

**Prepared Statement of the Honorable Spencer Abraham
Secretary, Department of Energy
Before the
House Committee on Appropriations
Subcommittee on Interior and Related Agencies
Concerning the
FY 2005 Department of Energy Budget**

February 26, 2004

Introduction

Mr. Chairman and Members of the Subcommittee, it is a pleasure to be here today to discuss the President's FY 2005 budget for the Department of Energy (DOE). The FY 2005 budget includes a total of \$24.3 billion for DOE, \$1.7 billion of which is requested for programs funded in the Interior and Related Agencies Appropriations under the jurisdiction of this Subcommittee. Those programs are Fossil Energy, \$728.9 million; Energy Conservation, \$875.9 million; and the Energy Information Administration, \$85 million. I will provide highlights of those programs later in my statement.

This FY 2005 budget request builds on a number of successes we have had over the past 3 years. I'm very proud of what we have accomplished in terms of fulfilling the President's management vision for this Department and also what we have achieved for the energy and economic security of the American people. We are grateful for the support and guidance that the Members of this Subcommittee have provided to the Department.

The Office of Management and Budget recently announced that DOE has made the most progress among cabinet-level agencies in the implementation of the President's Management Agenda. OMB recognized DOE as the cabinet-level agency "leading the pack with regard to management improvement."

A large part of that leadership involves defining the mission of the Department. From our first days in office we stressed that the overriding mission of this Department is national security.

Another significant part of the Department's mission is to protect our economic security by promoting a diverse supply and delivery of reliable, affordable, and environmentally sound energy. The FY 2005 budget includes \$2.7 billion to meet energy-related objectives. Of this amount, approximately \$1.6 billion is for Fossil Energy and Energy Conservation programs. The budget request maintains Presidential commitments to promote energy security and reliability through coal research and development, hydrogen production, fuel cell powered vehicles, advanced nuclear energy technologies, and electric transmission reliability.

Within the jurisdiction of this Subcommittee, this budget provides for investments in the President's Clean Coal Power Initiative (\$287 million) – including the ambitious FutureGen program – and Hydrogen Fuel Initiative (\$93.5 million). These initiatives will serve as the technological spring board to solve the nation's long-term energy needs by focusing on energy independence and reliability with a diverse energy portfolio.

Also included in this budget is funding that continues the Administration's 10-year commitment to the Weatherization Assistance program. With a proposed budget of \$291 million, approximately 119,000 homes will be weatherized in FY 2005.

Investing in America's Energy Future

An important element of all our energy programs is making energy use more secure, more efficient, and more environmentally sound. At the same time, we are preparing long-term energy solutions that will eventually make questions of supply and environmental effects obsolete. The Administration's energy portfolio takes a long-term focus through investments in hydrogen use and production, electricity reliability, and advanced coal and nuclear energy power technologies. Investments in these pivotal areas honor a commitment to strengthen the nation's energy security for the near-term and for generations to come.

In FY 2005, the Department's Energy Efficiency and Renewable Energy program is at the forefront of implementing the President's Hydrogen Fuel Initiative. Hydrogen promises to help meet our nation's future energy challenges. The Department is requesting \$227 million for hydrogen-related activities. That figure includes \$173 million in the Energy Efficiency and Renewable Energy program, \$29 million in the Science program, \$16 million in the Fossil Energy program, and \$9 million in the Nuclear Energy program.

This budget invests \$447 million in the President's Coal Research Initiative to improve the efficiency and environmental protections being developed for coal burning power production. Of that figure, \$287 million will go to the President's Clean Coal Power Initiative, including the FutureGen program which was launched in FY 2004. This cost-shared, \$1-billion project will create the world's first near zero-emissions fossil fuel plant. When operational, the FutureGen plant will be the cleanest fossil fuel-fired power plant in the world.

Mr. Chairman, I would now like to discuss some highlights of our FY 2005 Interior and Related Agencies Appropriations budget request.

