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Senate Appropriations Subcommittee on Energy and Water Development
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Mr. Chairman, Members of the Committee, it is a pleasure for me to appear before you today to present the Office of Fossil Energyôs (FE) proposed Budget for Fiscal Year 2009.

FEôs budget request of $1.127 billion for Fiscal Year 2009 is one of the largest FE requests made by this Administration. These funds will allow FE to fulfill its mission: to create public benefits by enhancing U.S. economic, environmental, and energy security.

Achieving this mission means developing technological capabilities that can dramatically reduce carbon emissions to achieve near-zero atmospheric emissions power production, thereby meeting the Presidentôs priority of expanding our climate change options with higher-efficiency power plants to reduce carbon dioxide and other emissions, including through FutureGen demonstration plants.

FE is also responsible for the management and operation of the nationôs petroleum reserves, most notably the Strategic Petroleum Reserve, which provides strategic and economic security against disruptions in oil supplies with an emergency stockpile of crude oil.

More specifically, the proposed FY 2009 coal budget request of $648 million focuses on technology allowing the United States to maintain its technological

lead in coal use in a way that addresses climate concerns. This is the largest budget request for coal research development and demonstration in over 25 years and leverages a nearly $1 billion investment in Clean Coal Technology.

The budget includes $406.5 million for Coal R&D including in-house R&D; $85 million for the Clean Coal Power Initiative and $156 million for a new approach to the FutureGen program.

The Fiscal Year 2009 request demonstrates the Administration's continuing commitment to domestically produced energy from coal. Combined with the required private sector cost sharing contribution as directed by the Energy Policy Act of 2005 (EPACT), this budget will bring the total public and private investment in coal technology leveraged by FE to nearly $1 billion. In addition, the federal government provides support to advance coal technologies through tax incentives for clean coal plants, and through loan guarantees to be allocated to various types of coal power and other gasification projects.

The $344 million Fiscal Year 2009 budget request for the Strategic Petroleum Reserve, an 84 percent increase over Fiscal Year 2008 approved funding, will allow for expansion activities at two existing storage sites and the development of a new site in FY 2009. This expansion is in accordance with the provision in EPACT for an expansion of reserve capacity from 727 million to one billion barrels of oil, and with the presidentôs recommendation to further increase the reserveôs capacity to 1.5 billion barrels of oil.

FOSSIL ENERGY RESEARCH AND DEVELOPMENT

I will begin the detailed presentation of our proposed budget with the work of Fossil Energy Research and Development (FERD), which is directed at electric power generation from coal, our most abundant and lowest cost domestic fossil fuel. Coal today accounts for nearly one-quarter of all the energy -- and about half the electricity ï consumed in the United States.

FERD supports many Presidential initiatives and priorities including the Coal Research Initiative, Hydrogen Fuel Initiative, and FutureGen. FERD also supports the Climate Change Technology Program, which is a priority for the Department. The components of the FERD program begin with FutureGen.

FUTUREGEN

FutureGen promotes advanced, full-scale integration of integrated gasification combined cycle (IGCC) and carbon capture and storage technology to produce electric power from coal while capturing and sequestering carbon dioxide (CO_2), resulting in near-zero atmospheric emissions coal energy systems. FERD is restructuring FutureGen in a way that accelerates the commercial use of carbon capture and storage technologies.

The new approach proposes multiple 300-600 Megawatt (MW) commercial-scale demonstration clean coal power plants ï as opposed to a single, 275 MW R&D facility - each producing electricity and capturing and safely sequestering at least an estimated annual one million metric tons of CO_2 from each. FutureGen receives an $81.7 million funding increase from Fiscal Year 2008 in the Fiscal Year 2009 budget proposal.

CLEAN COAL POWER INITIATIVE

The Clean Coal Power Initiative (CCPI) is a cooperative, cost-shared program between the government and industry to demonstrate advanced coal-based power generation technologies. CCPI is now focused on projects to help accelerate development and deployment of coal technologies that could economically capture carbon dioxide, including increasing the efficiency and reliability of carbon capture technologies. CCPI allows the nationôs power generators, equipment manufacturers, and coal producers to help identify the most critical barriers to coal use and the most promising advanced technologies to use coal cleanly, affordably, and with higher efficiencies that reduce carbon intensity.

The budget request of $85 million for CCPI in Fiscal Year 2009 will complete the third round of project solicitations, proposal evaluations, and project selections of advanced technology systems that capture carbon dioxide for sequestration or beneficial reuse.

SEQUESTRATION

The Fiscal Year 2009 budget request of $149 million for carbon sequestration, one of the key components of the Fuel and Power Systems program, is an increase of $30 million over the $119 million provided in Fiscal Year 2008.

The increase should help develop economical ways to separate and permanently store (sequester) greenhouse gas emissions from the combustion of fossil fuels. The technologies will help existing and future fossil fuel power generating facilities by reducing the cost of electricity impacts and also providing

protocols for carbon capture and storage demonstrations to capture, transport, store, and monitor the CO_2 injected in geologic formations.

The increase will support site selection and characterization, regulatory permits, community outreach, and completion of site operations plan for large-scale, geologic, carbon storage tests. It will also fund large-scale injections and remaining infrastructure development. The additional funding also permits work on capture projects and initiates an effort to prepare for and augment the monitoring, measurement and verification being conducted in the Phase III tests.

HYDROGEN

The budget request of $10 million in Fiscal Year 2009 for hydrogen from coal -- a clean fuel for future advanced power technologies such as fuel cells and transportation systems ï is down nearly $15 million from Fiscal Year 2008. The decrease is due to the elimination of integrated coal-biomass processing for carbon emissions research (which is generally advanced through the gasification program), elimination of substitute natural gas and coal-to-liquids production research (which are mature industries and not the high-return investment that FE focuses on), and a right-sizing of the effort level for early engineering and design studies on hydrogen production modules in near-zero emission coal plants.

