U.S. DEPARTMENT OF ENERGY BUDGET ROLL-OUT MEDIA AVAILABILITY SECRETARY SPENCER ABRAHAM FEBRUARY 2, 2004 1:00 – 1:30 WASHINGTON, D.C.

SECRETARY ABRAHAM: Good morning, everybody. I hope you all appreciate the orchestration that goes into these entrances over here. I want you to also notice that, once again, we have all these senior leaders from the department who will stand rigidly at both this event and the next event while they listen to the same basic speech twice. In any event, it's good to have you all here today.

We're pleased to be here to give you an overview of the Department of Energy's budget for the next fiscal year. At \$24.3 billion, the FY '05 budget request will be the largest in the history of this department. This year's budget proposal represents a nearly 4 percent increase over last year's submission and an increase of about 27 percent since we took office in 2001. Those figures reflect the president's confidence in the work done here as well as the importance I think he attaches to this department's mission.

This FY '05 budget request builds on a number of enormous successes which we've achieved over the past three years. I'm very proud of what we have accomplished in terms of fulfilling the president's vision for this department and providing for the national energy and economic security of the American people.

And I'm very proud of the fine men and women whose dedication and hard work make our successes here possible. In fact, Thursday's announcement by the Office of Management and Budget that the Department of Energy ranked first among cabinet-level agencies in the implementation of the president's management agenda is, I think, a testament to that dedication and hard work by the employees of this department. OMB issued a scorecard that evaluates agency performance in the areas of human capital, competitive sourcing, financial management, e-government and budget performance integration. And OMB recognized our department as the cabinet-level agency "leading the pack with regard to management improvement." As you might imagine, everybody here is very proud of that recognition.

Our budget submission this year continues to chart a course that focuses the management and resources of the Department of Energy's mission in four key areas: defense and national security, energy security, world-class scientific research, and environmental stewardship.

Let me begin with our defense missions. The FY '05 budget requests \$9 billion in FY '05 to support our overall defense activities. Of that, \$6.6 billion will go to stockpile stewardship in the ongoing modernization of our defense complex. That's an increase of nearly \$200 million over last year's budget request.

The '05 budget includes \$99 million for first responder programs. These programs deploy teams of highly specialized scientists and technical personnel anywhere they are needed to address immediate threats from weapons of mass destruction.

We're requesting \$1.35 billion for our nonproliferation programs. Within this total, approximately \$439 million will support the Department of Energy's United States Government commitment to the global partnership to sustain nuclear nonproliferation initiatives in the former Soviet Union. Of that amount, a total of \$238 million is included for the International Nuclear Material Protection and Cooperation program to secure nuclear materials in the former Soviet Union. By the end of 2005, the fiscal year, the department will have secured 41 of 64 identified nuclear warhead sites and will have secured 37 percent of the approximately 600 metric tons of weapons-usable nuclear material.

Other programs, meanwhile, target the elimination of weapons-grade plutonium production in Russia and seek to convert 34 tons of weapons-usable plutonium in the United States and Russia, each, into commercial nuclear reactor fuels.

We're concerned about the dangerous materials outside of the former Soviet Union as well. That's why we're requesting approximately \$45 million for international nuclear and radiological cleanup programs which are designed to secure and remove dangerous materials from vulnerable sites in countries like Egypt, Libya, and Vietnam.

Meanwhile, the budget for international material protection, control, and cooperation also includes \$15 million for the Megaports initiative to detect the trafficking of nuclear and radioactive materials in the world's busiest seaports.

The FY '05 budget requests \$798 million for the Naval Reactors Program to provide safe and reliable nuclear reactors to power the Navy's warships. This program is responsible for all naval nuclear propulsion work, beginning with technology development through reactor operations and ultimately to reactor plant disposal.

Finally, safeguarding and securing all of the Department of Energy's sites and facilities is one of our top priorities. At \$1.38 billion, the FY '05 budget for all DOE safeguard and security programs addresses the requirements identified in the revised Design Basis Threat, the post-September 11th analysis of potential threats against which we must protect DOE sites and materials across the country.

The FY '05 budget request includes \$2.5 billion for energy-related objectives. These break down in a number of different ways. In FY '05 the department's Office of Energy Efficiency and Renewable Energy will be at the forefront of implementing the president's hydrogen fuel initiative. Our budget submission requests \$227 million for '05 hydrogen efforts, which offer great promise in reducing pollution as well as enhancing our nation's energy independence.

In addition to the large investments in hydrogen technology development, this budget also includes an investment of \$544 million for R&D to improve energy efficiency and

reliability in buildings, transportation, and industry, and \$220 million for R&D to reduce the cost of renewable energy technologies such as wind, solar, geothermal, and biomass.

The energy efficiency and renewable energy budget also includes \$291 million to help continue fulfill the president's commitment to increase funding for the Weatherization Assistance Program by \$1.4 billion over 10 years. That represents a \$64 million, or 28 percent increase, over FY '04 funding and would weatherize 119,000 homes in calendar year 2005.

This budget invests \$447 million for the department's coal-related research to dramatically improve the efficiency and environmental protections being developed for coal-burning power production. About \$287 million of that will go to our Clean Coal Power initiative, including our ambitious FutureGen program. This \$1 billion project will create the world's first zero-emission fossil fuel power plant.

Nuclear energy remains a critical component of the nation's energy portfolio and a significant part of America's energy future. The budget request for DOE's nuclear energy programs in FY '05 is \$410 million, a \$5 million increase from the FY '04 enacted level. These programs work to address essential requirements to develop advanced nuclear power technologies for deployment.

The FY '05 nuclear energy budget also reflects the establishment of the Idaho National Laboratory as the nation's primary center for strategic nuclear energy research, development, demonstration, and education.

