understanding the future transmission needs of the Western Interconnection. In addition, Mr. Nickell leads WECC's planning policy support collaborations with state and provincial organizations in the West. Prior to joining WECC, Mr. Nickell served as the Technology Manager for Wind Energy Systems Integration at the U.S. Department of Energy. His 15 years of electric utility experience includes generator control design, bulk system operations, facility planning, and regulatory compliance training. Mr. Nickell holds a BSEE in electric power systems from Iowa State University and an MBA in finance from the University of Colorado.

## Warren Lasher, Manager of Long-Term Planning and Policy, Electric Reliability Council of Texas (ERCOT)

As Manager of Long-Term Planning and Policy for ERCOT, Mr. Lasher's responsibilities include long-range interconnection-wide planning studies, generation reserve margin studies and analyses of potential impacts of pending regulatory changes. His department was responsible for the development of the CREZ Transmission Plan, as well as recent studies of the potential impacts to the ERCOT system from carbon dioxide emissions limits and pending EPA regulations. Prior to his work at ERCOT, Mr. Lasher was employed by the Southern Company in Birmingham, Alabama, where he worked in Engineering and the Generation Planning and Development organizations.