Building Economic and Energy Security in the Heartland: A Midwestern Delegation to the Gulf Coast to Explore Development of the Enhanced Oil Recovery Industry

Houston, Texas - Jackson, Mississippi September 28-29, 2011

Delegation Participants

Valerie Brader recently joined Gov. Rick Snyder's administration as the Chief Energy Policy Officer for the Michigan Economic Development Corporation. Prior to this position, Ms. Brader was a corporate and environmental attorney with Bodman, PLC, a clerk for the Hon. John Feikens, an environmental consultant for federal agencies with Booz Allen, and the staff assistant for natural resources for Gov. Phil Batt of Idaho. A Rhodes Scholar and published author in the legal and scientific presses, Ms. Brader holds an A.B. magna cum laude from Harvard University and Radcliffe College, two masters degrees from the University of Oxford, and a J.D. magna cum laude from Georgetown Law Center.

Frank Chou recently joined the Clean Air Task Force as the International Innovation Manager. He will be facilitating the businesses between US and China for partnership in Carbon Capture and Storage (CCS) technology. He will assist companies in the gulf region and elsewhere in the US that are interested in using Chinese technology to lower the cost of capturing carbon dioxide. He will also assist Chinese companies that would like to collaborate with US-based companies and experts on the development of EOR operations. With a background in mechanical engineering and over thirty years of work experience in the engineering, procurement and construction business of petro-chemical industry, Dr. Chou was managing capital projects for Shell Oil, Dow Chemical, and doing mechanical engineering for Fluor and M. W. Kellogg. He has a BSME from National Taiwan University, MSME and Ph. D. from West Virginia University.

Brian Crowe is a Business Development Project Manager at the Iowa Economic Development Authority. His responsibility is to attract capital investment and job growth to Iowa. He primarily works with Iowa wind energy manufacturers, supply chain companies, educational institutions, and transportation companies to bring new

opportunity to Iowa. He also works with companies involved in renewable energy, advanced manufacturing, and value added agricultural. Prior to joining the Department, he was the Program Manager for the \$100 million Iowa Power Fund. The fund made investments in innovative companies and researchers in the renewable energy sector. He managed the marketing, due diligence and contracting process for the Power Fund Board, which made 50 investments in various renewable technologies that included cellulosic biofuels, wind, solar, hydrogen, energy storage, and efficiency. Mr. Crowe received his BA from the University of Illinois at Chicago. He also served from 2002-2004 as a volunteer with the Peace Corps in Romania.

Hal Fitch has served as Director of the Office of Geological Survey of the Michigan Department of Environmental Quality since 1996. He oversees the regulation of oil, gas, and mining operations in the state, and serves as the Assistant Supervisor of Wells and the Governor's Official Representative on the Interstate Oil and Gas Compact Commission. Mr. Fitch earned a Bachelor of Science degree in Geology from Michigan Technological University in 1972 and did graduate work in hydrology at the University of Arizona. He has spent most of his career with the Office of Geological Survey.

G. Vinson (Vince) Hellwig was appointed Division Chief of the Air Quality Division, Michigan Department of Environmental Quality (MDEQ), on December 2, 2002. Prior to joining the MDEQ, he was with the US EPA, Office of Air Quality Planning and Standards, in Research Triangle Park, North Carolina. Other work experiences include: Senior Vice President and National Air Programs Director with TRC Environmental, Inc.; Senior Vice President with TRC Process Engineering, Inc.; Senior Vice President and National Air Program Director with

Metcalf & Eddy. He is Past Co-President (representing states) of the National Association of Clean Air Agencies (NACAA), Past Chair of the Lake Michigan Air Directors Consortium, serves on the Board of Directors of The Climate Registry, and serves on the EPA Clean Air Act Advisory Committee. Mr. Hellwig holds a Bachelor of Science degree from Shorter University and performed graduate studies at Clemson University and Auburn University.

