Committee on Science, Space and Technology U.S. House of Representatives

Witness Disclosure Requirement - "Truth in Testimony" Required by House Rule XI, Clause 2(g)

1. Your Name: Richard A. Bajura			
	Yes	No	
2. Are you testifying on behalf of the Federal, or a State or local government entity?	Yes		
	Yes	No	
3. Are you testifying on behalf of an entity that is not a government entity?		No	

4. Other than yourself, please list which entity or entities you are representing:

I am a faculty member in the Mechanical and Aerospace Engineering Department at West Virginia University (WVU) and serve in an administrative appointment as the Director of the National Research Center for Coal and Energy (NRCCE) at WVU. I am offering testimony as a member of the staff of WVU and do not represent any other entity. West Virginia University is a State Land Grant University with a Board of Governors created by the West Virginia Legislature through the Code of West Virginia Article 18B-2A.

5. Please list any Federal grants or contracts (including subgrants or subcontracts) that you or the entity you represent have received on or after October 1, 2009:

As per the instructions for completing this disclosure form, I have not personally received any grants or contracts from the Federal Government. Research projects that I manage in my role as a research administrator that involve federal funding were received by the West Virginia University Research Corporation (WVURC) on behalf of WVU as the fiscally responsible agency. As a major research university, WVU receives numerous awards from the Federal Government. I will not list them here. This information is publicly available.

6. If your answer to the question in item 3 in this form is "yes," please describe your position or representational capacity with the entity or entities you are representing:			
Not Applicable			
7. If your answer to the question in item 3 is "yes," do any of the entities disclosed in item 4 have parent organizations, subsidiaries, or partnerships that you are not representing in your testimony?	Yes Not Applicable	No	
8. If the answer to the question in item 3 is "yes," please list any Federal grants or contracts (including subgrants or subcontracts) that were received by the entities listed under the question in item 4 on or after October 1, 2009, that exceed 10 percent of the revenue of the entities in the year received, including the source and amount of each grant or contract to be listed: Not Applicable			
9. Please attach your curriculum vitae to your completed disclosure form. Attached			
Signature:		Date: October 28, 2013_	

Biographical Information for Richard A. Bajura

December, 2011

Director, National Research Center for Coal and Energy (NRCCE)

Phone: 304-293-6034 Email: Richard.Bajura@mail.wvu.edu

385 Evansdale Drive, West Virginia University (WVU), Morgantown, WV 26506-6064

Education/Training

Degree Programs

- University of Notre Dame, Fluids Engineering, Ph.D., 1967
- University of Notre Dame, Mechanical Engineering, MSME, 1964 and BSME, 1962

Postdoctoral Programs

- Colorado State University / National Science Foundation (Environment) 1972
- Stanford University (Materials / Experimental Fluid Dynamics) 1971
- Johns Hopkins University, Department of Mechanics, Postdoctoral Research Associate, 1968-69

Research and Professional Experience

- Director, National Research Center for Coal and Energy (NRCCE), WVU, 1994-Present
- Academic Integrity Officer / Research Integrity Committee Executive Secretary and Committee Member, WVU, 1990-2005
- Associate Provost for Research, WVU, 1990-94
- Professor, Mechanical and Aerospace Engr. Dept., WVU, 1969, 1974, 1978 Present
- Research Engineer, Babcock & Wilcox R&D Center 1967-68, Summers 1973-75
- Summer Appointments with Gulf R&D Center, National Energy Technology Laboratory (NETL) for 3 years, NASA – Ames Research Center, Harry Diamond Laboratories, Westinghouse R&D Center, and Alleghany Ballistics Laboratory

Publications, Patents, Copyrights, Software

- 1. Wilson, T., Bajura, R., Winschel, R., Srivastava, R., Scandrol, R., Wells, A., Rauch, H., Locke, J. and Patchen, D., Characterization and Monitoring of CO2 Coal Bed Injection Program at the Marshall County West Virginia Pilot Sequestration Site: Proceedings of the Annual International Pittsburgh Coal Conference, 2009, 2010, and 2011
- 2. Co-author with J. Fletcher and Q. Sun on research reports related to synthetic fuels production and carbon sequestration of CO2 associated with the Shenhua Direct Coal Liquefaction Plant in Inner Mongolia, China, 2005-Present
- 3. Author of multiple reports to the Coal Utilization Research Council and congressional testimony on the topic of coal-to-liquid fuels and chemicals, 2000- Present

