

ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR FISCAL YEAR 2008

WEDNESDAY, MARCH 7, 2007

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 2:21 p.m., in room SD-138, Dirksen Senate Office Building, Hon. Byron L. Dorgan (chairman) presiding.

Present: Senators Dorgan, Murray, Domenici, Bennett, Craig, and Allard.

DEPARTMENT OF ENERGY

OFFICE OF ENVIRONMENTAL MANAGEMENT

**STATEMENT OF HON. JAMES A. RISPOLI, ASSISTANT SECRETARY OF
ENERGY FOR ENVIRONMENTAL MANAGEMENT**

OPENING STATEMENT OF SENATOR BYRON L. DORGAN

Senator DORGAN. I call the hearing to order. Let me apologize for the delay, but we have had two votes on the floor of the Senate and they are just finishing.

This is the first hearing of the Energy and Water Subcommittee this year and the first since I have assumed the chairmanship, and I am pleased to be in this role and working on so many interesting and divergent issues. I am also pleased to be working with my colleague Senator Domenici. I visited the National Laboratory at Sandia in New Mexico with Senator Domenici 2 weeks ago. I saw some of the scope of the subcommittee's jurisdiction during that visit and was very impressed, very interested.

Today we have two important programs to hear from, the Office of Environmental Management and the Office of Civilian Radioactive Waste Management. I am going to put most of my opening statement into the record so that we can hear the witnesses, but let me say that the Radioactive Waste Office has the immediate task of submitting a license for the Yucca Mountain waste repository to the Nuclear Regulatory Commission by June 2008. The Environmental Management Office has the immediate and long-term task of cleaning up the contamination from nuclear weapons facilities that date back to the Second World War. It is clear to me as I look at the budget that we have some very serious budget problems and we will evaluate some of those today.

PREPARED STATEMENT

I am going to put the rest of my statement in the record. I will be using a portion of that discussion during the question period. I want to thank both Mr. Sproat and Mr. Rispoli for being with us today.

[The statement follows:]

PREPARED STATEMENT OF SENATOR BYRON L. DORGAN

The hearing will come to order. Thank you all for being here today. This is the first hearing of the Energy and Water Subcommittee this year and the first of my chairmanship.

I am happy to be in this role and excited by the prospect of working on so many interesting and divergent issues. I am also pleased to be working with my colleague, and long-time chairman of this subcommittee, Senator Domenici.

I visited Sandia National Laboratory in New Mexico with Senator Domenici two weeks ago.

During that visit I saw some of the scope of this subcommittee's jurisdiction and my colleague's wealth of experience on these matters.

Today, we have two important programs to hear from—the Office of Environmental Management and the Office of Civilian Radioactive Waste Management.

The Radioactive Waste office has the immediate task of submitting a license for the Yucca Mountain waste repository to the Nuclear Regulatory Commission by June, 2008.

The Environmental Management (EM) office has the immediate and long-term task of cleaning up the contamination from nuclear weapon facilities that date back to World War II.

It is clear the proposed budget for the EM program is inadequate.

The EM program has recognized the shortfall in requested funding and has proposed to focus fiscal year 2008 cleanup on the highest risk activities across the complex. This is obviously wise.

But I'm concerned by the budget's implied premise that it is okay to delay addressing lower risk activities.

It is very clear that this budget will lead to missed milestones set out in cleanup agreements with the States. In fact, the Department is already stating it intends to work with the States to modify these cleanup agreements.

I find it unfortunate that the administration proposes to modify cleanup agreements based purely upon lack of funding.

Nuclear waste cleanup is difficult work involving some of the most dangerous materials on earth. We all understand that difficulties arise in this type of work that leads to missed milestones.

But, as I understand it, the States are often understanding in these circumstances and have agreed to make changes to the agreements when legitimate obstacles to cleanup have arisen.

It seems too much to ask that States agree to milestone changes simply because the Federal Government proposes to short-change such an important program.

I'm also concerned by a fiscal year 2008 budget document statement that says the life-cycle cost of the EM program is estimated to have increased by \$50 billion.

We need a better explanation for this estimated cost increase and what the Department is doing to reverse this escalation.

The Department of Energy's own website has a section on the history of the EM program and its origins in the weapons programs that produced the contamination. The website notes that scientists in the weapons program early on advised that the resulting waste stream presented grave problems.