GASIFICATION TECHNOLOGY

The Integrated Gasification Combined Cycle (IGCC) budget request for Fiscal Year 2009 is $69 million, a $15.5 million increase over Fiscal Year 2008. The IGCC program develops advanced gasification-based technologies aimed at reducing the cost of coal-based IGCC plants, improving thermal efficiency, and

achieving near-zero atmospheric emissions of all pollutants. These technologies will be an integral part of the carbon capture and storage demonstration projects.

FUEL CELLS

Flexible fuel cell systems that can operate in central coal-based power systems and with applications for electric utility, industrial and commercial/residential markets, receive a funding request of $60 million in Fiscal Year 2009 - an increase over the Fiscal Year 2008 appropriation of $55.5 million. This activity enables the generation of highly efficient, cost-effective electricity from domestic coal with near-zero atmospheric emissions of carbon and air pollutants in central station applications. The technology also provides the technology base to permit grid-independent distributed generation applications.

OIL AND NATURAL GAS TECHNOLOGY

Consistent with the budget requests for Fiscal years 2006, 2007 and 2008, the Petroleum - Oil Technology and Natural Gas Technologies research and development programs are being terminated in Fiscal Year 2009.

The Ultra-Deepwater and Unconventional Gas and Other Petroleum Research Fund was created by the Energy Policy Act of 2005 (Public Law 109-58) as a mandatory program beginning in Fiscal Year 2007. The program is funded from mandatory federal revenues from oil and gas leases. Consistent with the Fiscal Year 2007 and 2008 budget requests, the Fiscal Year 2009 budget proposes to repeal the program through a legislative proposal.

STRATEGIC PETROLEUM RESERVE

The Strategic Petroleum Reserve (SPR) exists to ensure Americaôs readiness to respond to severe energy supply disruptions. The Energy Policy Act of 2005 directs DOE to fill the SPR to its authorized 1 billion barrel capacity as expeditiously as practicable. Additionally the President has proposed expanding the Reserveôs capacity to 1.5 billion barrels.

The Fiscal Year 2009 budget request of $344 million would continue preparations for doubling the current 727 million barrel capacity of to 1.5 billion barrels and increasing the drawdown capability from 4.4 million barrels per day (MMB/day) to more than 6 MMB/day. The Administration strongly believes that this expansion is necessary to protect the economic and energy security of the nation, given the increased risk of disruption that is now apparent in the global oil market. Increasing the inventory to 1 billion barrels requires expanding two existing sites and adding one new site.

The Fiscal Year 2009 budget request reflects completion of land acquisition activities for the Richton, Mississippi site in Fiscal Year 2008 and the addition of expansion activities at the two existing sites and the new site in Fiscal Year 2009.

NORTHEAST HOME HEATING OIL RESERVE

The Fiscal Year 2009 budget request of $9.8 million will fund continuing operation of the Reserve and the leasing of commercial storage space.

The President directed DOE in 2000 to establish a Northeast heating oil reserve which is capable of assuring a short-term supplement to private home heating oil supplies during times of very low inventories or in the event of significant threats to immediate energy supplies. The two million barrel Reserve

protects the Northeast against a supply disruption for up to 10 days, the time required for ships to carry heating oil from the Gulf of Mexico to New York Harbor.

NAVAL PETROLEUM AND OIL SHALE RESERVES

The Fiscal Year 2009 budget request of $19.1 million is slightly less than the Fiscal Year 2008 request of $20.3 million. The decrease is due to the completion of the Risk Assessment and Corrective Action Studies to determine the cleanup requirements of the Elk Hills site (NPR-1) and reductions in operating and facility maintenance costs at NPR-3.

The Naval Petroleum and Oil Shale Reserve (NPOSR) mission is to complete environmental remediation activities and determine the equity finalization of NPR-1 and to operate NPR-3 until its economic limit is reached, while maintaining the Rocky Mountain Oil Field Test Center as a field demonstration facility. Because the NPOSR no longer served the national defense purpose envisioned in the early 1900s, the National Defense Authorization Act for Fiscal Year 1996 (P.L. 104-106) required the sale of the government's interest in Naval Petroleum Reserve 1 (NPR-1).

To comply with this requirement, the Elk Hills field in California was sold to Occidental Petroleum Corporation in 1998, two of the Naval Oil Shale Reserves (NOSR-1 and NOSR-3) were transferred to the Department of the Interior's (DOI) Bureau of Land Management, and the NOSR-2 site was returned to the Northern Ute Indian Tribe.

The Energy Policy Act of 2005 transferred administrative jurisdiction and environmental remediation of Naval Petroleum Reserve 2 (NPR-2) in California to the Department of the Interior. DOE retains the Naval Petroleum Reserve 3 (NPR-3) in Wyoming (Teapot Dome field). Environmental remediation is performed on those facilities which no longer have value to either of the missions.

MEETING THE NATIONÕS CRITICAL ENERGY NEEDS

In conclusion, Iõd like to emphasize that the Office of Fossil Energyõs programs are designed to promote the cost-effective development of energy systems and practices that will provide current and future generations with energy that is clean, efficient, reasonably priced, and reliable. Our focus is on supporting the Presidentõs top priorities for energy security, clean air, climate change, and coal research. By reevaluating, refining and refocusing our programs and funding the most cost-effective and beneficial projects, the Fiscal Year 2009 budget submission is designed to help meet the Nationõs needs for energy, environmental and national security.

Mr. Chairman, and members of the Committee, this completes my prepared statement. I would be happy to answer any questions you may have at this time.

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