Synergistic Activities

- American Society of Mechanical Engineers (ASME): Vice President for Basic Engineering 1998-2001;
 Fluids Engineering Division Executive Committee 1989-1994 (Chairman 1992-93);
 Member Energy Committee;
 Journal of Fluids Engineering Associate Editor six years
- National Coal Council General Member and Technical Subcommittee Member
- Coal Utilization Research Council (CURC); Group Leader for the fuels program on the Technical Subcommittee for developing technology road map for coal R & D programs
- International Pittsburgh Coal Conference Advisory Board 1986 Present

- Washington Coal Club Board of Directors; President 1999
- Executive Committee, Research Partnership to Secure Energy for America (RPSEA)
- Fossil Energy Strategic Initiatives for Coal and Power Workgroup
- WVU Councilor for Oak Ridge Associated Universities (ORAU)
- Technical leader for WVU for the NETL Regional University Alliance program involving WVU, Pitt, CMU, Penn State and Virginia Tech
- Served with the WV EPSCoR program since 1989 as a member/member emeritus of the West Virginia State Committee; positions held include State Project Director, Voting Representative to the National EPSCoR Coalition, and the Project Director for the DOE EPSCoR Program
- Chairman, National Institute of Mineral Research Institute Directors, 1989-90

Graduate/Postdoctoral advisees during the past five years (since 6/2006)

 Postdoctoral Associates supervised: Maxwell Osawe, Felipe Vargas-Villamil, Jeff Dietiker and Osama Marzouk, and Kringan Saha

Narrative

As the Director of the NRCCE, I oversee a research enterprise with a total annual budget averaging in excess of \$10 million. I am Campus Coordinator for collaborative research by WVU faculty with NETL on a program averaging an additional \$6.5 million annually. My administrative accomplishments include facilitating over \$250 million in support for energy and environmental research at WVU since 1985. The NRCCE has developed financial and administrative management expertise to coordinate the efforts of faculty researchers working on multi-disciplinary programs. My principal activities include development of multi-investigator, multi-institutional research programs and providing management and administrative support through the offices of the NRCCE. I have initiated eight major inter-institutional consortium programs. My work is more in the role of advising on research rather than performing research. I review, edit, and submit research reports to sponsors on work that I manage.

Current projects in which I am actively involved as research manager or principal investigator include:

- Zero Emissions Research and Technology Center (ZERT) Carbon Sequestration Research Project
 (Principal Investigator) storage of carbon dioxide in the Upper Freeport coal seam in Marshall County.
 Field project with CONSOL Energy. Core research program involves modeling CBM production,
 characterization of reservoirs, monitoring, and risk assessment. Supported by Montana State University
 under award from DOE / FE
- Center for Advanced Separations Technology (CAST) (Consortium Co-Director with Virginia Tech) work in advanced separations processes related to coal cleaning and other mineral processing operations.
 Supported by DOE / FE
- Consortium for Fossil Fuel Liquefaction Science (CFFS) (Campus Coordinator) two separate projects related to producing liquid fuels from coal. Supported by University of Kentucky under awards from DOE /FE and DOD.
- US DOE EPSCoR State Implementation Grant on Fuel Cells Operating on Coal Syngas project director on experimental and modeling study to determine the effect of contaminants in coal syngas on the operation of SOFCs. Supported by the Office of Science, DOE
- Regional University Alliance Cooperative Research Program with NETL campus coordinator for a collaborative program of research with NETL in areas of materials, computational modeling, fuels and catalysis, carbon storage, sensors and controls, devices (fuel cells and turbines), methane hydrates, and oil and natural gas (EPACT 2005 Section 999 program).

J:_DYNAMIC\Testimony\House E&C July 10, 2012\Committee Correspondence\Bajura 112th TNT form for July 10, 2012.doc.docx