

SPEAKER BIOGRAPHIES FOR ECAI 2007 WORKSHOP

Samuel F. Baldwin, U.S. Department of Energy (DOE) - Office of Energy Efficiency and Renewable Energy

Sam Baldwin is a PhD. Physicist and currently serves as the Chief Technology Officer and Member of the Board of Directors for the Office of Energy Efficiency and Renewable Energy at the U.S. Department of Energy. In previous positions he has served with the White House Office of Science and Technology Policy, the National Renewable Energy Laboratory, the Congressional Office of Technology Assessment, Princeton University, the U.S. Senate, and elsewhere. He is the author or coauthor of 9 books and monographs, and more than 30 papers and technical reports on physics, energy technology and policy, and other issues.

Dwayne Breger, Massachusetts Division of Energy Resources (MA DOER)

Dwayne Breger is the Manager of the Renewable Energy and Climate Change Group at the Massachusetts Division of Energy Resources. His group is responsible for the implementation of the state's Renewable Energy Portfolio Standard. Dwayne is a member of the Staff Working Group of the Northeast Regional Greenhouse Gas Initiative, a ten-state carbon cap and trade program to begin in 2009. He led the subgroup concerned with modeling the economic impacts of the proposed program.

Prior to his position at DOER, Dwayne served as a member of the faculty of Lafayette College, as a research associate at UMass Amherst, and as a U.S. participant for the U.S. DOE in the International Energy Agency. In 1996-97 he worked as a joint AAAS/EPA Fellow and then contractor with the U.S. EPA on energy modeling for climate policy. He has been actively engaged with renewable energy for 25 years.

He holds a BS in Engineering from Swarthmore College, an MS in Technology and Policy from MIT, and a PhD in Resource Economics from UMass Amherst.

Mike Eckhart, American Council on Renewable Energy (ACORE)

Michael Eckhart is President of the American Council On Renewable Energy (ACORE), co-chairman of the World Council for Renewable Energy (WCRE), and a member of the Steering Committee of the REN 21 global policy network. Since its formation in 2001, ACORE has grown to have over 400 organizational members; producing three major national conferences per year on renewable energy business, finance and policy; and participating in international renewable energy policy affairs. Mr. Eckhart is a member of the Clinton Global Initiative. He also works through Solar International Management, Inc. on the financing of solar energy (SolarBank), and on the development of a new international debt security called Global Development Bonds (GDB) for the financing of sustainable development in the developing countries. He has over 25 years of experience in renewable energy, power generation, high technology, and finance. Previously, he was CEO of the IPP development firm United Power Systems, Inc.; Vice President of the venture capital firm Areté Ventures, Inc.; Manager of Strategic Planning for the Power Systems Sector of General Electric Company; and a Principal of Booz, Allen & Hamilton's energy practice. He served in the US Navy Submarine Service.

He received a BS in Electrical Engineering from Purdue University and an MBA from Harvard Business School.

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Professor Burton English, University of Tennessee

Burton English develops and uses simulation models to evaluate production and environmental issues associated with agricultural production. Involved in examining the economics of biomass to energy conversion for nearly 30 years, he has analyzed alternative environmental policies and impacts on production agriculture, examined alternative land use changes on net farm income, estimated the impacts of environmental policies on small and medium-sized agricultural producers, and projected the impacts of changes in the agricultural industrial complex and the corresponding changes to occur in the region/nation's economy. He has with his colleagues conducted recent national analyses for 25 X '25, the Governors Ethanol Coalition, Department of Energy, and USDA. Recently he has conducted feasibility studies on ethanol and biodiesel. He is also working on the TN Biofuels Initiative.

Various tools used in his research include crop simulation models, econometric models, linear programming models, logit models, I-O models, spreadsheet analytical models, and hybrid models for economic analysis. As a professor, he has taught graduate and undergraduate courses in Agricultural and Trade Policy, Agricultural Production, Managerial Economics, Agricultural Finance, Research Methods, Mathematical Programming, Agribusiness Operations Research, Advanced Quantitative Methods and Agricultural Supply Analysis.