	\$ in 000		
	FY 2003	FY 2004	FY 2005
Fossil Energy R&D	611,149	672,771	635,799
Naval Petroleum & Oil Shale Reserves	17,715	17,995	20,000
Elk Hills School Lands	36,000	36,000	36,000
Energy Conservation	880,176	877,984	875,933
Economic Regulation	1,477	1,034	0
Strategic Petroleum Reserve	171,732	170,948	172,100
Strategic Petroleum Account	1,955	0	0
Northeast Home Heating Oil Reserve	5,961	4,939	5,000
Energy Information Administration	80,087	81,100	85,000
Subtotal Interior Accounts	1,806,252	1,862,771	1,829,832
Clean Coal Technology	-47,000	-98,000	-140,000
Total Interior & Related Agencies	1,759,252	1,764,771	1,689,832

FOSSIL ENERGY BUDGET REQUEST

	\$ in 000		
	FY 2003	FY 2004	FY 2005
	797,512	804,653	728,899

As part of the effort to lessen the level of our reliance on imported energy sources, the Fossil Energy program is seeking new energy technologies and methodologies that promote the efficient and environmentally sound production and use of fossil fuels, as well as providing strategic protection against the disruption of oil supplies.

The United States relies on fossil fuels for about 85 percent of the energy it consumes, and forecasts indicate U.S. reliance on these fuels could exceed 87 percent in 2025. Accordingly, a key goal of DOE's fossil energy activities is to ensure that economic benefits from fossil fuels and a strong domestic industry that creates export-related jobs are compatible with the public's expectation for exceptional environmental quality and reduced energy security risks. This includes promoting the development of energy systems and practices that will provide energy to current and future generations that is clean, efficient, reasonably priced, and reliable.

Fossil energy programs focus on supporting the President's top initiatives for energy security, clean air, climate change, and coal research. FY 2005 fossil energy programs:

- Support the development of lower cost, more effective pollution control technologies embodied in the President's Coal Research Initiative or help diversify the nation's future sources of clean-burning natural gas to meet the President's Clear Skies goals;
- Expand the nation's technological options for reducing greenhouse gases either by increasing power plant efficiencies or by capturing and isolating these gases from the atmosphere as called for by the President's Climate Change Initiative; or
- Measurably add to the nation's energy security by providing a short-term emergency response, such as the Strategic Petroleum Reserve, or longer-term alternatives to imported oil, such as hydrogen and methane hydrates.

President's Coal Research Initiative

President Bush has committed \$2 billion over 10 years on coal research through his Clean Coal Research Initiative. This includes two major programs: the Clean Coal Power Initiative, and the Coal Research and Development program. The FY 2005 budget continues to meet the President's commitment by providing \$447 million for the Coal Research Initiative. Under President Bush's leadership, budget requests for coal R&D have more than doubled over historical amounts and appropriations.

Clean Coal Power Initiative and FutureGen

The Clean Coal Power Initiative (CCPI) is a key component of the National Energy Policy to address the reliability and affordability of the nation's electricity supply, particularly from coal. The initiative fulfills the President's commitment to conduct research on clean coal technologies to meet this challenge.

Included in the FY 2005 budget is \$287 million for the CCPI program. The CCPI program is a cooperative, cost-shared program between the government and industry to rapidly demonstrate emerging technologies in coal-based power generation and to accelerate their commercialization. The nation's power generators, equipment manufacturers, and coal producers help identify the most critical barriers to coal's use in the power sector. Technologies are selected with the goal of accelerating development and deployment of coal technologies that will economically meet environmental standards, while increasing the efficiency and reliability of coal power plants. The FutureGen program is funded within this initiative and was launched in FY 2004.

The President's Clean Coal Power Initiative is especially significant because it directly supports the President's Clear Skies Initiative. The first projects included an array of new cleaner and cheaper concepts for reducing sulfur dioxide, nitrogen oxides, and mercury – the three air pollutants targeted by the Clear Skies Initiative.

The "first round" in the Clean Coal Power Initiative – the centerpiece of the President's clean coal commitment – attracted three dozen proposals for projects totaling more than \$5 billion. In early 2003, we announced the first winners of the competition – eight projects with a total value of more than \$1.3 billion, more than \$1 billion of which would be provided by the private sector. These projects are expected to help pioneer a new generation of innovative power plant technologies that could help meet the President's Clear Skies and Climate Change Initiatives.

Competitive solicitations for the "second round" were made just last month and are open to technologies capable of producing any combination of heat, fuels, chemicals, or other useful by-products in conjunction with electricity generation.

FutureGen. The FutureGen component of the Clean Coal Power Initiative will establish the capability and feasibility of co-producing electricity and hydrogen from coal with essentially zero emissions, including carbon sequestration and gasification combined cycle, both integral components of the zero emissions plant of the future.