DOE's website then notes, "The imperatives of the nuclear arms race, however, demanded that weapons production and testing be given priority over waste management and the control of environmental contamination."

This historical observation about the Cold War period still seems applicable today.

The Department's budget proposes some big increases in a few programs, but proposes severe decreases for Environmental Management.

I'm concerned that we are again prioritizing other activities while not fully recognizing the risk of nuclear waste contamination or our obligation to cleanup.

This subcommittee has members with a keen interest in seeing the Federal Government live up to its responsibility at these waste sites. I look forward to working with them toward this goal.

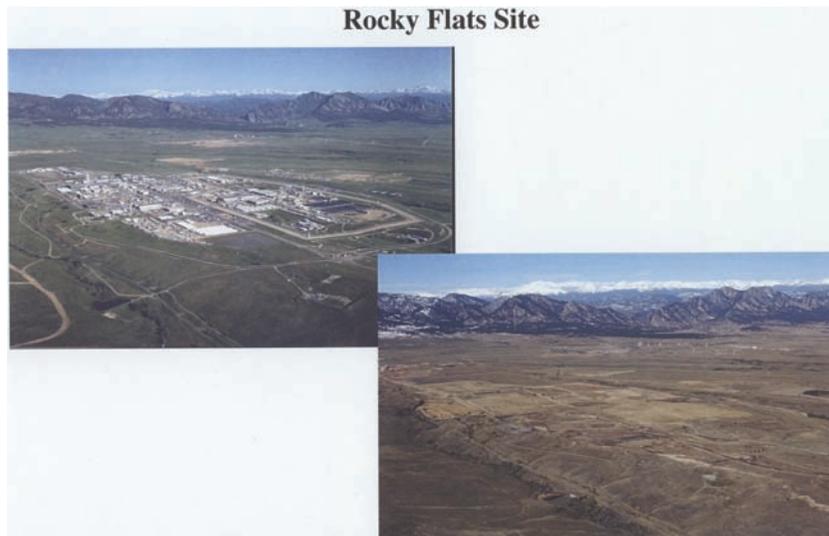
Senator DORGAN. Mr. Rispoli, if you will please present your testimony, we will include your entire testimony as part of the record and you may summarize.

STATEMENT OF HON. JAMES A. RISPOLI

Mr. RISPOLI. Thank you, Mr. Chairman. Good afternoon, Chairman Dorgan, and I look forward to seeing other members of the subcommittee, I am sure. I am happy to be here today to answer your questions on the fiscal year 2008 budget request for the Environmental Management program. I would like to thank you and your subcommittee for your support in this program.

As you know, the EM program has solved a number of cleanup challenges, including Rocky Flats, Fernald, and other major facilities that process significant amounts of plutonium and uranium and at one time presented challenges that seemed unanswerable. We are making progress on many other complex challenges that the program still faces. EM has been able to achieve notable results by addressing these challenges through risk reduction and prioritization and judicious use of the resources that you entrust to us on behalf of the American people.

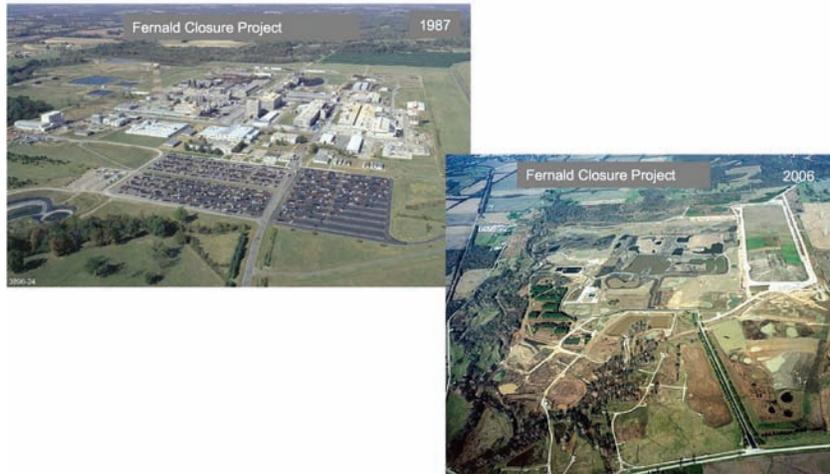
I realize that maybe we will not get the full benefit of this, but I would like to just quickly run through just some of the posters here that give you the idea of the before and after of what we have accomplished, some of the sites that we have closed literally just in the past year and a half. So I would like to start with the Rocky Flats poster. You can see the before and after, a significant cleanup effort, 3.6 million square feet of buildings demolished; the site will become a wildlife refuge.



