### Colin Meehan, Director of Regulatory and Public Affairs, First Solar

Colin Meehan is Director of Regulatory and Public Affairs at First Solar, with responsibility over Texas and the eastern U.S. Most recently, Mr. Meehan led Comverge, Inc.'s demand response regulatory and market strategy in Texas and California. Prior experience includes serving as Environmental Defense Fund's Policy Manager for U.S. Climate and Energy; Wholesale Settlement Analyst for the Lower Colorado River Authority focusing on ERCOT nodal market implementation; and as a wholesale power markets analyst for ICF International where he used their proprietary Integrated Planning Model (IPM) to help generation owners make investment decisions.

Mr. Meehan earned a Bachelor of Arts degree in Math and Economics from the University of Rochester and a Master of Science degree in Energy and Earth Resources from the University of Texas at Austin.

# Gurcan Gulen, Senior Energy Economist, Bureau of Economic Geology at the University of Texas at Austin

Gürcan Gülen is Senior Energy Economist at Bureau of Economic Geology's Center for Energy Economics, The University of Texas at Austin, where he investigates and lectures on energy value chain economics and commercial frameworks. He worked on oil, natural gas and electric power projects in North America, South Asia, West Africa, and Caucasus, focusing on the economics, policy and regulation of resource development and delivery, and power market design. He has been working in an interdisciplinary team to assess shale gas and oil resources in the U.S. and natural gas demand assessment in the electric power, industrial and transportation sectors. Dr. Gülen has published in peer reviewed and industry publications, and presents regularly to a wide range of audiences. He served in the U.S. Association for Energy Economics in various positions and was the editor of USAEE Dialogue for several years. He is a USAEE Senior Fellow. He is also a member of the Society of Petroleum Engineers, American Economic Association and Gulf Coast Power Association. He received a Ph.D. in Economics from Boston College and a B.A. in Economics from Bosphorus University in Istanbul, Turkey.

### Michael Goggin, Senior Director of Research, American Wind Energy Association

Michael Goggin is the Senior Director of Research at the American Wind Energy Association, the trade association for the U.S. wind industry. Michael oversees analysis that supports the organization's advocacy work and the collection of data that is provided as a service to AWEA's member companies. Since joining AWEA in 2008, he has testified before a number of state legislatures and regulatory commissions, and has published articles on how wind energy is integrated into the power system and electricity markets. Michael holds a Bachelor's degree with honors from Harvard University.

## Michele Allen, Senior Director of Energy, Walmart Stores Inc.

Michele has over 19 years of experience primarily focused on Energy, Information Technology, and Consulting. Michele experience at Walmart has focused on leading Texas Retail Energy, a retail energy supply company through a massive expansion covering ERCOT, PJM, New England, New York, MISO, and the U.K. Texas Retail Energy purchases the electricity supply for Walmart, Sam's, ASDA, and Walmart's Distribution Centers in competitive markets.

Previous to Walmart, Michele led teams at Greenbrier and Russel, a Dallas-based software consulting company, The Williams Companies in Tulsa, Oklahoma, and the former Electronic Data Systems in Plano, Texas.

Michele is actively involved in numerous sustainable initiatives at Walmart, including projects to expand Walmart's renewable energy portfolio.

Michele earned a BBA in Business from Southern Methodist University and an MBA from The University of Tulsa.

# Dr. Varun Rai, Assistant Professor, LBJ School of Public Affairs at the University of Texas at Austin

Dr. Varun Rai is an Assistant Professor at the LBJ School of Public Affairs at the University of Texas at Austin, where he directs the Energy Systems Transformation Research Group. He is a Faculty Affiliate at UT Austin's Energy Institute. Before joining UT Austin in July 2010, he was a research fellow at the Program on Energy and Sustainable Development (PESD) at Stanford University from 2008-2010. Dr. Rai received his Ph.D. and MS in Mechanical Engineering from Stanford University and a bachelor's degree in Mechanical Engineering from the Indian Institute of Technology (IIT) Kharagpur.

## Dana Lazarus, Energy Analyst, ERCOT

Dana Lazarus is an energy analyst with expertise in environmental regulations, water resources, and the electric sector. Dana works for the Electric Reliability Council of Texas as the technical lead on environmental resource issues. In the past, Dana has worked for Abt Associates Inc., the White House Office of Management and Budget, and the Capital Area Council of Governments. She has a Master's degree in Public Affairs from the Lyndon B. Johnson School of Public Affairs, and a Bachelor's of Science in Environmental Engineering from Harvard University.

## Susana Hildebrand, Director of Environmental Policy, Energy Futures Holdings

Susana Hildebrand, P.E., joined Energy Future Holdings Corp as the director of environmental policy in April 2013. Because of her environmental focus, Hildebrand primarily supports Luminant's activities including plant and mine, wholesale marketing and trading, and development operations.

Hildebrand's major accountabilities include:

- Assisting in the development of Luminant's environmental policy positions on state and federal environmental issues.
- Providing counsel on environmental issues affecting the company to senior management.
- Aiding in communicating the company's environmental policy messages.