Bruce Hill has worked as Senior Scientist with the Boston based non-profit Clean Air Task Force (CATF) since 2000. He has worked as an exploration geologist for Sohio Petroleum Company, taught geology and environmental sciences for Chapman University and the University of New Hampshire, and conducted high-elevation air pollution monitoring research for Appalachian Mountain Club. Currently he serves as a geologist in CATF's CCS project focusing on anthropogenic CO2-EOR and geologic sequestration regulatory development. Dr. Hill has also conducted numerous air pollution exposure research investigations in the field and written numerous air pollution and public health reports for CATF. He received his Ph.D. in Geology from the Stanford University School of Earth Sciences and his B.A. in Geology from the University of Vermont.

Bill Hoback, a former coal miner, is in his ninth year leading the state of Illinois' coal office with programs aimed at stimulating coal utilization through initiatives in deploying clean coal technology. The coal office has supported the Illinois State Geological Survey's mapping of Illinois' sequestration potential in deep geological formations and has also been involved in work related to CO₂ pipelines to support Enhanced Oil Recovery. The office also supported the drilling of deep injection wells to sequester CO2 from the Archer Daniels Midland ethanol facility in Decatur, Illinois and the Western Kentucky CO₂ test well to prove out geological formations in Southern Illinois. Mr. Hoback has also led state efforts to support the development and construction of the \$4 billion, 1,600-megawatt, 6 million ton a year Prairie State Energy Campus in southwestern Illinois.

Dorota Keverian is a director at the William J. Clinton Foundation Climate Initiative, focusing on carbon capture and storage projects. She has extensive international experience in strategy, organizational change, talent management, and performance improvement through her prior roles as Global Director of Consultant HR at Boston Consulting Group. Arthur D Little Director and Vice President responsible for Global Oil Practice (P&L and talent development) and various downstream positions at Exxon International. She holds a Masters degree in Management from the Massachusetts Institute of Technology, where she also completed her undergraduate studies in Engineering and Mathematics. Ms. Keverian is a board member of Plan USA and Plan International.

Gregory Kunkel is Vice President, Environmental Affairs for Tenaska. Dr. Kunkel supervises Tenaska's corporate environmental team to assure compliance with environmental requirements, including management systems, compliance monitoring and reporting, and technical support. He leads environmental permitting and development efforts for Tenaska projects throughout the United States. He also is engaged in carbon capture and storage development activities. In addition, he directs environmental commodity transactions for Tenaska affiliates, including emission allowance and emission reduction credits; domestic and international carbon credits; and development of carbon dioxide offset, capture, storage and delivery arrangements. He has more than 30 years of experience as an environmental scientist, manager, analyst and advisor in the energy industry. His experience includes environmental permitting, assessment and compliance in power generation, water resources, mining and other industrial development. He previously worked for ENSR Corporation and Camp Dresser and McKee Inc.

Dr. Kunkel earned Bachelor of Arts and Master of Arts degrees from the University of Colorado at Boulder. He received his doctorate from the University of California at Davis. He is a member of the Air and Waste Management Association and represents Tenaska on the Electric Power Supply Association Climate Change Committee.

Bob Mannes is the Founder, President and CEO of Core Energy, LLC, based in Traverse City, Michigan. Core Energy operates the only commercial CO2 Enhanced Oil Recovery project east of the Mississippi River. Mr. Mannes has participated in a number of MGA initiatives over the past several years involving energy policy matters. Bob is a third generation oil man in Michigan and is committed to the ongoing development of oil and gas resources in the Midwest.

Scott McDonald is Director of Biofuels Development for Archer Daniels Midland Company. In this role, his responsibilities include identification and development of projects and novel product applications which will expand the use of biofuels and bio-based products into the marketplace. He is also the principal investigator and director of the project: "CO2 Capture From Biofuels Production and Sequestration by Injection into the Mt. Simon Reservoir", largescale demonstration of industrial carbon capture and storage projects from industrial sources, a U. S. Department of Energy-National Energy Technology Laboratory Project, Phase I, and II 2009-2015. Prior to joining ADM, he was the commercial trading manager for TOTAL, a refining and petrochemical company where his job responsibilities included trading and risk management for various feed and finished product streams for the company's US refining and petrochemical assets. His 20 year career has included trading and risk management, business development, economics and planning, fuels formulation, and unit process design, startup, and operation.