It is anticipated that the cost-shared FutureGen project will create a public/private partnership to produce technology ultimately leading to zero emission plants, including carbon dioxide, that are fuel-flexible and capable of multi-product output and efficiencies of up to 60 percent with coal. The project is critical to the continued and expanded use of coal - our most abundant and lowest cost domestic energy resource.

Carbon Management. Several Clean Coal projects also help expand the menu of options for meeting the President's climate change goal of an 18-percent reduction in greenhouse gas intensity (carbon equivalent per Gross Domestic Product) by 2012, primarily by boosting the efficiencies of power plants (meaning that less fuel is needed to generate electricity with a corresponding reduction in greenhouse gases).

Carbon management has become an increasingly important element of our coal research program. Carbon sequestration – the capture and permanent storage of carbon dioxide – has emerged as one of our highest priorities in the Fossil Energy research program – a priority reflected in the proposed budget of \$49 million in FY 2005.

Carbon sequestration, if it can be proven practical, safe, and affordable, could dramatically enhance our long-term response to climate change concerns. It could offer the United States and other nations an approach for reducing greenhouse gases that would not necessitate changes in the way we produce, deliver, or use energy.

A cornerstone of our carbon sequestration program will be a national network of regional partnerships. This initiative, which I announced last year, will bring together the federal government, state agencies, universities, and private industry to begin determining which options for capturing and storing greenhouse gases are most practicable for specific areas of the country.

Hydrogen. Another aspect of the President's Clean Coal Research Initiative is the production of clean fuels from coal. A major priority for the Administration is hydrogen as a clean fuel for tomorrow's advanced power technologies (such as fuel cells) and for future transportation systems. Within the Fossil Energy program, we have allocated \$16 million for research into new methods for making hydrogen from coal.

Advanced Research. To provide fundamental scientific knowledge that benefits all of our coal technology efforts, our FY 2005 budget includes \$30.5 million for advanced research in such areas as materials, coal utilization science, analytical efforts, and support for coal research at universities (including historically black and other minority institutions).

Other Power Systems Research and Development. We are also proposing \$23 million for continued development of fuel cells with an emphasis on lower-cost technologies that can contribute to both Clear Skies emission reductions, particularly in distributed generation applications, and Climate Change goals by providing an ultra-high efficiency electricity-generating component for tomorrow's power plants. Distributed power systems, such as fuel cells, also can contribute to the overall reliability of electricity supplies in the United States and help strengthen the security of our energy infrastructure.

Natural Gas Research. The President's Clear Skies Initiative also provides the rationale for much of the Department's \$26 million budget request for natural gas research. Even in the absence of new environmental requirements, natural gas use in the United States is likely to increase by 40 percent by 2025. The National Petroleum Council has estimated that 14 percent of our natural gas supply in 2025 will be provided from advances in technology that have not yet been developed.

Our natural gas research program, therefore, is directed primarily at providing new tools and technologies that producers can use to expand and diversify future supplies of gas. The program will focus on resources in high-priority regions to find and produce gas from non-conventional and deep gas reservoirs with minimal environmental impact. Emphasis will be on research that can improve access to onshore public lands, especially in the Rocky Mountain region where much of our undiscovered gas resource is located. A particularly important aspect of this research will be to develop innovative ways to recover this resource while continuing to protect the environmental quality of these areas.

We will continue the National Stripper Well Consortium involving industry and the research community to investigate multiple technologies to improve stripper well production and prevent continued abandonment.

Natural gas importation and storage will also assume increasing significance in the United States as more and more power plants require consistent, year-round supplies of natural gas. We will continue a nationwide, industry-led consortium that will examine ways to improve the reliability and efficiency of our nation's gas storage system, and we will initiate analyses to facilitate LNG importation and facility siting.

Over the long-term, the production of natural gas from hydrates could have major energy security implications. Hydrates – gas-bearing, ice-like formations in Alaska and offshore – contain more energy than all other fossil energy resources. Hydrate production, if it can be proven technically and economically feasible, has the potential to shift the world energy balance away from the Middle East. Understanding hydrates can also improve our knowledge of the science of greenhouse gases and possibly offer future mechanisms for sequestering carbon dioxide. For these reasons, we are continuing a research program to study gas hydrates with a proposed FY 2005 funding level of \$6 million.

Oil Technology Development

The President's National Energy Policy calls attention to the continued need to strengthen our nation's energy security by promoting enhanced oil and gas recovery and improving oil and gas exploration technology through continued partnerships with public and private entities.