The next poster is Fernald in Ohio. It is not much of a smaller site. Secretary Bodman and I were there with the Administrator of the EPA just last month to celebrate the closure of Fernald as well as other Ohio sites, and we will have a couple of shots of those as

well. This will also become parkland, wetlands, prairie. You will notice on the right-hand side of the after that there actually is a 75-acre on-site disposal cell.

Fernald Closure Project



The next two are Columbus and Ashtabula, Ohio. We celebrated those at the same ceremony. Columbus is a Battelle Memorial Institute property. It is about 31 acres and it is now available for reuse by the owner. The Ashtabula project is a similar privately owned property, 42 acres, also available for reuse by the owner.

Columbus Closure Project



Ashtabula Closure Project



The next shot is Miamisburg, Ohio. Miamisburg also processed nuclear materials. In the case of Miamisburg you will notice there are three significant buildings still there that can be spotted in the before shot, and that is because this particular site is being taken over by a community reuse organization and the site will be put to a constructive reuse.

Miamisburg Closure Project



Some ongoing projects at other places: Oak Ridge, for example, where we have a very large, significant EM site, but at Oak Ridge, this is a picture of the Melton Valley before and after, where we removed 600,000 tons of rock and millions of cubic yards of soil that was contaminated.

Oak Ridge Reservation - Melton Valley



At Savannah River, recently I went to the T Area celebration, where we demolished 28 facilities and took care of problems immediately adjacent to the Savannah River.

Savannah River T-Area



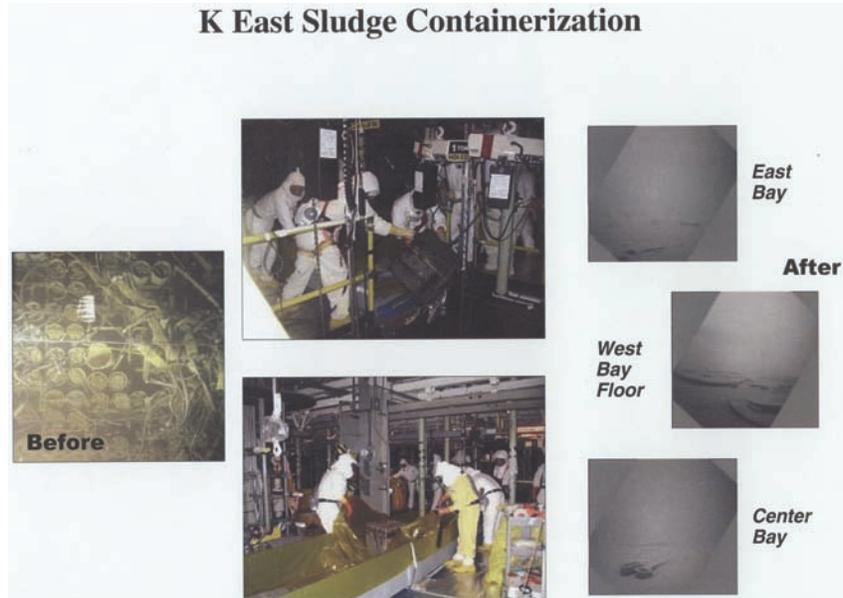
We have a picture here next of a truck pulling into the Waste Isolation Pilot Plant in New Mexico with the first remote-handed transuranic waste shipment. We have since accomplished five shipments. This is very recent, within the past month. We have since completed five shipments of transuranic waste from the Idaho facility to the Waste Isolation Pilot Plant after getting—obtaining, with

the help of the regulator in the State of New Mexico and the EPA, the permits that we needed to be able to do this, a very significant accomplishment for us.

First Remote-Handled Transuranic Waste Shipment to Waste Isolation Pilot Plant



I would like to show you a shot of a troubled project. This is the K Basins at Hanford. It has been a very, very difficult and challenging project. Spent nuclear fuel on the left below 22 feet of water, that we had to retrieve and then deal with all of the disintegrated pieces that derived from that fuel, again through 22 feet of water, with workers working with manipulators straight down through that to maneuver and pick up the pieces. You can see pictures of them in the center as well as on the right side of the clean-up as it was completed.