D. Keith Meyers is the Director of Training Services for the Kansas Department of Commerce. A co-author of Commerce's State Energy Sector Partnership & Training grant proposal that resulted in a \$6M training and training capacity expansion award from the USDOL, Mr. Meyers and his staff work closely with the employers served by the grant in Renewable Energy Operation & Construction; Renewable Energy Manufacturing & Supply Chain; Energy Transmission (electric and natural gas); Biomass; and Green Construction & Manufacturing Processes. He also oversees state-

funded training and registered apprenticeship. A graduate of Michigan State University with a BA in Personnel Administration and holding a Certificate in Labor Relations Management from the University of Wisconsin-Milwaukee, Mr. Meyers has served in a number of management capacities with the Kansas Department of Administration and was previously employed in the private sector with both Allis-Chalmers and Vulcan Materials. Learn more about him at his LinkedIn profile.

Andrew Moyer currently serves as Chief of Staff for the Illinois Department of Commerce and Economic Opportunity. In that position he manages key activities and coordinates efforts across the Department. Prior to joining DCEO, he spent eight years working for Wisconsin Governor Jim Doyle in a variety of roles including as Special Assistant to the Governor, Legislative Liaison and two stints as the state's representative in Washington, DC. Mr. Moyer also served as Chief of Staff at the Wisconsin Department of Administration and helped create the Wisconsin Office of Recovery and Reinvestment. He is a graduate of the University of Wisconsin-Madison.

Elee Muslin is responsible for the Clinton Climate Initiative's (CCI) efforts in CO2 enhanced oil recovery, as part of the organization's global work in carbon capture and sequestration. Elee joined CCI in 2006 as Director of Building Technologies, where he negotiated global supply agreements for energy efficiency building technologies on behalf of CCI's municipal partners. He then launched and co-managed CCI's Climate Positive Development Program, an effort to develop commercial models for large-scale urban greenfield real estate projects to achieve significant greenhouse gas reductions. In his former life, Elee spent six years as a proprietary bulk commodities and chemicals trader in New York. He has an MBA from the Tuck School of Business at Dartmouth College, an MA in International Relations (Economics and Energy) from The Johns Hopkins University (SAIS), and a BA from Brown University.

Patti Petersen-Klein is the Executive Director of the Kansas Corporation Commission and manages all aspects of the agency's operations including its Utilities, Conservation, and Energy Divisions. Previously, she served as the Commission's Advisory Counsel, representing it on regulatory matters in various state and federal tribunals. She is also a Member of the Board of the Kansas Development Finance Authority and was appointed by Governor Brownback to that role in March of this year. Ms. Petersen-Klein's career includes eleven years in the private sector with money-center banks, handling large scale problem loans. Before joining the Commission, she clerked for the Chief Justice of the Kansas Supreme Court. She received her BBA from Wisconsin, MBA from Arizona State University, and JD from Washburn Law School. Her publications and lectures center on Administrative Law topics and she is the current President of that section under the Kansas Bar Association. David Pippen serves as the Chief General Counsel to Indiana Gov. Mitch Daniels. He also serves as a senior policy director for energy issues.

Michael Rieser is the Senior Business
Development Manager for C12 Energy where he works with industrial customers on the long-term geologic storage of their carbon dioxide emissions. Prior to joining C12, he was involved in the strategy, development and marketing of renewable energy for Element Power and Horizon Wind Energy during their high-growth stages. Mr. Rieser holds a Bachelor of Arts degree in Geology from Macalester College and a Master of Science in Geology from the University of Minnesota.