At the same time, however, we recognize that if the federal oil technology R&D program is to produce beneficial results, it must be more tightly focused than in prior years. Consequently, our FY 2005 budget request of \$15 million reflects a reorientation of the program toward those areas where there is clearly a national benefit.

One example is the use of carbon dioxide (CO₂) injection to enhance the recovery of oil from existing fields. CO₂ injection is a proven enhanced oil recovery practice that prolongs the life of some mature fields, but the private sector has not applied this technique to its fullest potential due to insufficient supplies of economical CO₂. A key federal role to be carried out in our proposed FY 2005 program will be to facilitate the greater use of this oil recovery process by integrating it with CO₂ captured and delivered from fossil fuel power plants. This technology has the dual benefit of enhancing oil recovery and sequestering CO₂. In fact, this technology could potentially be a key method of meeting the President's 18-percent carbon reduction commitment.

A high priority effort in FY 2005 will be to develop "micro-hole" technology. Rather than developing just another new drilling tool, the federal program will integrate "smart" drilling systems, advanced imaging, and enhanced recovery technologies into a complete exploration and production system. Micro-hole systems may offer one of our best opportunities for keeping marginal fields active because the smaller-diameter wells can significantly reduce exploration costs and make new drilling between existing wells ("infill" drilling) more affordable. In addition, micro-hole technology has the potential to greatly increase recovery of the almost 60 percent of oil that remains in reservoirs after conventional production.

We will also work toward diversification of international sources of oil supplies through bilateral activities with nations that are expanding their oil industry, including Venezuela, Canada, Russia,

Mexico, and certain countries in West Africa. Bilateral and multi-lateral work will include technology exchanges.

Other Fossil Energy R&D

The budget also includes \$124.8 million for other activities in the Fossil Energy program, including \$106 million for headquarters and field office salaries, \$6 million for environmental restoration, \$3 million for federal matching funds for cooperative research and development projects at the University of North Dakota and the Western Research Institute, \$1.8 million for natural gas import/export responsibilities, and \$8 million for advanced metallurgical research at our Albany Research Center.

Petroleum Reserves

The Strategic Petroleum Reserve and Northeast Home Heating Oil Reserve are key elements of our nation's energy security. Both serve as resource options for the President to use to protect U.S. citizens from disruptions in commercial energy supplies.

Strategic Petroleum Reserve. The President has directed us to fill the Strategic Petroleum Reserve (SPR) to its full 700 million barrel capacity. The mechanism for doing this – a cooperative effort with the Minerals Management Service to exchange royalty oil from federal leases in the Gulf of Mexico – is working well. We have been able to accelerate fill from an average of 60,000 barrels per day at the start of the President's initiative to a rate of 130,000 barrels per day.

Because of the President's "royalty in kind" initiative, we have achieved the Reserve's highest inventory level ever, now at 640 million barrels. Our goal remains to have a full inventory of 700 million barrels by the end of calendar year 2005.

The FY 2005 budget for the SPR is \$172.1 million, all of which is now in our facilities development and operations account. We do not require additional funds in the oil acquisition account because charges for transporting "royalty in kind" oil to the SPR are now the responsibility of the oil supplier.

Northeast Home Heating Oil Reserve. We are requesting \$5 million for the Northeast Home Heating Oil Reserve, the same level as last year. The two-million-barrel reserve remains ready to respond to a Presidential order should there be a severe fuel oil supply disruption in the Northeast. A key element of this readiness is a new online computerized "auction" system that we implemented to expedite the bidding process. Installing and testing the electronic system (including tests with prospective commercial bidders) have also been major elements of the Fossil Energy program's role in implementing the "e-government" initiatives in the President's Management Agenda.

Naval Petroleum and Oil Shale Reserves. The FY 2005 budget request of \$20 million reflects funds for continued operation. The Rocky Mountain Oilfield Testing Center (RMOTC), established at the Naval Petroleum Reserve No. 3 in Wyoming, will be funded at \$2.1 million. We are considering transfer of Naval Petroleum Reserve No. 2 in California to the Department of the Interior. We expect to be able to reduce our funding requirements for equity redetermination

studies for the government’s portion of the Elk Hills Naval Petroleum Reserve No. 1, which was divested in 1998. Of the four producing zones for which final equity shares had to be finalized, three have been completed and the fourth (the Shallow Oil Zone) is expected to be finished in FY 2007.