Burton holds a B.S. in Forest Management from Iowa State University (1974). MS from New Mexico State University in 1976. PhD in Agricultural Economics from Iowa State University (1981).

Thomas S. Fiddaman, Ventana Systems

Tom Fiddaman joined Ventana in 1997 and has twenty years of experience in dynamic modeling. He has applied models to management and public policy issues, including the economic implications of global climate change, strategic electricity sector models for testing pollution reduction strategies, and natural gas supply and demand. Tom's business consulting includes models of next-generation technologies and international consumer markets. For a multi-national consumer packaged goods company he optimized pricing and advertising allocation. For IBM, he examined the future of B2B networks and the thresholds required to make them succeed. His dissertation research, with continuing development has analyzed energy-economy interactions and their implications for climate policy. Recently he has made model-based comparisons of low-carbon technologies and compared carbon taxes and permits. For DOE-NETL, he developed a strategic, top-down multi-pollutant model of the electric power sector in China. At RIVM and MIT in the 90s, he worked on simulation games for climate policy and collaborated on models that became the precursors of Integrated Assessment model components in use today. Tom received the 2006 Forrester Prize, awarded for the best contribution to the field of system dynamics published in the preceding five years.

Tom holds a B.A. Engineering Sciences, Dartmouth and a Ph.D. in System Dynamics /Operations Management, MIT Sloan School of Management;

Chris Hall, New York State Energy Research and Development Authority (NYSERDA)

At NYSERDA, Chris is responsible for electricity system modeling and analysis: macroeconomic modeling; energy use and price data; and NYISO market data.

Chris has a B.A. in Mathematics from the State University of New York at Potsdam and a Masters in Business Administration, with a concentration in management, from Clarkson University.

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Max Henrion, Lumina Decision Systems

Max Henrion has 25 years of experience as a researcher, educator, software designer, consultant, executive, and entrepreneur working to create and apply tools to help people make better decisions. He is coauthor of the book, *Uncertainty* (Cambridge University Press), and over 60 other publications. He is the founder and CEO of Lumina Decision Systems, Inc. Max was the lead designer of Analytica®, Lumina's quantitative modeling software, and of the Lumina Shopping Advisor, a Web-based personal decision expert, acquired and marketed by Ask Jeeves, Inc. As Vice President for Decision Technology for Ask Jeeves, he led the Ask Jeeves Decision Lab. He was the founding President of the Association for Uncertainty and Artificial Intelligence. He has created and deployed effective decision tools for corporate and public sector clients in environmental risk, energy systems, health care, and corporate investment strategy, as well as for consumers.

Susan Holte, U.S. DOE – Energy Information Administration (EIA)

Susan H. Holte is the Technical Assistant to the Administrator of the Energy Information Administration (EIA), the independent analytical and statistical agency of the U.S. Department of Energy (DOE). She provides technical support to both the Administrator and Deputy Administrator on a wide range of energy issues, particularly related to the modeling of energy markets. Previously, Ms. Holte held the position of Director of the Demand and Integration Division in EIA, where she managed the analysis and forecasting of U.S. end-use energy demand and the overall use of the National Energy Modeling System. She was responsible for the *Annual Energy Outlook*, EIA's annual report of domestic energy projections, and a number of reports on the potential impacts of policy initiatives on U.S. energy markets. Ms. Holte also worked for 2 years in the DOE Office of Energy Efficiency and Renewable Energy on benefits analysis. Ms. Holte joined the Federal Energy Administration, the predecessor agency of EIA, in 1973. She has contributed to the design and development of several major integrated models of domestic energy markets and participated in numerous analytical studies.

Susan holds Bachelor of Science and Master of Science degrees in Mathematics from the University of Delaware.

Thomas Jenkin, National Renewable Energy Laboratory (NREL)

Thomas Jenkin joined NREL's Washington Office in August 2004, and since then his work has focused on serving the analytic needs of the PAE, and EERE more generally. The scope of his work has been quite broad reflecting PAE's diverse needs and interests. Some current examples include: supporting the development of improved R&D benefit estimates by different programs and technologies, including the incorporation of technical and market risk into such estimates; exploring the potential uses and limits of portfolio analysis; facilitating a better linkage between science activities and applied technologies, and the development of REMAP, a forum that uses a variety of energy models to address a common policy question, and by doing so better understand why different models may provide different answers to the same question.