This is important. These basins are very close to the Columbia River and it is important to us to get these emptied out so that we can get on with ensuring that there is no contamination to the river from those.

The Idaho poster shows a very significant event. The Department had statutory authority to, after waste was removed from tanks, to close the tanks by grouting them with only de minimis material left in the tanks. It is a relatively new statutory authority, section 3116 of the 2005 National Defense Authorization Act, and this was the first application of that authority, at Idaho during the week of Thanksgiving, 2006.

Idaho Liquid Radioactive Waste Tanks



These cleanup successes were accomplished by the collaboration of DOE, the Congress, the States, and the national regulatory agencies, Indian nations, and communities, focusing on a common vision. All these completions and accomplishments should be recognized as results derived from partnerships that were founded on mutual respect and collaboration.

The task before us is very complex. We face challenges of having to develop and deploy new technologies as we proceed. We recognize our regulatory commitments and must focus on our urgent risks. At the same time, we are improving our management performance and incorporating new project scope, and in many of the projects we discover that the contamination is far greater than we had anticipated. But despite all of these, we are resulting and achieving progress.

First and foremost, safety is our top priority. We will continue to maintain and demand the highest safety performance. We believe that every one of our workers deserves to go home as healthy as he or she was when they came to work in the morning.

One of my goals as Assistant Secretary is that at least 90 percent of our portfolio will meet or beat our cost and schedule targets. Over the past year, we have personally conducted quarterly performance reviews of all of our projects with our leadership team. I can tell you today that we have shown measurable improvement, but we have yet to realize the full potential of implementing our management systems. So we will renew our emphasis on applying these principles as we go forward. We have not yet attained the ap-

propriate skills mix to most effectively implement our procurement and project execution strategies, so we are in the process of strengthening those capabilities.

Based on the results we are already seeing, I am optimistic that we can fulfill these multi-year objectives to be a truly high-performing organization.

As Secretary Bodman stated yesterday before the House Appropriations Energy and Water Development Subcommittee, the Federal Government has an obligation to address the environmental legacy of nuclear weapons production. Our request of \$5.655 billion consists of three appropriations: defense environmental cleanup, non-defense environmental cleanup, and the Uranium Enrichment Decontamination and Decommissioning Fund.

In keeping with the principles of reducing risk and environmental liabilities, our 2008 request will support the following priority activities. First is stabilizing radioactive tank wastes in preparation for treatment. This is about 31 percent of our request. We consider it to be the most clear and imminent risk that we address in our program. Storing and safeguarding nuclear materials and spent nuclear fuel, which is about 17 percent of our request. Dispositioning transuranic low-level and other solid waste, about 16 percent of our request; and remediating major areas at our sites and decontaminating and decommissioning excess facilities, which is about 26 percent of our request. Examples of milestones and planned activities by site-specific categories can be found in my formal statement, Mr. Chairman, that I request be accepted for the record.

This budget requests and reflects difficult decisions to focus funding on activities we have identified to reduce the highest risks we face. Some of these funding decisions are not driven by existing compliance agreements. Therefore, this budget request does not cover some of the lower risk-reducing activities required under existing compliance agreements.

PREPARED STATEMENT

Mr. Chairman and members of the subcommittee, let me assure you that we will continue to work with this subcommittee and our regulators in implementing our risk reduction approach, using the resources you provide to ensure the best possible protection for the public. Challenges lie ahead, but we are focused on our objectives—safety, performance, cleanup, and closure. I look forward to continuing to work with this subcommittee and the Congress to address your concerns and interests, and I would be pleased to answer your questions during the hearing. Thank you, sir.

[The statement follows:]

PREPARED STATEMENT OF HON. JAMES A. RISPOLI

Good morning, Chairman Dorgan and members of the subcommittee. I am pleased to be here today to answer your questions on the President's fiscal year 2008 budget request for the Department of Energy's Environmental Management (EM) program. I want to thank the subcommittee for support of the EM program.

The EM mission was undertaken to address the safe and successful cleanup of the Cold War legacy brought about from five decades of nuclear weapons development and government-sponsored nuclear energy research. This mission, as I pointed out last year, is both inherently challenging and innately beneficial to the American people. As this committee knows the EM program has solved several cleanup chal-

allenges, including Rocky Flats and Fernald, that at one time seemed unanswerable. We are also making progress on the many other complex challenges that the program still faces. Since I last appeared before this committee, EM has been able to achieve notable results by addressing these challenges through a risk reduction and prioritization strategy and a judicious use of the resources that Congress entrusts to us. EM is implementing this prioritized, risk reduction strategy supported by the crucial tenets of safety, performance, cleanup, and closure.