ENERGY CONSERVATION BUDGET REQUEST

	\$ in 000		
	FY 2003	FY 2004	FY 2005
	880,176	877,984	875,933

Now turning to the Energy Conservation budget, the Department continues to allocate more funding for energy efficiency and renewable energy programs than it does for fossil and nuclear energy activities. Our overall Energy Efficiency and Renewal Energy (EERE) budget request for FY 2005 is a robust \$1.25 billion. Of the \$1.25 billion, we are requesting \$875.9 million for Energy Conservation programs funded in the Interior appropriation. The Interior portion of the EERE budget request continues to reflect priorities consistent with Presidential initiatives, the Administration's Research and Development (R&D) investment criteria and the Office of Management and Budget’s PART recommendations.

As you know, in 2002 we dramatically restructured the EERE program in response to the President's Management Agenda by streamlining program management and centralizing administrative functions with a focus on developing consistent, uniform, and efficient business practices. This focus is helping to assure that we not only fund the right mix of R&D, but that we get more work done for every R&D dollar spent in the lab.

EERE's R&D and technology deployment efforts funded by the FY 2005 budget support Presidential initiatives for increased energy security, greater freedom for Americans in their energy choices, and reduced costs and environmental impacts associated with those choices.

Vehicle Technologies. America currently imports 55 percent of its oil – a level projected to rise to 68 percent by 2025, and highway transportation currently accounts for more than 54 percent of our oil use. Alternative means of fueling highway transportation from domestic resources is critical if we are to reverse this trend and improve our energy security. The Vehicle Technologies program is focused on just this challenge.

In FY 2005, the Department is requesting \$156.7 million for the Vehicle Technologies program. Activities in this program contribute to two cooperative government/industry initiatives: the FreedomCAR Partnership (where CAR stands for Cooperative Automotive Research) and the 21st Century Truck Partnership. In addition, the Hydrogen Fuel Initiative builds on the FreedomCAR Partnership. Together these initiatives comprise a collaborative effort among the three domestic automobile manufacturers, five major energy companies and DOE for cooperative, precompetitive research on advanced automotive and hydrogen infrastructure technologies having significant potential to reduce oil consumption.

Under the FreedomCAR Partnership, the Vehicle Technologies program supports advanced, high-efficiency vehicle technologies including advanced combustion engines, hybrid vehicle

systems, high-powered batteries, materials and power electronics. These critical technologies can lead to near-term oil savings when used with gasoline or diesel-fueled hybrid vehicles; they are also the foundation for the hydrogen fuel cell vehicles of tomorrow. The FY 2005 request fully supports the FreedomCAR Partnership goals for Electric Propulsion Systems, Electric Drivetrain Energy Storage, and Material and Manufacturing Technologies.

The 21st Century Truck Partnership has similar objectives but is focused on heavy vehicles. The partnership involves key members of the heavy vehicle industry, truck equipment manufacturers, hybrid propulsion developers, and engine manufacturers along with other federal agencies. The effort centers on improving and developing engine systems, heavy-duty hybrids, parasitic losses, truck safety, and idling reduction.

Fuel Cell Technology. In FY 2005, we are requesting \$77.5 million for the Fuel Cell Technology program. Fuel Cell Technology plays an important role in both the FreedomCAR Partnership and the Hydrogen Fuel Initiative. These initiatives seek to effect an industry decision by 2015 to commercialize hydrogen-powered fuel cell vehicles. To the extent that hydrogen is produced from domestic resources in an environmentally-sound manner, hydrogen fuel cell vehicles will require no petroleum-based fuels and emit no criteria pollutants or carbon dioxide. Their development and commercial success would essentially remove personal transportation as an environmental issue and substantially reduce our dependence on foreign oil.

The program works to advance both fuel cell vehicle technology and the hydrogen infrastructure needed to support it. This helps ensure that hydrogen will be available and affordably priced when fuel cell vehicles are ready for commercialization.

The major focus of the Fuel Cell Technology program continues to be on high risk research and development to overcome technical barriers, centered on core research of key fuel cell components, with industry focused on engineering development of complete systems. DOE provides funds to major fuel cell suppliers, universities and national laboratories to develop materials and component technology aimed at lowering cost and improving durability, which are two major barriers to commercialization. The FY 2005 Fuel Cell Technology budget also continues support of our Vehicle Validation effort, a “learning” demonstration program that integrates real-world operation of vehicles provided by major automotive companies with the required refueling infrastructure provided by major energy suppliers (the refueling portion of this effort is funded through the Energy and Water Development appropriation bill). Projects were selected from a major solicitation in 2004 and this effort will play a significant role in integrating fuel cell vehicle and hydrogen activities, measuring progress and determining remaining challenges, leading to the 2015 commercialization decision.