The widespread blackout of August 2003, affecting 50 million people across eight states and part of Canada, was a strong reminder that our nation's electricity grid has vulnerabilities and weaknesses that need to be addressed. Energy reliability is imperative. To this end, the Department of Energy requests \$91 million, a \$10 million or 12.5 percent increase above the FY '04 level, to modernize and expand our national electricity transmission grid programs.

The budget also includes \$10.6 million for energy security and assurance activities that complement the R&D efforts undertaken by the Office of Electric Transmission and Distribution and the activities of the Department of Homeland Security.

Our energy programs are important to helping us achieve energy security in the 21st century. As important as they are, however, they are not enough by themselves. So I'd like to take this opportunity to stress the importance of Congress sending President Bush an energy bill to complete the job.

Let me now turn to science. Every one of the programs and activities highlighted in this budget depends heavily upon advanced research and development. The work we do could not be possible were it not for the scientific and engineering capability available in the Energy Department's national laboratories and at universities across this nation.

This year we're requesting \$3.4 billion for non-defense science-related programs and activities. We're particularly excited about the prospects for nanoscience research, and

we are requesting \$211 million, which is \$8 million more than in FY '04, to continue the Department of Energy's revolutionary research in this field.

Our budget also continues the pursuit of scientific understanding of matter and energy. The FY '05 budget includes \$80.5 million for construction and \$33.1 million for operation of the Spallation Neutron Source in Tennessee and \$50 million for design and construction of the Linac Coherent Light Source in California. Both facilities are expected to significantly advance the understanding of materials that will benefit applied R&D across a wide range of disciplines.

Another important investment this budget continues is the pursuit of fusion energy. Fusion, we believe, could well be one of the technologies that allows us to leap-frog the enormous acceleration in future energy demand that threatens economic growth in every corner of the world. And to this end, the department continues its commitment to the future of fusion energy science research with a request of \$264.1 million.

The request for our Genomes to Life program is \$67.5 million, an increase of \$4 million over last year. This program will attempt to use genetic techniques to harness microbes to consume pollution, create hydrogen, and absorb carbon dioxide. The research in this area can translate into gene therapies for illnesses such as cystic fibrosis, sickle cell anemia, diabetes, and cancer.

New in 2005 is a \$29 million program within Basic Energy Sciences to advance the fundamental understanding to the properties of hydrogen. This work will complement the applied investigation underway elsewhere in the department on hydrogen production, storage, and infrastructure development.

Now let me talk about the environment. There are many steps we must take to protect the environment, particularly through our Environmental Management program and our Yucca Mountain work. Our '05 budget requests \$8.6 billion to meet our various environmental-related objectives. Within that, we are seeking over \$7.4 billion for the Environmental Management program. That's \$426 million more than this fiscal year budget. This is the most funding ever for this program.

And this budget reflects the peak year of DOE's investment strategy for accelerated cleanup. The department's accelerated cleanup strategy has led to the creation of two new organizations outside of Environmental Management--the Office of Legacy Management and the Office of Future Liabilities. Transferring responsibilities to these new offices will enable the Environmental Management program to complete its current cleanup scope, and it allows other department programs to focus on their primary missions.

I'm particularly happy to report that the '05 budget includes \$43 million within the Environment Safety and Health program to accelerate the processing of claims for former workers who may have become ill as a result of their work at U.S. weapons facilities. This is a matter of doing what is right and taking care of those whose labors help secure our safety. Within this budget request we are making good on implementing

a three-year program to completely eliminate the backlog of applications by the end of the year 2006.

One of the most significant and longstanding commitments addressed in this budget is funding to establish a permanent nuclear waste repository at Yucca Mountain. To remain on schedule to begin operation in 2010, the '05 budget requests \$907.5 million, which is \$303 million above the '04 enacted level. This request enables us to finalize the license application for construction of the permanent repository as well as other activities associated with construction and with developing a transportation system to Yucca. We plan to submit a license application to the Nuclear Regulatory Commission by December of 2004.

Unfortunately, the constraints of time preclude me from talking about all of the programs that make up DOE. However, I have been able, I think here, to give everyone a sense of what we do and where we hope to go. In that light, I hope that you come away today with an understanding of the purpose and the dedication which we bring to this '05 budget submission.

This department is made up of extremely talented men and women, including the world's top engineers and scientists. I think it's a privilege to work alongside these people on a common mission. It's an honor to serve a president who shares our vision of what this department can and will accomplish in FY '05 and beyond. We believe that this department is headed in a very position direction. We're anxious for the challenges that lie ahead.

At this point, I'd be glad to take a couple of questions.

QUESTION: Mr. Secretary, you've got some programs that are being frozen or slightly reduced. Do you expect any layoffs at any of the field offices because of this, if this goes through?

SECRETARY ABRAHAM: Well, we have places in the complex where there will be eventual reduction in the work force. You know, we're in the process, for instance, in three of the environmental cleanup sites of basically phasing down the operation because we're finishing the work. Rocky Flats is one of them; Fernald and Mound. All of those sites are on accelerated cleanup programs the goal of which is to complete them by 2006. So we will begin to see some reductions in the contractor work forces at those locations.

You know, it remains to be seen as we work this out exactly what the implications are in terms of other specific reductions, but for the most part, this budget, as I indicated, represents--it is the highest budget in the history of this department, and so I anticipate minimal impact on the work force except in those areas where we have already, you know, been focusing on changing the scope of operations.

QUESTION: Mr. Secretary, what would you say that this budget reflects in terms of the commitment of the president toward the Freedom Car and the hydrogen fuel initiative? And secondly, is there any change in the law that would eliminate the tax credit for the fuel efficient cars, or the hybrid cars, that is due to phase out by 2007?