The President's fiscal year 2008 budget request will allow this prioritized work on these important cleanup and closure projects to continue across the complex. For the EM program, the President's budget request for fiscal year 2008 is \$5.66 billion. We've been able to achieve a decrease of \$173 million from the fiscal year 2007 request by employing a thoughtful balance of reducing risk and completing cleanup for the EM program. Nearly half of our budget request will go towards our highest risks activities in stabilizing tank waste, nuclear materials, and spent nuclear fuel, and another quarter is going to clean up contaminated soil, groundwater, and unused facilities. With this request, we are continuing on our strategic course to address high priority-tank waste treatment and radioactive waste disposition while preserving our site completion and closure drive.

With this budget request, the Defense Waste Processing Facility at Savannah River Site (SRS), the Advanced Mixed Waste Treatment Facility at Idaho National Laboratory (INL), and the Toxic Substance Control Act Incinerator at Oak Ridge Reservation (ORR) will continue to operate, along with the initiation of operations at the Depleted Uranium Hexafluoride (DUF₆) conversion facilities in both Ohio and Kentucky. Design and construction will continue at the Waste Treatment Plant at Hanford, the Sodium-Bearing Waste Treatment Plant at INL, and the Salt Waste Processing Facility at SRS. Tank farm operations will continue at Hanford, INL, and SRS along with spent nuclear fuel receipt, storage, and cleanup.

At the SRS, this request will support ongoing nuclear material processing in H-Canyon and plutonium vitrification design to support ultimate disposition. At Hanford, it supports consolidation of plutonium and unirradiated category 1 and 2 nuclear fuel to an off-site location, pending a consolidation decision. Consolidation of enriched uranium from INL to an off-site location, and design and long-lead procurement for the U-233 disposition project at Oak Ridge Reservation is also supported in this request.

This request enables transuranic (TRU) waste projects to continue with priority for INL and Los Alamos National Laboratory (LANL) TRU waste. Other contact and remote-handled TRU shipments to the Waste Isolation Pilot Plant (WIPP) are also supported. Low-level radioactive waste and mixed low-level radioactive waste activities will be supported at Hanford, Nevada Test Site (NTS), INL, SRS, and ORR.

The request will allow high-priority waste retrieval, soil and groundwater remediation, and decontamination and decommissioning (D&D) of excess facilities at Hanford, INL, SRS, ORR, Portsmouth, Paducah, LANL, and other sites. In addition, the request supports targeted technology development and deployment in support of high-level waste, soil and groundwater, and facility D&D.

With this budget request, EM will achieve our goals for risk reduction and cleanup completion at:

- Lawrence Livermore National Laboratory-Site 300, California;
- Inhalation Toxicology Laboratory, New Mexico;
- Pantex Plant, Texas;
- Sandia National Laboratory, New Mexico; and,
- Argonne National Laboratory-East, Illinois.

As cleanup work is completed at sites with continuing missions, EM will transfer long-term surveillance and monitoring activities to the cognizant program office or, for those sites without a continuing mission, to the Office of Legacy Management.

The fiscal year 2008 budget request will allow the EM cleanup program to reduce risk, honor commitments and produce results worthy of the investment of the American people. We are committed to ensuring strong management of this complex cleanup work to secure safe and efficient progress that protects the public, our workers, and the environment. We have shown we can deliver meaningful results. Your continued support will allow us to deliver results important for today, as well as for generations to come.

RISK REDUCTION RESULTS

The results being delivered by the EM program's risk reduction and prioritization strategy are proving that linking safety, performance, cleanup, and closure can lead to significant outcomes. We are communicating and discussing our challenges with our State and Federal regulators, Congress, the communities, and other interested

parties. We believe that reasonable solutions are best found through open interaction with all interested parties. Recently, we celebrated another success at the completion ceremonies for the Fernald, Ashtabula and Columbus sites. Cleanup successes achieved with the assistance of representatives from Congress, the State and national regulatory agencies, and the communities, collaborating and focusing on a common vision. It is the latest demonstration of our progress following the earlier completion of cleanup at Rocky Flats in Colorado, the Kansas City Plant in Missouri, and the Lawrence Livermore National Laboratory-Main Site in California. All these completions should be recognized as results that have been borne from partnerships founded on mutual respect and collaboration.