This past year we awarded a total of \$75 million for 15 new fuel cell projects that support the FreedomCAR Partnership and the Hydrogen Fuel Initiative. Through open competition, the program has secured the country’s leading scientists and engineers and strong corporate involvement to implement the President’s vision that the first car driven by a child born today will be powered by hydrogen.

Weatherization and Intergovernmental Activities. In FY 2005, we are requesting \$364 million for Weatherization and Intergovernmental Activities. Given increases in natural gas and heating oil prices, it is especially important to fund programs that will help reduce the

energy costs of low-income Americans who spend a disproportionately high share of their income on energy. The program also promotes rapid deployment of clean energy technologies and energy efficient products. This request supports the President's commitment to increase funding for the Weatherization Assistance program by \$1.4 billion over 10 years.

The FY 2005 Weatherization Assistance program request of \$291.2 million will support the weatherization of approximately 119,000 low-income homes. The FY 2005 request for other activities includes State Energy Program Grants (\$40.8 million), State Energy Activities (\$2.4 million), and Gateway Deployment (\$29.7 million).

Building Technologies. EERE's building technology R&D programs address technologies, techniques, and tools to make residential and commercial buildings, both in existing structures and new construction, more energy efficient, productive and affordable. Our FY 2005 request for the Building Technologies program is \$58.3 million. The funding supports a portfolio of activities that includes solid-state lighting, energy efficiency improvement of other building components and equipment, and their effective integration using whole-building-system-design techniques, as well as the development of codes and standards.

The Building Technologies program has expanded work supporting longer-term, higher-risk activities with a large potential for public benefits. For example, last year we supported a \$5 million investment to expand our Solid State Lighting research activities, and we request an increase of that funding to \$10.2 million in FY 2005. Solid State Lighting represents one of the most exciting and promising new approaches to efficient lighting systems, with potential to more than double the efficiency of general lighting systems in the coming decades. Our Solid State Lighting research will create the technical foundation to revolutionize the energy efficiency, appearance, visual comfort, and quality of lighting products.

Industrial Technologies. The mission of the Industrial Technologies program is to reduce the energy intensity of the U.S. industrial sector through a coordinated program of research and development, validation, and dissemination of energy-efficiency technologies and operating practices. The industrial sector is the most energy-efficient sector of our economy, due in part to the strong economic incentives energy-intensive companies have to reduce their energy consumption and costs.

In FY 2005, we are requesting \$58.1 million for the Industrial Technologies program. As in previous years, the request reflects the refocus of government R&D to higher priority activities that align better with the Administration's R&D investment criteria. Beginning in FY 2005, we will shift a portion of funding to focus on multi-industry "Grand Challenges" for next generation manufacturing and energy systems technologies. These include efforts for the steel, aluminum, glass and metal casting, and chemical industries. These Grand Challenges will require high-risk investment for high-return gains to achieve much lower energy use than current processes.

Biomass. This program receives appropriations from both the Energy and Water Development (EWD) and the Interior and Related Agencies Appropriations Subcommittees. Interior-funded activities focus on developing advanced technologies for more energy efficient industrial processes and co-production of high-value industrial products. EWD-funded activities focus primarily on developing advanced technologies for producing transportation fuels and power from biomass feedstocks.

Our FY 2005 request for the Interior-funded portion of the biomass program is \$8.7 million. The request supports continuing R&D on processes for the production of chemicals and materials that can be integrated into biorefineries. Projects with industrial partners will focus on novel separations technologies; bio-based plastics; novel products from oils; and lower cost and energy use in biomass harvesting, preprocessing, and storage. Additional work with industry, universities, and the national laboratories will focus on improvements to increase the efficiency of individual process steps; for example, catalysis and separations.