Dave Smethurst is a member of the Pigeon River Advisory Council. In the early 1970's, oil was discovered in the Pigeon River Country, the largest tract of wild land in the Lower Peninsula of Michigan. Eventually, a compromise was struck allowing limited oil development. A citizen's advisory body was created to provide oversight of that development. He became the Chair of the Pigeon River Country Advisory Council during the exploration and development phase for hydrocarbon development in the state forest. Today, many visitors pass through the forest never knowing they are in an oil field. Mr. Smethurst has a BS in history and political science

and an MA in Educational Administration. He taught and later served as a high school principal. Today, after retiring, he works for the State of Michigan as a Camp Licensing Consultant for summer youth camps in northern Michigan.

Greg Schnacke is Executive Director, Governmental Relations for Denbury Resources Inc. Headquartered in Plano, Texas, he coordinates government affairs activities for Denbury's executive team at the federal, state and local level. Prior to joining Denbury, he was an energy consultant and served as the Chief Executive of the Colorado Oil & Gas Association from 1994-2007 directing strategic, political and communications activities for the state's largest industry. From 1985-1994, he served on the senior staff of former U.S. Senate Majority Leader Bob Dole (R-KS), both in Kansas and in Washington, D.C. holding several positions including Legislative Director and Deputy Administrative Assistant. Mr. Schnacke is a graduate of the University of Kansas where he holds BS and BA degrees and is also a graduate of the University of Tulsa, College of Law with a JD in Energy Law.

Chairman Todd A. Snitchler was appointed to the Public Utilities Commission of Ohio by Governor John Kasich in 2011. As chairman of the PUCO, Snitchler is the head of a 400-person agency that works to oversee the regulation of electric, natural gas, telecommunications, water, and commercial transportation in the state of Ohio. He is also the chairman of the Ohio Power Siting Board that reviews, evaluates, and approves the siting of electric generation plants and electric and natural gas transmission lines. He is a member of the National Association of Regulatory Utility Commissioners and serves on the association's committees on Gas and International Relations. Before joining the Commission, he was elected to two terms in the Ohio House of Representatives. Additionally, he was also an attorney in private practice. Chairman Snitchler received his bachelor's degree in history and secondary education/social science from Grove City College and his law degree from the University of Akron School of Law.

John Stovall is a Senior R&D Staff Member and since joining Oak Ridge National Laboratory in 1978, has worked on a variety of power system engineering projects. For the past six years, he has been working on power system monitoring and visualization techniques. For the past eight years, he has designed and built a transmission line test facility at the Laboratory for testing overhead transmission line conductors. From 1996 to 2002, he was the ORNL Project Manger of the Superconducting Cable Development project and worked extensively with Southwire Company in Carrollton, Georgia. Mr. Stovall started his career at Public Service Company of Indiana now part of Duke Energy. He has a BS in Electrical Engineering from Rose Hulman Institute of Technology and a MS in Power System Engineering from The Ohio State University.

Joseph M. Sutherland is the Executive Director for Governmental Affairs for the Indiana Utility Regulatory Commission (IURC). He joined the Commission in 1995 as a Rate Analyst in the Accounting Division. In 1998, Mr. Sutherland became Director of Operations and Executive Secretary to the Commission. In 2001, his duties were significantly expanded and he became the Commission's Chief Operating Officer and CFO with responsibilities including the supervision of all commission technical staff. Since 2006 he has been in charge of all external functions, including liaison responsibilities for the Indiana General Assembly, the Governor's Office, and Indiana's Congressional delegation. In addition to his public policy role, he also oversees IURC internal operations, including all budgetary matters, media relations, consumer affairs, and information technology. Mr. Sutherland is the prior Chairman of the National Association of Regulatory Utility Commissioners (NARUC) Staff Subcommittee on Executive Management, as well as a member of NARUC Staff Subcommittees on Telecommunications, International Relations, and Education.