SECRETARY ABRAHAM: Well, we want to--you know, we're supporting extending some of the tax incentives for renewable energy and alternative energy vehicles. We hope we can get an energy bill through Congress that gets to the president's desk this year and includes the components which we outlined in the president's energy plan.

This budget reflects a strong commitment by the president and this administration to the fuel cell and the Freedom Car program, the hydrogen program as well. As I indicated, there's \$227 million of resources directed across the variety of the areas of this department to support that effort. Most prominent, of course, is the work we'll do directly in the area of fuel cell development as well as what we will do in the areas of hydrogen production. And there we will focus on a variety of different sources of the hydrogen, from nuclear energy as a possible source, to coal, to renewable energy as well. And in addition to those specific programs, our science department will now also join the effort, and about \$29 million of the hydrogen research programs will be conducted in the context of the science department.

So it's a very strong commitment, and it's a commitment that the rest of the world has come to recognize. One of the things that I've been participating in this past year has been a number of international conferences on various energy issues. And virtually every meeting I attend, every trip we take finds another nation asking to partner with America on hydrogen.

What this reflect is two things. First of all, that the rest of the world agrees with our assessment that hydrogen is the next frontier, that a hydrogen economy is where this world is heading. And they understand that if we can develop hydrogen fuel cell operating systems for motor vehicles, we can at the same time dramatically lessen everyone's dependence on foreign energy sources at the same time that we're dramatically improving the environment.

And so, the fact that not just America is headed in this direction, but, as we saw in November when we had the International Partnership for the Hydrogen Economy here in Washington, 14 other countries and the EU joined us in chartering that organization; the fact that as I travel, whether it's to Europe or to Asia, I find countries asking not only to work under that partnership but also to develop bilateral research programs with us--we see it as not only a wise investment for America but really where the world is heading. I think that's a strong vote of confidence in the course of the president's outline.

QUESTION: Mr. Secretary, you said that the electricity transmission and distribution are receiving, I think, roughly a 12.5 percent increase. But within that, it appears that reliability programs are receiving a slight reduction. What would you say within this budget would help prevent another blackout or modernize the electricity grid?

SECRETARY ABRAHAM: Well, I don't think that's quite the way it will work out because we're shuffling some program definitions into different areas. But I think we're launching these new programs--the GridWise program--areas where we're trying to, you know, develop smarter technology and operating systems. I think that those contribute to efficiency and reliability in terms of the operation of the grid.

I also think that passage of an energy bill that includes mandatory reliability standards has to accompany the research investment because even as we develop new technologies that can help us to minimize and, hopefully, someday eliminate the possibilities of blackouts, we also have to have rules in operation in the transmission grid that have to be maintained by the people who participate, and make those enforceable. And hopefully, that can happen this year as well.

QUESTION: Mr. Secretary, you have substantial spending increases in several presidential priorities. With the president working to hold the line on non-security discretionary spending, where are your agency's cuts going to come from specifically?

SECRETARY ABRAHAM: Well, what you're going to see over time is the fulfillment, really, of our commitments in areas like our environmental cleanup programs. As I've made clear from the start, when we looked at the Environmental Management program area, the under secretary, Bob Card, and assistant secretary, Jesse Roberson, put together a top-to-bottom review of how we spent those dollars. What we concluded was that we needed to go from a system in which we managed risks to one in which we literally eliminated or reduced the risk, and did so quickly. And the strategy we've now adopted is one that's working effectively in places like Mound and Fernald and Rocky Flats, where we're literally accelerating the cleanup so we finish the work quickly. And once we being to actually reduce the risk at a site, then the costs associated with that site will likewise begin to come down. And that's where you're going to start to see substantial budget reductions in our department's budget over the next several years.

Overall, we have the goal of reducing the timeframe for that cleanup for 70 years to at least 35, and hopefully a shorter period of time; and a goal of--we believe attainable goal of reducing the long-term cost of the program by at least \$50 billion. So we think we're making a very positive contribution, both in terms of the environment as well as in terms of the budget through that effort.

QUESTION: Mr. Secretary, the budget talks about legislative proposals to reclassify the fees going into the nuclear waste [inaudible]. In the past, the folks on the Hill haven't seemed too eager to go down that path. Is this structured differently, or is there anything else that you would want to stress that might make it more palatable?

SECRETARY ABRAHAM: I think some things have changed that we believe will allow for the passage of that proposal. First is the fact that we've now left the stage of doing simply the research and moved ahead because of our determination that the research supported the Yucca Mountain site, the president's ratification of that, and Congress's ultimate passage of the Yucca Mountain legislation. So I think in the minds of Congress, we've now moved from the role of research to the role of implementation.

Submitting the license this year is a key step along that way. Obviously, the Nuclear Regulatory Commission still has to make a determination of whether or not our license will be approved. But I think psychologically we've now moved from phase 1 into phase 2, and there's still the construction phase that lies ahead. But as you move into the phase of submitting the license application, beginning to develop a transportation plan, and so on, I think people recognize--I hope they'll recognize that the costs will begin to dramatically increase.

Against that is the back drop that, across America the United States government has been collecting, as you know, fees from the various utility companies who have nuclear power. The rate payers have been sending that money to Washington. That account has a surplus in it that's very substantial. I think if you add interest and so on, it might be about \$14 billion. And as opposed to that account continuing to grow because we don't spend the money from that account or we don't begin dedicating these funds, we believe in fencing them off now as they come in at the rate of about \$750 million a year--fencing them off and making them directly, then, available to fund the program. Obviously, Congress will still have to make a decision each year as to what amount of that money that comes into the fund will be spent on the program, but as opposed to going off to be spent on other projects of the federal government, we think it at least ought to be segregated for the purpose to which it was intended when it was sent to Washington.