Thomas came to NREL with over 10 years experience in economic consulting in the energy industry. His work has focused on strategic, economic and market analysis, valuation and risk management in the natural gas and power sectors, including renewable energy. He has published work and given presentations on a wide variety of topics, including electricity storage and risk management.

Thomas has a B.Sc. in physics from the University of Bristol, a doctorate (D.Phil.) in physics from University of Oxford, and a master's degree in public and private management from the Yale School of Management, where he focused on strategy and economics.

Karl Jessen, Massachusetts Renewable Energy Trust

Karl Jessen is the economic development officer for the Massachusetts Renewable Energy Trust. With over 17 years in energy, he is now focused on building the clean energy cluster in the state. He has a BS in Electrical Engineering from Worcester Poly Tech and an MBA from Babson College.

Gary Kleiman, Northeast States for Coordinated Air Use Management (NESCAUM)

Gary Kleiman is a senior scientist and the Science and Technology Program Manager at NESCAUM specializing in air quality issues related to U.S. energy infrastructure. Acid deposition, regional haze, fine particulate matter and climate change are all interests in which Gary is active. He is currently leading the development and use of a multi-region MARKAL energy/economic model which serves as the centerpiece of an integrated assessment framework for energy and air quality issues at the regional level. The combination of a regional-scale energy technology model linked directly to regional air quality models, health benefits assessment tools and a regional-scale economic model provide the region with the capacity to examine future air quality protection programs from the perspective of the energy infrastructure, environmental and public health consequences and economic implications. This multi-pollutant policy analysis framework can simultaneously address programs dealing with climate change, criteria pollutants (ozone and PM_{2.5}), regional haze reasonable progress goals, acid deposition and mercury.

Gary received B.A. in physics and mathematics from the University of Colorado at Boulder and a M.S. in physics and astronomy from the University of Massachusetts at Amherst. He received his Ph.D. in atmospheric chemistry from the Massachusetts Institute of Technology.

Dr. Michael Lahr, Associate Research Professor, Center for Urban Policy Research, Rutgers University

Dr. Lahr has modeled and measured the economic consequences of investments, events, and programs for over 25 years. The main thrust of his published research has been on regional and urban economics, particularly upon improving the accuracy of regional economic models. Dr. Lahr has published over 50 articles and 15 book reviews in refereed journals and has co-edited three books on recent advances in both input-output analysis and regional science. He presently serves on the Board of the International Input-Output Association and has been the Chair for the North American Regional Science Council. Lahr is co-editor of the journal *The Review of Regional Studies*, is also on the Board of Editors for the *Journal of Regional Science, Economic Systems Research*, and the *Brazilian Review of Regional Studies*. Dr. Lahr has been affiliated as a research fellow or as an adjunct faculty member with the University of Groningen (Netherlands), The College of New Jersey, the U.S. Department of Agriculture's Economic Research Service, the University of Pennsylvania, the Regional Science Research Institute, and Bryn Mawr College.

John A. "Skip" Laitner, American Council for an Energy Efficient Economy (ACEEE)

Skip Laitner is the Senior Economist for Technology Policy for the American Council for an Energy-Efficient Economy (ACEEE). He previously served almost 10 years in a similar capacity for the US Environmental Protection Agency (EPA), but chose to leave the federal service in June 2006 to focus his research on developing a more robust analytical characterization of energy efficiency resources within energy and climate policy analyses and within economic policy models. Skip has more than 35 years of involvement in the environmental and energy policy arenas.

In 1998 Skip was awarded EPA's Gold Medal for his work with a team of other EPA economists to evaluate the impact of different strategies that might assist in the implementation of greenhouse gas emissions reduction policies. In 2003 the US Combined Heat and Power Association gave him an award to acknowledge his contributions to the policy development of that industry. In 2004 his paper, "How Far Energy Efficiency?" catalyzed new research into the proper the characterization of efficiency as a long-term resource.