He holds a B.S. from the Indiana University School of Business with concentrations in both Accounting and Finance. Before joining the Commission, he worked in the private sector for approximately ten years in a number of management and supervisory capacities. Sherry Tucker provides government business development advice and representation to energy companies. Currently, she is under exclusive contract with Denbury Resources, Inc. and is working on the Midwest CO2 Pipeline and assisted with the Denbury CO2 Pipeline Feasibility Study. Her work has included CO2 pipeline permitting and development, coal gasification co-production, electric power from poultry litter and environmental permitting. She formed Tucker Associates, Inc. in 1999. She also has been active in gasification co-production since 2001. Previously, she was a partner in two nationally recognized law firms, practicing in environmental and energy law. Ms. Tucker also served as an Assistant General Counsel for the Department of Energy and as Assistant Attorney General for Maryland.

Staff:

Jennifer Christensen joined the Great Plains Institute in May 2007 and works primarily on the Institute's Carbon Capture and Storage (CCS) Program. She has led the development of several publications with stakeholders that address statutory and regulatory policy for deploying CCS technologies. Ms. Christensen is currently staffing the National Enhanced Oil Recovery Initiative, a stakeholder effort convened by GPI and the Pew Center that brings together leaders from industry, states and NGOs. Recent work includes staffing the Midwestern Governors Association (MGA) Energy & Jobs Initiatives, including work on CCS, low carbon fuels, energy efficiency and transmission. Previous work at GPI involved staffing the Upper Midwest Coal Gasification Work Group. Prior to joining the Institute, she worked for Xcel Energy in their Data Integrity and Mapping Department and conducted research for the Research Corporation of the University of Hawaii. She has volunteered with the United Nations Online Volunteer Service and with Hawaii Volcanoes National Park's Interpretation Division and Resources Management Division, including field work with the Hawksbill Turtle Monitoring Program. Ms. Christensen is a graduate of the University of Hawaii at Hilo with BA degrees in political science and geography.

Brad Crabtree is policy director of the Great Plains Institute since 2002. He is currently the Institute's staff lead for the National Enhanced Oil Recovery Initiative, GPI's energy security project convened in partnership with the Pew Center to increase domestic oil production using CO2 captured from industrial sources. He recently facilitated the Midwestern Greenhouse Gas Reduction Accord Advisory Group established by six governors and helped coordinate energy advisory groups for the Midwestern Governors Association. He previously was project director at the Consensus Council, managing regional flood mitigation and resource management projects. His background also includes environmental policy and project development work in Washington, DC and Brazil and field research in Borneo. Brad raises sheep and cattle with his wife and daughter in North Dakota, where he was a statewide candidate for Public Service Commissioner in

2010. A graduate of the Georgetown School of Foreign Service, he has an MA in history from Johns Hopkins University.

Jesse Heier is the Executive Director of the Midwestern Governors Association. He has over 12 years of experience working with our nation's Governors, serving since 2003 with the Midwestern Governors Association (MGA). At the MGA, he coordinates the activities of the governors' staff advisory committee, the annual Chair's agenda, the MGA Partners Program and oversees operations of the Association. Before joining the MGA, he worked in the Maryland governor's office where he focused on natural resources, energy and smart growth issues. Previously, he worked in the Office of Management Services at the National Governors Association. Mr. Heier holds a Bachelor's degree from American University and a Master's degree from the Johns Hopkins University.

Daniel Stenberg is the Manager of Regional Initiatives for the Midwestern Governors Association. In this capacity, he participates in the grant proposal, budget development, and reporting process. He interacts with press, governors' offices, and industry representatives as well as researches and crafts talking points for speeches and letters. He has helped to manage the MGA Partners Program as well as worked with various MGA advisory groups and helps coordinate projects and events dealing with investment, energy and workforce development. Originally from western North Dakota, he attended Jamestown College where he received Bachelor of Arts degrees in Business Administration and History/Political Science. Mr. Stenberg previously worked for the Federal Reserve Board in Washington DC.