And I think, in light of that change from, you know, phase 1 to, really, phase 2, I hope and believe there will be strong support.

QUESTION: If you can free up this money, what does it say about the schedule of the program? Are you still going to be able to--

SECRETARY ABRAHAM: Well, I'm not going to speculate. I believe we will be successful in doing it this way and I think it makes sense. I don't think members of Congress should be telling either their own rate payers or anybody else that you're sending this money to Washington and it's not going to be used for the purpose it's collected. So we'll work hard on that project.

QUESTION: Mr. Secretary, I wanted to find out whether you are close to signing an agreement with FutureGen Alliance for the FutureGen project?

SECRETARY ABRAHAM: Well, we're obviously hopeful that that will happen in the near future. We aren't quite at the point of signing. I don't know if the under secretary has any timetable he wants to reveal, but--

We're committed to two things. Number one, moving the program forward in a timely fashion. Two, making it a program that is a full and complete effort. And by that I'm talking about the magnitude of the program. As I've indicated in my remarks, we see this in the range of \$1 billion over the next 10 years or so.

For those of you unfamiliar with this important project, we basically intend to conduct the science necessary to ultimately construct a totally clean-fired coal gasification power plant, 275-megawatt power plant that would not only produce coal but have as a second

part of its production the production of energy, while we separate and fully sequester carbon that is part of that process as well as separate other pollutants at the same time.

It's our believe that this will ultimately become the prototype for the coal plants of the 21st century. Maybe it will take a few years to get to the point where it's widely used, but we believe it will be a way by which the very substantial reserves of coal, not just in America but throughout the world, can be used in an environmentally benign and clean fashion.

And not only are we dedicated to this, but last summer in Washington we held the first meeting of an organization called the Carbon Sequestration Leadership Forum. Twelve other countries and the EU joined us to put together a team that will work together on issues and programs and research that relates to carbon sequestration. I think the next meeting's coming up in Italy. We're excited about it, as are the other countries who are participating. They include not just the traditional countries that we tend to do this research work with, but it also includes China and India, two of the world's largest coal users, countries who are not part of the Kyoto Accord, but who obviously will have a major role in terms of 21st century issues that relate to GHG. So we see this as a very important new undertaking by the department, by the U.S. government, and we see the FutureGen project as potentially one of the projects that becomes an international project as a result of the leadership forum.

QUESTION: Just to follow up on the Yucca Mountain funding issue, in the past members of Congress have expressed a concern not with how the money was used but just structurally the fact that it was being taken off budget and that it was taking discretion away from them as to how funds would be used. I wonder if you could address that issue.

SECRETARY ABRAHAM: Well, we're proposing a fencing of the money so that it can't be used for other things, but it would still remain within the power of the appropriations committees to determine on an annual basis how much of the money would be appropriated for work on Yucca Mountain. In other words, there's about \$750 million that comes in in a fiscal year through those collections. What we're proposing is that 750 be fenced off from being used for other Department of Energy programs or anybody else's programs and that it then be up to the appropriators to decide whether some of it or all of it would be employed for the Yucca Mountain project, on the theory that rate payers are sending money into their utilities, the utilities are forwarding it to Washington to clean up the waste that's piling up in temporary storage sites at these facilities around the country. And already, as you probably know, the department is being sued by a number of people who feel that this money had been sent here and should have already been used to begin ameliorating their waste problems. So we believe that it's an important step in the right direction to guarantee that at least the money's going to be segregated for purposes of the Yucca Mountain project as opposed to being spent for other priorities either in this department or anywhere else.

Okay, thanks. We've got another function, and I guess you're all invited to that. Thanks for being here.

U.S. DEPARTMENT OF ENERGY BUDGET ROLL-OUT STAKEHOLDER SESSION SECRETARY SPENCERABRAHAM FEBRUARY 2, 2004 1:45 – 2:15 WASHINGTON, D.C.

SECRETARY ABRAHAM: Thanks, everybody, for coming here today. I appreciate the chance to give everyone a bit of an overview about this fiscal year '05 budget, which at \$24.3 billion is the largest in the history of the department. This budget represents nearly a 4 percent increase over last year's submission and an increase of more than 27 percent since we took office. I think those figures reflect President Bush's confidence in the work we do here and the importance which he attaches to the mission of the Department of Energy.

This budget request really builds on a number of enormous successes which we've achieved over the past three years, and I'm very proud of what we have accomplished in terms of fulfilling the president's vision for this department and providing for the national energy and economic security of the people of the United States.

I also just want to say right now that I'm extremely proud of the men and women who work for the Department of Energy. Last Thursday, as you may know, an announcement was made by the Office of Management and Budget that ranked the Department of Energy first among cabinet-level agencies in the implementation of the president's management agenda. And I think that is a testament to the dedication and the hard work of the people of the Department of Energy.

[Applause by one person.]

SECRETARY ABRAHAM: Yes. Now you know who did it all. Thank you. That individual alone is responsible for the enthusiasm with which we've taken on that challenge.

But seriously, we really have done a great job here and I want to thank the people of this department. OMB specifically said that the Department of Energy was "leading the pack with regard to management improvement." And for a department that has had its share of criticism over the years in terms of its management operations, I think everybody connected to the Department of Energy should take pride in the gains which we are making.

And I'd also just note that that announcement follows on the heels of, and in fact might have something to do with, a recent study of the best places to work in the federal government, which ranked the Department of Energy first among cabinet agencies also when it came to effective leadership.

I think one of the hallmarks of that leadership I'm perhaps most proud of centers on defining the mission of this department. From our first days in office, we stressed that the overriding umbrella under which all of the components of the Department of Energy operated was a mission of maintaining and strengthening America's national security. And that's what we do here. That obviously applies to our defense operations, but I think all of the programs here play an

important role as well. Those which help us to develop the fuels and the energy strategies for tomorrow to ensure our energy security, to those that work on environmental safety and security issues, they're all pillars of our national security effort here. We are one department with one mission.