Previously, Hildebrand was an 18-year veteran with the Texas Commission on Environmental Quality. She was named chief engineer in 2009 and reported directly to the executive director. In this role, she was also the science adviser for the executive office, specifically regarding executive-level technical and policy matters. Her duties included monitoring federal initiatives that could affect the implementation of federal regulations or that could result in adverse consequences to the environment, the state or TCEQ.

Prior to her role as chief engineer, Hildebrand was director of the TCEQ's air quality division, which is responsible for developing the state implementation plan to restore air quality in areas in Texas exceeding the National Ambient Air Quality Standards. She directed air quality data analysis and state-of-the-art photochemical modeling in support of pollution control strategies and designs. She was also responsible for emissions inventory and fee assessments, emissions banking and trading programs, mobile source programs and the Texas Emission Reduction Plan, which provides grant funds to reduce nitrogen oxide emissions from large mobile internal combustion engines.

In addition to her state roles, Hildebrand participated at the national level in Clean Air Act Advisory Committee workgroups including the Section 185 Workgroup and the Multi-Pollutant Sector Approach Workgroup under the Economic Incentives and Regulatory Innovation Subcommittee. Additionally, she represented TCEQ and the agency's commissioner in the Climate Change Workgroup in 2009, which looked at Best Available Control Technology requirements and their application to greenhouse gas pollutants within the Prevention of Significant Deterioration under the Clean Air Act.

Hildebrand began her career in 1993 at the Texas Air Control Board, a predecessor agency of TCEQ. She served as a permit engineer in the air permits division, writing permits and technical guidance for chemical plant and refinery authorizations. She also helped develop a number of emissions banking and trading programs and led numerous teams implementing federal regulatory requirements and state legislation. Additionally, Hildebrand served as a special assistant and technical advisor to the TCEQ's chief engineer.

Hildebrand completed her bachelor's degree in aerospace engineering and her master's degree in environmental and water resource engineering at the University of Texas. In 2009, she was recognized by UT with the 2009 Outstanding Young Alumna in the Department of Civil, Architectural and Environmental Engineering. She is a licensed professional engineer in Texas.

# Calvin Opheim, Manager of Load Forecasting and Analysis, ERCOT

Calvin Opheim is currently the Manager of Load Forecasting and Analysis at ERCOT, responsible for load forecasting, load profiling, and data analysis. In the past he was responsible for developing the load and generation processes for the zonal market of which many are still in use in the nodal market.

He has worked in the electric utility industry for 30 years including 7 years at Florida Municipal Power Agency (large municipal joint action agency) with responsibilities including the creation of the long-term load forecast, 8 years at Progress Energy (IOU, now part of Duke)) focusing on load research including demand response, and 15 years at ERCOT. He holds a bachelor's degree in Statistics from the University of Central Florida and a graduate certificate in Applied Statistics from Penn State.

#### Tom Currah, Chief Revenue Estimator at Texas Comptroller of Public Accounts

Tom Currah is the state's Chief Revenue Estimator and director of the Revenue Estimating Division at the Comptroller's office. Revenue Estimating is responsible for producing the Biennial Revenue Estimate before each regular legislative session, informing the Texas Legislature how much money is available to be appropriated in the state budget. The division also helps verify that the final budget spends no more revenue than the Comptroller expects to be available and estimates gains or losses from any bill that affects state revenues.

Tom has worked at the Comptroller's office since 1999. During his tenure, Tom has developed and led an array of in-depth, complex and award-winning data analysis and research projects related to critical issues affecting Texas and its economy. He has a bachelor's degree from the University of Texas and a master's from the University of Houston.

#### Mike Legatt, Principal Human Factors Engineer, ERCOT

Michael E. Legatt is the principal human factors engineer for the Electric Reliability Council of Texas (ERCOT), which manages the flow of electricity to 22.7 million Texas customers. Mr. Legatt has been a programmer for over 20 years, and worked in the energy, financial, medical, neuroscience research and educational sectors.

He has a Ph.D. in clinical health psychology/neuropsychology from the Ferkauf Graduate School of Psychology/Albert Einstein College of Medicine, and is currently pursuing a Ph.D. in energy systems engineering at the University of Texas at Austin.

As an amateur (ham) radio operator, he received a commendation for helping to provide emergency communications during the 2003 blackout in the northeastern United States, which sparked his interest in the psychology of energy management. He works to build systems designed to provide operators with needed information, optimizing for perception, speed, comprehension, and stress management. He also works at the organizational level to support the growth of the industry's high reliability culture.

At ERCOT, his development of the Macomber Map® has been featured in the New York Times, National Public Radio and T&D World. The Macomber Map was credited as being instrumental in helping ERCOT operators maintain grid reliability during several record-setting wind generation levels since 2010, and through several severe weather events since 2009. Macomber Map is now freely available as an open-source application.

He also works on the behavioral aspects of consumer electric use, researching electric vehicle to grid integration, behavioral aspects of conservation and consumer awareness in grid management, and the cybersecurity, behavioral, and reliability issues that arise with integration of new technologies across layers of the grid. He is ERCOT's lead on a collaborative project with the University of Texas at Austin, EV-TEC and the Pecan Street Project to study integrating electric vehicle charging and driver behavioral patterns with the bulk electric system. This research project looks at the viability of EVs to intelligently charge in a distributed fashion and provide ancillary services and other reliability-enhancing services.