EM has also made other significant progress:

- Stabilizing and packaging for disposition all plutonium residues, metals, and oxides (SRS and Hanford);
- Producing well over 2,000 cans of vitrified high-level waste from radioactive tank liquid wastes (SRS and the West Valley Demonstration Project);
- Retrieving and packaging for disposal over 2,100 metric tons of spent nuclear fuel from the K-Basins on the Hanford site to protect the Columbia River;
- Characterizing, certifying, and shipping close to 37,000 cubic meters of TRU waste from numerous sites to WIPP for permanent disposal;
- Disposing of more than 965,000 cubic meters of legacy low-level waste and mixed low-level waste (contaminated with hazardous chemicals); and
- Eliminating 11 out of the 13 high-risk material access areas through material consolidation and cleanup.

In addition, on a site-specific level, we have:

- Initiated pre-conceptual design of the Plutonium Disposition Facility at SRS;
- Completed disposal at WIPP of all legacy drummed TRU waste from SRS;
- Completed demolition of the 232-Z facility at Hanford;
- Completed clean up at the Melton Valley area and the D&D of three gaseous diffusion buildings at the ORR (K-29, 31 and 33) at ORR;
- Disposed of over 8,500 tons of scrap metal from the Portsmouth site; and
- Completed the first remote-handled TRU waste shipments to the WIPP from INL.

SOLVING THE CHALLENGES

The task before us is extremely complex. We sometimes face the challenge of having to engineer new approaches or invent new technologies as we proceed. Technologies were not available or sufficiently effective, our regulatory environment has continued to change, performance issues have hindered progress, new scope has been added to our program, and greater than anticipated contamination has been found for some existing cleanup. But ingenuity and hard work are resulting in progress.

DOE is committed to resolve this cleanup in partnership with our stakeholders and regulators. The consequences of inaction pose unacceptable risks to our environment and the public.

In continuing to address these challenges, EM is focusing its cleanup efforts on the reduction of high risk issues to most efficiently invest the department's fiscal year 2008 funding request. We intend to overcome these challenges in collaboration with our partners, dealing openly with any impacts to previously predicted cost, schedule and performance. I want to assure you that we will meet these challenges with the energy and dedication that have demonstrated our steadfastness to our mission and our commitment to the public.

First and foremost, safety is our top priority. We will continue to maintain and demand the highest safety performance. We have taken measures to fully integrate safety into our project designs at an earlier stage while assuring our line project teams have the necessary experience, expertise, and training. Every worker deserves to go home as healthy as she or he was when they came to work in the morning. Safety will remain a cornerstone in the execution of our mission objectives.

We are actively engaged, both within the department and externally with our regulators and stakeholders, in identifying issues that impact our mission objectives. We have been challenged by lower than expected performance levels, increased scope, and unrealized planning assumptions. As we identify issues that could affect future performance and regulatory commitments, we are taking significant steps to improve our operations in planning and executing our work. We are applying lessons learned to help prevent future occurrences that will impact our planning and commitments.

One of my goals as Assistant Secretary is that at least 90 percent of our "projectized" portfolio will meet or exceed our cost and schedule targets. We have

begun the process of integrating our management tools into our business processes. Over the past year, I have personally conducted Quarterly Performance Reviews of all EM projects with our leadership team. I report to you that we have showed progress but we have yet to realize the full potential of implementing our management systems and better applying risk management principles—that is, identifying project uncertainties and developing mitigation measures. Some of our projects have fallen short of expected performance, but we are engaging our field management contractors with state-of-the-practice project management methods.

Over the last year, it has become apparent that we have not yet attained our full potential in our procurement and execution of projects. We have instituted measures to strengthen our emphasis on program execution. This multi-year objective already is producing results that should provide more effective management in the future. This initiative is being coupled with additional training for Federal managers and staff to enhance project management and acquisition skills. This integrated approach will deliver dividends for our managers in the long term.

We are improving our ability to ensure that proper procurement vehicles are available to meet our acquisition strategies. We are taking a new look at contract types and fee structures within our contracts. EM must acquire the best services including those of small business, to meet our business objectives and to become a top-performing organization.