In addition to the progress which we've made on management and mission definition in the last three years, we have made great progress in a number of our program areas as well, and I'd like to talk about those at this time.

The first area I'd like to talk about is our accelerated cleanup program of environmental management. On a complex-wide basis we have taken an approach that says we are not going to allow the legacy of the work done in the weapons complex to be part of a community's burden for as far as the eye can see. When we took over, the timetable for cleanup at most of our sites was 70 to 80 years. Today, the measures we have instituted will accelerate completion of the cleanup program by 35 years and it will save American taxpayers as much as \$50 billion and perhaps more.

Another area in which we've made tremendous progress is ensuring that nuclear power will remain part of our fuel mix in the United States. We made a decision at the beginning of 2002 that we would move ahead with the Yucca Mountain project. It was a decision that people said might never be made, a decision for which there would always be a political excuse for delay. But this department did an excellent job of conclusively establishing from a scientific point of view that the site would be safe, and I'm proud that we went ahead and made that decision to recommend the Yucca Mountain site. I'm also proud that the president supported that decision. And I'm especially proud that Congress overwhelmingly supported that recommendation as well.

There's still much work to be done at the site, at the Nuclear Regulatory Commission, and in various court rooms, but I believe that at the end of the day America will finally have a long-promised safe repository for its nuclear waste.

The Yucca Mountain program goes hand in hand with other steps we've taken to ensure nuclear energy plays an important part in our future energy mix. Our sciences are pursuing an advanced fuel cycle program to provide significant improvements in fuel performance, energy utilization, and proliferation resistance for nuclear reactors. And we're working on an international basis to develop the next generation of nuclear technologies that take us to the next level in terms of efficiency, reliability, safety, and security.

In addition to new nuclear research is a real focus on other new technologies as a key to meeting future energy and environmental challenges. These are transformative technologies that will help settle many of the debates about energy, the environment, and climate change in which our public policy seems mired today. That's why we're working on carbon sequestration technologies to ensure that this nation's 250-year coal reserves can be used without concern about environmental impact. That's why we're pursuing the promise of hydrogen. And that's why we are working with so many international partners to make important progress in all of these areas.

I am also proud of the progress which we have made with Russia on nonproliferation. We have accelerated the material protection programs as well as expanded the scope of our work to ensure

that dangerous materials don't fall into the hands of terrorists. We've increased our cooperation with Russia's strategic rocket forces by initiating warhead security work at three new sites. And we've also extended our international nuclear and radiological clean-out programs to states that were once part of the Soviet Union and its empire.

Working with them, with Russia, and with the International Atomic Energy Agency, we've been able to secure radiological materials in these countries before anyone with evil designs could get their hands on it. Moveover, we have begun a Megaports program to detect the trafficking of nuclear or radioactive materials in the world's busiest seaports. Eventually we hope to have detection equipment in key locations all over the planet.

We've also taken measures to modernize our defense complex. Three years ago, our complex was in a seriously deteriorated condition. Many of buildings and facilities were in such disrepair that our ability to carry out our defense responsibilities appeared jeopardized. It was clear to us that we needed to make significant investments to restore those facilities to working condition, and we're doing so with a very substantial capital investment program underway to make these repairs and improvements. Now, that may not be as glamorous as some of the other things which we do in this department. But because f it, it will allow us to maintain the capability of our defense complex, which is, of course, a pivotal role for this department.

And while we're rebuilding and modernizing the defense complex itself, we are also restoring its capabilities. One of the concerns which the president and I have is that some of the capabilities within our defense complex have either been allowed to deteriorate or simply have been lost. The ability to manufacture plutonium pits for nuclear weapons is one example. We produced the first certifiable pit last year, and we're on a path forward now to have a new fully-certified pit enter the stockpile for the first time in many years, by fiscal year '07. This will restore the United States to the capacity that other nuclear weapons states already have.

In the same vein, we are enhancing our nuclear test readiness. The weapons in the nuclear stockpile are various ages and in various conditions. Today we are confident that they will function are our nuclear deterrent if they are needed.

But as these weapons age in an era in which we have a moratorium on testing, it is up to our laboratories to do the phenomenally complicated job of determining, through science and technology, whether or not the weapons will work effectively and reliably. We believe we can do that. But if someday in the future it were determined that we had uncertainty, it would take us a minimum of three years to conduct a test to determine whether or not the stockpile was reliable. That is too long. So we're in the process of reducing that timeframe by half so that this department can protect America's national security by being able to conduct such a test in a timely fashion.

Beyond the things we've done within the complex, we have done some very positive things on an international basis as well. I'm proud that in a variety of areas, especially those that relate to climate change, we've been able to develop partnerships with other countries to develop the science and the technology which I've been talking about. Last November, the International Partnership for the Hydrogen Economy brought together 15 countries and the European Union to work together on fuel cells and other energy technologies for the future related to hydrogen.

The Carbon Sequestration Leadership Forum in June of last year brought together 13 countries to begin working on ways to sequester greenhouse gas emissions from fossil fuels.

And we've expanded our international partnerships on the energy production side as well. We have developed much stronger relationships with countries like Russia and others in the Caspian region, in Africa, and in South America that have the potential to be major suppliers of gas and oil for the 21st century. Because as important as it is to have a diverse mix of fuels, it's equally important to have a diverse set of sources from which we acquire that fuel.

Toward that goal, in December we had an extremely successful conference on liquefied natural gas, or LNG, bringing together all of the world's major gas-producing countries to discuss increasing U.S. access to gas exports. It was an extremely successful conference, one that I believe will help produce the fuels we need in the 21st century.