Skip has a master's degree in Resource Economics from Antioch University in Yellow Springs, OH.

Michael Leifman, U.S. Department of Energy (DOE) - EERE

Michael Leifman is an economist within DOE's Office of Energy Efficiency and Renewable Energy, and manages the analysis portfolio for EERE's Planning, Analysis and Evaluation team. The analysis portfolio includes foundational work that deepens our ability to do further analyses, energy model development, technology risk analyses, policy analyses, and most significantly, an analysis of the prospective benefits of EERE and DOE R&D programs (AKA GPRA benefits). Prior to joining DOE in 2005, Michael worked in the EPA's Climate Change Division, and for an environmental policy consulting firm. He has published on energy modeling, and on socioeconomic drivers of GHG emissions.

He holds a M.S. in environmental sciences from Johns Hopkins, an M.S. in public policy from Carnegie Mellon, and a B.A. from the University of Chicago.

Dan Loughlin, U.S. Environmental Protection Agency (EPA)

Dan Loughlin is an environmental scientist with the U.S. EPA's Office of Research and Development. At the EPA, Dan is part of the Integrated Systems Analysis Workgroup, a multi-disciplinary team that is evaluating the linkages between global changes and air quality. As part of this work, the workgroup has developed national and regionalized versions of the MARKAL energy system model database.

Dan has an undergraduate engineering degree from Duke University and masters and doctoral degrees from N.C. State University.

Chris Namovicz, U.S. DOE – Energy Information Administration (EIA)

Chris Namovicz is an Operations Research Analyst for the Energy Information Administration's Office of Integrated Analysis and Forecasting. Mr. Namovicz maintains and updates wind and solar portions the National Energy Modeling Systems (NEMS), which is the primary model used to develop EIA's Annual Energy Outlook. Mr. Namovicz is responsible for analysis and forecasting of renewable resources and generation, including several reports to Congress analyzing the impact of renewable energy policies such as a national renewable portfolio standard and production tax credits. Prior to joining EIA, Mr. Namovicz worked as an Energy Policy Analyst with SENTECH, Inc. and Senior Analyst with Technology & Management Services, Inc.

He holds an M.S. in Environmental Science from Johns Hopkins University and B.S. in Engineering and Public Policy from Washington University in St. Louis.

Denise Mulholland, U.S. Environmental Protection Agency

Denise has worked at the US EPA since the mid-90s, helping state governments evaluate and implement policies that reduce greenhouse gas emissions. In the late 90s, she served as the program manager of EPA's State and Local Climate Change Program and in the early 2000s became the program's Director of State Analysis and Tools. Currently, she serves as a program manager for the Clean Energy-Environment State Partnership program.

Throughout her EPA tenure, she has initiated and/or managed the development of numerous software tools that facilitate the assessment of various benefits associated with mitigation options, including economic, energy, air quality, greenhouse gas and human health benefits.

Denise earned a Master of Economics from the University of Calgary in Alberta, Canada and a Bachelor of Arts in Economics from the University of Delaware.

Jeff Pillon, Michigan Energy Office

Jeffrey Pillon is Manager of Energy Data & Security for the Michigan Public Service Commission. He is responsible for monitoring energy supply and demand, emergency preparedness and management of the Commission's website and information technology applications. In 1978, he developed and continues to publish the Michigan Energy Appraisal, a short-term energy supply/demand outlook for Michigan. Since 1990, he has been responsible for energy forecasting and statistical analysis for the Michigan Commission. In the 1980's and 1990's he worked on Integrated Resource Planning and long term electricity sales and demand forecasts. He is the chair of the Energy Data and Security Committee for the National Association of State Energy Officials (NASEO).

In other duties, Mr. Pillon serves as the Emergency Management Coordinator for the Michigan Department of Labor & Economic Growth; and represents the National Association of Regulatory Utility Commissions (NARUC) Committee on Critical Infrastructure as well as NASEO on the Government Coordinating Council for the Energy Sector under the National Infrastructure Protection Plan. He is a member of the Michigan Homeland Security Preparedness and Critical Infrastructure Protection Committees. He has lectured nationally on energy assurance planning and preparedness and designed and assisted in conducting a series of multi-state regional energy emergency exercises. Mr. Pillon has worked for the State of Michigan on energy forecasts and regulatory issues, emergency preparedness and data systems since 1973.

