

**Written Testimony Submitted by  
Linda Rowan, Director of Government Affairs  
American Geological Institute  
to the U.S. House of Representatives  
Subcommittee on Energy and Water Development Appropriations  
March 19, 2010**

To the Chairman and Members of the Subcommittee:

Thank you for this opportunity to provide the American Geological Institute's perspective on fiscal year (FY) 2011 appropriations for geoscience programs within the Subcommittee's jurisdiction. The President's budget request for the Department of Energy (DOE) research programs provides important and modest investments in research and development (R&D) that will help support economic growth, workforce development and energy resource development, diversification and sustainable management. AGI strongly supports the wise and increased investments in the Office of Science [\$5.1 billion], Office of Nuclear Energy [\$912 million] and Energy Efficiency and Renewable Energy [\$2.4 billion] (particularly the small increase for geothermal R&D within EERE). AGI strongly supports investments in geoscience education, training and workforce development through the Office of Science's Workforce Development for Teachers and Scientists [\$36 million] and RE-ENERGYSE [\$55 million].

AGI is concerned about the termination of limited investments in oil and natural gas R&D within the Office of Fossil Energy and the transfer of methane hydrate R&D to the Office of Science. The bulk of oil and gas R&D investments go to institutions of higher education for training and research. The U.S. has a substantial workforce and substantial investments in oil and natural gas research, development, exploration and production. The nation's economy and infrastructure are dependent on domestic development and production plus safe and secure imports. Methane hydrate R&D seems well placed in Fossil Energy and would perhaps benefit from greater emphasis on development at this time rather than a transfer. Steady, but modest federal investments in fossil energy R&D with a longer term strategic plan would benefit the academic, private and public sectors.

The Office of Fossil Energy suffers from an unbalanced portfolio that is focus primarily on coal, uncertainty about direction and investments, and unsteady funding. We ask for the Subcommittee's support for oil and gas, unconventional natural gas, geothermal, hydropower, methane hydrates and carbon sequestration R&D so the nation can develop a diverse portfolio of energy resources while enhancing carbon mitigation strategies to secure clean, affordable and secure energy supplies for now and the future.

AGI is a nonprofit federation of 46 geoscientific and professional associations that represent more than 120,000 geologists, geophysicists, and other earth scientists. The institute serves as a voice for shared interests in our profession, plays a major role in strengthening geoscience education, and strives to increase public awareness of the vital role that the geosciences play in society's use of resources and interaction with the environment.

## **DOE Office of Science**

The DOE Office of Science is the single largest supporter of basic research in the physical sciences in the United States, providing more than 40 percent of total funding for this vital area of national importance. The Office of Science manages fundamental research programs in basic energy sciences, biological and environmental sciences, and computational science and, under the President's budget request, would grow by about 4 percent from about \$4.9 billion last year to \$5.1 billion in FY2011. AGI asks that you support this much needed increase.

The Office of Science would provide \$191 million for the U.S. Global Change Research Program, \$51 million for Geosciences, \$305 million for Environmental and Climate Sciences, \$86 million for Climate and Earth System Modeling, and \$101 million for the Climate and Environmental Facilities and Infrastructure. There would be support for simulations and analyses needed for part of the Intergovernmental Panel on Climate Change Fifth Assessment. There would also be support for research in carbon capture and sequestration, subsurface biogeochemistry, radiochemistry and nuclear waste clean-up. AGI supports all of these investments in geosciences R&D within the Office of Science along with many others we cannot list here separately.

The President's request would provide \$36 million for Workforce Development for Teachers and Scientists and would fund the RE-ENERGYSE (REgaining our ENERGY Science and Engineering Edge) program at \$55 million. RE-ENERGYSE is jointly funded and coordinated with the National Science Foundation. Both programs will support training for teachers and students in science and engineering fields that are relevant to DOE work. AGI strongly supports investments in geoscience education, training and workforce development within DOE and other federal agencies.

## **DOE Energy Efficiency and Renewable Energy**

Within Energy Efficiency and Renewable Energy, the President's FY 2011 budget request would increase investments for R&D for many renewable energy resources. AGI applauds the \$55 million requested for geothermal R&D and greatly appreciates previous support from Congress for this key alternative energy resource. The geothermal research program within the Renewable Energy account, which funds Earth science research in materials, geofluids, geochemistry, geophysics, rock properties, reservoir modeling, and seismic mapping, would satisfy in part an authorization in the Energy Independence and Security Act of 2007, that calls for \$90 million for geothermal R&D in FY 2011.

## **DOE Fossil Energy Research and Development**

AGI urges you to take a critical look at the Fossil Energy Research and Development (R&D) portfolio as you prepare to craft the FY 2011 Energy and Water Development Appropriations bill. Many Members of Congress have strongly emphasized the need for a responsible, diversified and comprehensive energy policy for the nation. The growing

global competition for fossil fuels has led to a repeated and concerted request by Congress to ensure the nation's energy security. The President's proposal, which provides no funding for oil and gas R&D, is short sighted and inconsistent with congressional and public concerns. No funding for oil and gas R&D will hinder our ability to achieve energy stability and security.

The research dollars invested in oil and gas R&D go primarily to universities, state geological surveys and research consortia to address critical issues like enhanced recovery from known fields and unconventional sources that are the future of our natural gas supply. This money does not go into corporate coffers, but it helps American businesses remain competitive by giving them a technological edge over foreign companies. All major advances in oil and gas production can be tied to research and technology. AGI strongly encourages the subcommittee to ensure a balanced and diversified energy research portfolio that does not ignore the nation's primary sources of energy for the near future, fossil fuels.

Thank you for the opportunity to present this testimony to the subcommittee. If you would like any additional information for the record, please contact me at 703-379-2480, ext. 228 voice, 703-379-7563 fax, rowan@agiweb.org, or 4220 King Street, Alexandria VA 22302-1502.