Distributed Energy Resources. Our Distributed Energy Resources program leads a national effort to develop a flexible, smart, and secure energy system by integrating clean and efficient distributed energy technologies complementing the existing grid infrastructure. By producing electricity where it is used, distributed energy technologies can increase grid asset utilization and reduce the need for upgrading some transmission and distribution lines. Also, because distributed generators are located near the point of use, they allow for the capture of the waste heat produced by fuel combustion through combined heat and power systems. In FY 2005, we are requesting \$53.1 million. This funding level reflects relative priority within our overall energy R&D portfolio and is consistent with our FY 2004 request. The program emphasizes integrated designs for end-use systems, but also continues support for individual technology components such as microturbines, reciprocating engines, thermally activated devices.

Federal Energy Management Program (FEMP). The federal government is the nation's single largest energy consumer. It uses approximately one quadrillion Btu of energy annually, or about 1 percent of the nation's energy use. Simply by using existing energy efficiency and renewable energy technologies and techniques, the federal government can set an example and lead the nation toward becoming a cleaner, more efficient energy consumer. FEMP alternative financing programs help federal agencies access private sector financing to fund energy improvements through Energy Savings Performance Contracts and utility energy service contracts at no net cost to taxpayers. FEMP also provides technical assistance to federal energy managers so they can identify, design, and implement new construction and facility improvement projects in areas such as energy and water audits for buildings and industrial facilities, peak load management, and new technology deployment, including combined heat and power and distributed energy technologies.

As FEMP's core activities have matured, program efficiencies have increased. In FY 2005, we are requesting \$17.9 million for FEMP to continue meeting the goals of improving federal energy efficiency.

Program Management. Program Management provides executive and technical direction, information, analysis, and oversight required for efficient and productive implementation of those programs funded by Energy Conservation appropriations in EERE. In addition, Program Management supports headquarters staff, six regional offices, the Golden Field Office in Colorado in planning and implementing EERE activities, as well as facilitating delivery of applied R&D and grant programs to federal, regional, state, and local customers. In FY 2005, we are requesting \$81.7 million for these activities. Funding increases will be directed to federalize project management and contracting activities that have been performed by national laboratories, which have much higher overhead costs than our federal staff. This Project

Management Center initiative frees our laboratories to devote more time to real research as opposed to management oversight functions, and will help more program dollars remain focused on research, development, and deployment.

ENERGY INFORMATION ADMINISTRATION BUDGET REQUEST

	\$ in 000		
	FY 2003	FY 2004	FY 2005
	80,087	81,100	85,000

For the Energy Information Administration (EIA), we are requesting \$85.0 million, which is \$3.9 million more than the FY 2004 comparable appropriation. The FY 2005 funding will provide for the federal employee pay raise and maintain the other on-going data and analysis activities, allowing EIA to continue disseminating accurate and reliable energy information and analyses to inform energy policy-makers.

EIA's base program includes the maintenance of a comprehensive energy database, the maintenance of modeling systems for both near and mid-term energy market analysis and forecasting, and the dissemination of energy data and analyses to a wide variety of customers in the public and private sectors through the National Energy Information Center.

In FY 2005, EIA plans to discontinue the Annual Electric Industry Financial Report (EIA-412) that collects financial, plant cost, and transmission line data from municipal, state, and federal utilities and generation and transmission cooperatives. Funds provided to EIA with this budget request and savings from the discontinuation of the EIA-412 Report will be used to accomplish the following activities:

- Improve the quality and timeliness of natural gas data. As part of this initiative, a new natural gas production survey will be developed and fielded;
- Continue the Weekly Underground Natural Gas Storage Survey;
- Update our core electricity surveys to provide improved estimates of fuel-switching capabilities and other critical parameters, and enhance data quality;
- Update petroleum product surveys and systems to maintain data quality and accommodate changes in fuel specifications;
- Provide better regional information in the Short-Term Energy Outlook;
- Conduct independent reviews of energy data and analytical work to improve its accuracy and timeliness; and
- Improve the voluntary reporting surveys and databases to collect and disseminate information on greenhouse gas emission reductions in accord with updated reporting guidelines that are being developed as part of the President's Climate Change Initiative.

EIA continues to aggressively expand the availability of electronic information and upgrade energy data dissemination, particularly on the EIA website. The increased use of electronic technology for energy data dissemination has led to an explosive growth in the number of its data customers and the breadth of their interests, as well as an increase in the depth of the information

distributed. Since establishing a FY 1997 goal to increase the number of users of its website by 20 percent annually, EIA has either met or exceeded this commitment in each of the succeeding years. In FY 2003, EIA accomplished a 23-percent increase as compared to FY 2002, delivering more than 2,600 gigabytes of data.

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

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