Jeff is a graduate of Michigan State University in Political Science.

Walter Short, National Renewable Energy Laboratory (NREL)

Walter Short is a Principal Researcher and group manager at NREL, where he directs a number of analysis and modeling efforts related to renewable energy. He is the principal developer of the WinDS model of U.S. wind energy market potential, the initial developer of the HyDS model for the distributed production of hydrogen in the U.S., and the conceptual lead for the Stochastic Energy Deployment Systems Model (SEDS). He was a co-leader of the 2000 inter-laboratory study *Scenarios for a Clean Energy Future*. He has also conducted heat transfer, optical analyses and engineering-economics studies in the buildings and solar thermal programs at NREL. Prior to joining NREL in 1980, Mr. Short was an analyst at Stanford Research Institute.

Mr. Short holds a B.S. degree in mathematics from the University of Georgia and an M.S. in operations research from Stanford University.

Steve Smith, Pacific Northwest National Lab/Joint Global Climate Change Research Institute (PNNL/JGCRI)

Dr. Steven J. Smith is a scientist at the Joint Global Change Research Institute (Pacific Northwest National Laboratory and the University of Maryland). His research focuses on long-term socio-economic scenarios and the interface between socio-economic systems and the climate system in the areas of aerosols/greenhouse gases, energy efficiency, renewable energy, the carbon-cycle, and land-use changes. Recent research includes: examination of the role of non-CO2 forcing agents in policy scenarios, including sulfate aerosols, black carbon, and non-CO2 greenhouse gases; analysis of the role of renewable energy and energy efficiency; and analysis of the implication of uncertainties in the carbon-cycle. Smith is one of the developers of the ObJECTS framework, a new object-oriented modeling framework. Dr. Smith was a lead author for the Special Report on Emissions Scenarios.

Steve received his PhD in physics from the University of California at Los Angeles.

Bill Valdez, U.S. Department of Energy (DOE) - Office of Science

Bill Valdez is the Director of the Office of Workforce Development for Teachers and Scientists within the Department of Energy's Office of Science. His responsibilities include developing workforce strategies for the Department's scientific and technical workforce, and creating opportunities for students and educators to participate in the Nation's research enterprise as a means to improving the competitiveness of U.S. industry and overall scientific literacy.

In addition, Mr. Valdez has been leading an interagency effort, coordinated by the White House Office of Science and Technology Policy, that is designed to establish credible outcome measures for basic research, create new evaluation methods that focus on systems level analysis, and promote business models that will enable Federal R&D managers to improve investment decisions.

Mr. Valdez was elected as a Fellow of the American Association for the Advancement of Science in 2006 and is Vice Chair of the Senior Executive Association's Board of Directors. He was elected to the Board of Directors of the Senior Executive Association in 2005.

Mr. Valdez has held various positions at the Department of Energy since 1994, including serving as executive director of the DOE R&D Council and developing evaluation techniques for technology transfer programs. Mr. Valdez also served at the White House Office of Science and Technology Policy from 1998-99.

Mr. Valdez received a BA from the University of Texas and his MA in International Economics and Energy Policy from the Johns Hopkins School of Advanced International Studies.

Dave Vidaver, California Energy Commission (CEC)

Dave Vidaver has worked for the California Energy Commission for 12 years and currently heads the Procurement and Resource Planning Unit of the Commission's Electricity Analysis Office. His staff monitors and evaluates the procurement and resource planning of the state's utilities with a focus on the implications of these activities for meeting California's long-run policy goals related to reserve margin sufficiency, local reliability, renewable resource development and greenhouse-gas reductions. Prior to his current appointment, he worked in the Systems Modeling Unit of EAO overseeing long-run simulations of the WECC using production cost models and doing load-temperature studies for the Commission's Demand Analysis Office. His academic training is in economics.