Finally, we have made a lot of progress on safety and shoring up the security of this complex. Much of our department's work is of a highly skilled nature and deals with dangerous materials, as you all know. Many of our facilities are located near populated communities. And given these facts, it is clear that safety has to be a paramount concern to everyone at the Department of Energy. I think we've done a good job of driving that message home, and it is best reflected in the improved safety record in our laboratories.

The same goes for security. Our departmental mission is national security, and we cannot be said to be fulfilling that mission with any confidence unless we can guarantee security at our facilities. We are attempting to do that. We have increased the budget by about 35 percent since fiscal year 2002. We have made significant managerial changes in the security leadership at our facilities. We have revised and are implementing the Design Basis Threat, which is the post-September 11th analysis of potential threats against which we must protect DOE sites and materials across the country. And we have in place a high-level review of security procedures being conducted by some of the nation's top military and civilian experts.

The fiscal year 2005 budget we're submitting to Congress seeks to continue and to build on all of these successes. It includes unprecedented funding increases to hasten the cleanup of the Cold War environmental legacy, to construct a permanent nuclear waste repository at Yucca Mountain, to deliver on essential nuclear-related defense requirements, to provide for energy security by exploring the promise of hydrogen and fusion, and to promote basic science research to ensure America's technological preeminence well into the future.

Our budget submission this year continues to chart a course that focuses the management and the resources of this department in four key areas: defense and national security, energy security, world-class scientific research, and environmental stewardship. Let me begin a discussion of the budget in more detail with our defense mission.

The 2005 budget requests \$9 billion to support our overall defense activities. Of that, \$6.6 billion will go to stockpile stewardship and the ongoing modernization of our defense complex. That's an increase of nearly \$200 million over last year's budget request. These programs will continue to maintain and refurbish nuclear weapons, pursue advanced scientific programs to improve our ability to certify the safety, security, and reliability of the nuclear stockpile,

modernize facilities and increase the effectiveness of our infrastructure, and maintain a robust security program to protect the nuclear weapons complex.

More specifically, the budget includes \$99 billion for first responder programs. These programs deploy teams of highly specialized scientists and technical personnel anywhere they are needed to address immediate threats from weapons of mass destruction. These teams work for the Department of Homeland Security and the FBI making available DOE's nuclear expertise in response to suspected nuclear emergencies.

In '05, \$9 million is requested to support research and development efforts on advanced concepts to meet potential new or emerging Department of Defense requirements.

We're requesting \$1.35 billion for our nonproliferation programs. Within this total, approximately \$439 million will support our commitment to the global partnership to sustain nuclear nonproliferation initiatives in the former Soviet Union. As you know, the G8 leaders who make up the global partnership have pledged to devote up to \$20 billion over 10 years for cooperative efforts to address nonproliferation counterterrorism and nuclear safety issues. President Bush has committed the United States to provide \$10 billion, or half of that \$20 billion total, through programs here at DOE and the departments of state and defense.

Of that amount, a total of \$238 million is included for the International Nuclear Material Protection and Cooperation program to secure nuclear materials in the former Soviet Union. By the end of fiscal year '05, the department will have secured 41 of 64 identified nuclear warhead sites and will have secured 37 percent of the approximately 600 metric tons of weapons-usable nuclear material

To these ends we are requesting \$15 million to help secure dangerous materials in Russia's naval complex, and \$45 million to continue Russian strategic rocket forces activities, a new area which we have undertaken in recent years. An additional \$50 million is requested for a key program aimed at the elimination of weapons-grade plutonium production in Russia. Last year--in this room, in fact--I signed an agreement with the Russian government to shut down the last remaining plutonium production plants in Russia. By 2011, we will replace three Soviet-era nuclear reactors in Russia with coal-burning plants, to result in the cessation of the annual production of 1.2 metric tons of weapons-grade plutonium.

The U.S. and Russian Plutonium Disposition programs are together funded at \$649 million. This multi-year effort in partnership with Russia will result in construction and operation of two major facilities to convert 34 tons of weapons-usable plutonium in Russia and the United States, each, into commercial nuclear reactor fuels. Construction of the multibillion-dollar U.S. facility is projected to be starting in the near future.

We are concerned about dangerous materials outside of the former Soviet Union as well. That's why we are requesting approximately \$45 million for international nuclear and radiological clean-out programs. These programs, in conjunction with Russia, the IAEA, and various other foreign governments, are designed to secure and remove dangerous materials from vulnerable sites in countries like Libya, Egypt, and Vietnam.

Meanwhile, within the budgeted total for international materials protection, cooperation, and control is a request for \$15 million for the Megaports initiative. In fiscal year '05, the Energy Department's National Nuclear Security Administration will assume responsibility for the Offsite Source Recovery Project from the Office of Environmental Management. The requested funding for that project is \$5.6 million, with a projected cost of about \$40 million over the next five years to substantially reduce the risk of these source materials being used for radiological dispersal devices. The program works closely, of course, with the U.S. Nuclear Regulatory Commission, and our goal now is to prioritize source recovery.

Finally in the area of our national defense programs, the Naval Reactors Program, as you all know, provides safe and reliable nuclear reactors to power the Navy's warships. It is responsible for all naval nuclear propulsion work, beginning with technology development through reactor operations and ultimately to reactor plant disposal. For FY '05 the budget requests \$798 million, approximately 5 percent above the FY '04 enacted appropriation, to support 70 percent completion of the design of the next-generation nuclear reactor on an aircraft carrier and to continue work on the transformational technology core, which will deliver significant energy increase to future submarines.

Finally, safeguarding and securing all of the Department of Energy's sites and facilities is, as I've noted before, one of our top priorities. At \$1.38 billion, the FY '05 budget for all DOE safeguards and security programs addresses the requirements identified in the revised Design Basis Threat. Within the total amount requested for safeguards and security throughout the DOE complex, about \$707 million will support activities to safeguard nuclear weapons facilities. About \$265 million will support activities that protect the Cold War nuclear waste material being cleaned up at our environmental cleanup sites.

In addition to the work being done on NNSA security, we're also committing approximately \$73 million to support the continued safeguards and security activities at our scientific laboratories and facilities. And we're requesting \$255 million for the Office of Security here at the department to support the development of DOE-wide security policies as well as to provide physical security for DOE headquarters.

The FY '05 request also includes \$58 million to support safeguard and security activities at the new Idaho National Laboratory for nuclear energy R&D. Moreover, \$25 million will fund the department's cyber security activities for the department's chief information officer, which an additional \$104 million within the amounts just mentioned will fund DOE-wide cyber security measures.

I focus a lot on all of these numbers because I just want to reiterate that we are making very substantial investments and will continue to do so as needed to ensure that the security of this complex is maintained at the highest level required.

Turning to the energy sector, an important element of our work is making current forms of energy use more secure, more efficient, and more environmentally benign. At the same time, we must focus on preparing the 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 as well as for generations to come.

The FY '05 budget request includes \$2.5 billion for energy-related objectives. These break out in a number of ways. The department's Office of Energy Efficiency and Renewable Energy will be at the forefront of implementing the president's hydrogen fuel initiative. Hydrogen holds tremendous promise to meet our nation's future energy challenges. Our budget submission requests \$227 million for '05 hydrogen efforts. That figure includes \$173 million for the department's energy efficiency and renewable energy programs; \$9 million for the department's nuclear energy hydrogen program; \$16 million for the department's fossil energy hydrogen program; and \$29 million for the department's science hydrogen program.

In addition to these large investments in hydrogen technology development, the budget also includes an investment of \$544 million for R&D to improve energy efficiency and reliability in buildings, transportation and industry, and \$225 million for R&D to reduce the cost of renewable energy technologies such as wind, solar, geothermal, and biomass.

The Energy Efficiency and Renewable Energy budget will also include \$291 million to fulfill the president's commitment to increase funding for the Weatherization Assistance Program by \$1.4 billion over 10 years. That represents a \$64 million increase over '04 funding, and would weatherize 119,000 homes in calendar year 2005.

This budget invests \$447 million for the department's coal-related research to dramatically improve the efficiency and environmental protections being developed for coal-burning power production. Of that amount, \$287 million will go to our Clean Coal Power initiative, including our ambitious FutureGen program. The department launched FutureGen in fiscal year '04, and this \$1 billion project will create the world's first zero-emission fossil fuel plant. When it's operational, FutureGen will be the cleanest fossil fuel-fired power plant in the world.

Nuclear energy remains a critical component of the nation's energy portfolio as well, and a significant part of America's energy future. This budget request for DOE's nuclear energy program is \$410 million, about a \$5 million increase from the '04 enacted level. These programs work to address essential requirements to develop advanced nuclear power technologies for deployment.

Furthermore, the nuclear energy budget request also reflects the establishment of the Idaho National Laboratory I mentioned a moment ago. This new laboratory will serve as the nation's primary center for strategic nuclear energy research, development, demonstration, and education. It will lead the department's investigation of a new type of nuclear power plant that is proliferation-resistant and meltdown-proof, the next-generation nuclear power plant. And we will highlight in the request for proposals that DOE will issue in just a few days. It is our objective that the Idaho National Laboratory become the world's premier nuclear energy technology center within a decade.

The widespread blackout of August 2003 affecting 50 million people across eight states and one Canadian province was a strong reminder that our nation's electricity grid has vulnerabilities and weaknesses which need to be addressed. Energy reliability is imperative. To this end, the Department of Energy requests \$91 million, a \$10 million or 12.5 percent increase above the '04

level, to modernize and expand our national electricity transmission grid. The budget also includes \$10.6 million for energy security and assurance activities that complement the R&D efforts undertaken by the Office of Electricity Transmission and Distribution as well as the activities of the Department of Homeland Security.

Every one of the programs and activities highlighted in this budget depends heavily upon advance research and development. The work we do could not be possible were it not for the scientific and engineering capability available in the department's national laboratories and at universities across the nation. To give you a very current example of the quality of the science, as some of you saw in the media here, the Lawrence Livermore National Laboratory just announced the discovery of two new elements, elements 113 and 115. The work was done jointly with the Russian Institute, and that shows both our world-class science as well as the benefits of international cooperation.

Our \$3.4 billion request for science-related programs and activities supports work in areas like nanoscience, fusion, advanced scientific computing, and microbial genomes that hold enormous promise for scientific discoveries over the next decade. Combined with the significant science expenditures included in the nonproliferation and weapons budget, this amount makes the Department of Energy the largest federal supporter of the physical sciences and will help enable us to maintain America's position as the world leader in science research and development.

Nanoscience, the study of particles at the atomic and molecular level, has nearly unlimited potential, from the life sciences to building materials that repair themselves to giving us the tools to boost the potential of solar power, this new science will be a powerful force for solving a host of challenges. Our budget request reflects the priority we've assigned for nanoscience. The department requests \$211 million, an approximately \$8 million increase over fiscal year '04, to continue revolutionary nanoscience research.

The department's budget also continues the pursuit of scientific understanding of matter and energy. The budget includes \$80.5 million for construction and \$33.1 million for operation of the Spallation Neutron Source, and \$50 million for design and construction of the Linac Coherent Light Source, which will truly give us a new window on nature. Both facilities are expected to significantly advance the understanding of materials that will benefit applied R&D across a wide range of disciplines.

Another important investment this budget continues is the pursuit of fusion energy power. When the president announced that the United States would join in the International Thermonuclear Experimental Reactor ITER project, he noted that the results of ITER will advance the effort to produce clean, safe, renewable, and commercially available fusion energy by the middle of this century. Fusion power could well be one of the technologies that allows us to leap-frog the enormous acceleration in future energy demand that we know threatens economic growth in every corner of the world. And to this end, the department continues its commitment to the future of fusion energy science research with a request of \$264.1 million, slightly above the 2004 level.

The 2005 budget also includes \$204 million for advanced scientific computing research to advance U.S. leadership in high-performance supercomputing, networking, and software development. The request includes \$38 million for the next-generation computer architecture to

acquire additional advanced computing capability for existing users and for longer-term research and development on new architectures for scientific computers.

The request for our Genomes to Life Program is \$67.5 million, an increase of \$4 million over last year. This program will attempt to use genetic techniques to harness microbes to consume pollution, create hydrogen, and absorb carbon dioxide. The research in this area can also translate into gene therapies for illnesses such as cystic fibrosis, sickle cell anemia, diabetes, and cancer.

New in fiscal year '05 is a \$29 million program within Basic Energy Sciences to advance the fundamental understanding of the properties of hydrogen. This work will complement the applied investigation underway elsewhere in the department, which I noted earlier, on hydrogen production, storage, and infrastructure development.

Many of these science programs are ongoing; others are new. And there certainly will be more new programs in this department's future. To ensure our ability to carry out these programs, in November I outlined a 20-year roadmap for future scientific facilities. This budget reflects the first steps in that direction as we begin the funding of some of the highest priority projects on that new facilities list.

Let me now talk about the environmental programs. All of our scientific research is designed in part to meet our nation's environmental challenges. In that regard, DOE's work on hydrogen, clean coal technology or next-generation nuclear technology comes as readily to mind as our renewable energy research. We also must take steps to address the environmental legacy of our past work, particularly building the nuclear weapons complex that helped win the Cold War. That means cleaning up the contamination caused by the production of nuclear weapons. It also means doing right by former weapons employees who may have become ill as a result of their work at nuclear facilities. And we must act to ensure our nation is equipped to safely handle future high-level nuclear waste generated by the use of conventional nuclear power as well as the continued production of nuclear weapons.

The Department of Energy is prepared for these responsibilities through our Environmental Management Program and the work at Yucca Mountain I spoke of earlier. Our '05 budget requests \$8.6 million to meet our various environmental-related objectives. Within that, we're seeking over \$7.4 billion for the Environmental Management Program, a \$426 million increase over last year to this year. This is the most funding ever for this program. This budget reflects the peak year of DOE's investment strategy for accelerated cleanup. To better focus these resources on actual cleanup activities, the budget includes several program shifts from Environmental Management to other programs within the department.

The department's accelerated cleanup strategy has led to the creation of two new organizations outside of Environmental Management, the Office of Legacy Management and the Office of Future Liabilities. Transferring responsibilities to these new offices enables the Environmental Management Program to complete its current cleanup scope and it allows other departmental programs to focus on their primary missions.

The budget includes \$66 million for the Office of Legacy Management to manage postenvironmental cleanup activities. This organization demonstrates the department's long-term commitment to manage requirements relevant to closure sites beyond the completion of remediation. The budget also includes \$8 million for the Office of Future Liabilities to address various cleanup activities at sites with continuing missions. The budget also provides funds to pay for and manage environmental liabilities for sites not currently assigned within the department.

I'm particularly happy to report that the budget includes \$43 million within the Environment Safety and Health Program to accelerate the processing of claims for former workers who may have become ill as a result of their work at U.S. weapons facilities. This is a matter of doing what is right and taking care of those whose labors help secure our safety. With this budget request we are making good on implementing a three-year program to completely eliminate the backlog of applications by the year 2006.

One of the most significant and longstanding commitments addressed in this budget is funding to establish a permanent nuclear waste repository at Yucca Mountain. In order to remain on schedule to begin operation in 2010, the budget requests \$907 million, \$303 million more than the 2004 enacted level. This is key to ensuring the future use of nuclear power in this nation. It's also key to helping us complete the cleanup of our weapons facilities and to consolidate high-level nuclear waste in one safe, secure location. This request enables us to finalize the license application for construction of the permanent repository as well as other activities associated with construction and with developing a transportation system to Yucca. We plan to submit a license application to the Nuclear Regulatory Commission by December 2004.

Unfortunately, the constraints of time preclude me from talking about all of the programs we have here at the Department of Energy, but it seems like I've covered pretty much all of them and time doesn't seem to have been much of an object. However, I hope I've been able to give you a sense of what we have accomplished in the past three years, and I think it's a tremendous set of accomplishments. I hope you'll come away today with a good sense of our mission and of the purpose and dedication which we bring to this budget submission.

This department is made up of extremely talented men and women, as I've suggested earlier. We work with a lot of very talented people who are the stakeholders that do business with this department or who have policy concerns that they bring before us on a variety of fronts. We very much appreciate the contributions not only that the employees of this department but those who work with this department make to our successful operation. For me it's a great privilege to work alongside all of you, and I'm very proud to work for a president who's deeply committed, as I said earlier, to the mission of this department.

I think, by any objective measurement, it can be said that in the last three years we have moved this department ahead in a very positive fashion, from defining its mission to running it with effective management to moving a number of program areas forward at a pace, frankly, beyond that which people thought was feasible. That didn't happen because of my role and the people on the 7th floor; it happened because of people throughout the complex who are dedicated to what they do. And so today I'd like to conclude by thanking all of them, expressing to you the appreciation for the work you do, and I'll look forward over the course of the next few weeks as we move ahead with this budget to continuing this discussion. Thanks for all you do.