I have asked my senior leadership at Headquarters and in the field to take immediate actions to ensure that everyday operating processes reflect lessons learned. Lastly, in conjunction with the National Academy of Public Administration, EM has undertaken a review of our organization and its associated functions and authorities. To date, the process has identified areas for improvement, along with some refinements of our organizational alignment. During the next few months, EM will be implementing the resulting recommendations to ensure we have an organizational structure that will enhance our ability to respond to the needs of the mission.

THE FISCAL YEAR 2008 BUDGET REQUEST

The department's fiscal year 2008 budget request for defense EM activities totals \$5,655 million. The request consists of three appropriations, Defense Environmental Cleanup, Non-Defense Environmental Cleanup, and the Uranium Enrichment Decontamination and Decommissioning Fund.

The fiscal year 2008 budget request reflects safety as its utmost priority. The Office of Environmental Management is committed to our safety principles and to maintaining the highest safety performance to protect the workers, the public and the environment.

The budget request reflects prioritizing program work to balance the goals of risk reduction; completing ongoing work to achieve completion at four sites; and, meeting our environmental commitments. For fiscal year 2008, EM's funding priorities are listed in order of risk, to best address our cleanup challenges:

- Requisite safety, security, and services across EM cleanup sites;
- Radioactive tank waste storage, treatment, and disposal;
- Spent nuclear fuel storage, receipt, and remediation;
- Solid waste (transuranic, low-level, and mixed low-level wastes) treatment, storage, and disposal;
- Special nuclear materials storage, processing, and disposition;
- Soil and groundwater remediation; and
- D&D of contaminated facilities.

Examples of milestones and planned activities for fiscal year 2008 by site-specific categories are:

Hanford

Richland

Consolidate, package, and remove of spent nuclear fuel and other radioactively-contaminated elements within the K Basins (K-East and K-West).—The K Basins project is a high priority, risk reduction activity due to its close proximity to the Columbia River. The goal of this project is removal of all spent nuclear fuel, radioactive sludge, contaminated K Basin water, and radioactive debris from the K Basins. The endpoint of the K Basins cleanup will mean the removal of more than 55 million curies of radioactivity that pose a threat of leakage to the surrounding environment, including the Columbia River.

Amplify River Corridor remediation activities for Reactor Areas D, F, and H.—The River Corridor Closure Project will complete remediation of contaminated waste sites; the D&D and demolition of facilities that are adjacent to the Columbia River; and placement of eight reactors into an interim safe storage condition. The work

performed within the River Corridor Closure Project includes digging up contaminated soil, constructing interim safe storage (cocooning) of the reactors, demolishing facilities in the old reactor complexes and facilities in the 300 Area, disposing of waste in the Environmental Restoration Disposal Facility, and constructing surface barriers or caps over contaminated sites.

Continue retrieval of contact handled suspect transuranic waste and scheduled shipments to WIPP.—The Hanford Site contains thousands of containers of suspect transuranic waste, low-level, and mixed low-level wastes. The end point of this project will include the retrieval of contact-handled suspect transuranic waste in the low-level burial grounds, the treatment of mixed low-level waste, the disposal of low-level waste, and certification and shipment of transuranic waste to WIPP.

Continues on track groundwater/vadose zone remediation activities.—Due to 40 years of vast weapon production processes, Hanford's groundwater has been contaminated with carbon tetrachloride, chromium, technetium 99, strontium, and uranium plumes. EM is dedicated to preventing the potential for contaminants reaching the groundwater by: decommissioning an additional 100 unused groundwater wells; monitoring 700-plus wells for contaminants of concern above drinking water standards; and, commencing design of final remediation actions to address carbon tetrachloride and technetium plumes.

Office of River Protection

Sustain tank farm closure processes and maintain the tanks in a safe and compliant condition.—The radioactive waste stored in Hanford tank farms has been accumulating since 1944. Due to the age of the tanks, a number have leaked in the past into surrounding soil and groundwater. In order to reduce the risk of future tank leaks into the environment, the overall objectives of this project include the stabilization of radioactive waste stored underground in tanks, including retrieval, treatment, disposal, and closure of the facilities.

Progress on path forward for the Waste Treatment and Immobilization Plant.—The Waste Treatment and Immobilization Plant (WTP) is critical to the completion of the Hanford tank waste program by providing the primary facility to immobilize (vitrify) the radioactive tank waste at the Hanford Site. The WTP complex includes five facilities: the Pretreatment Facility, the High-Level Waste Facility, the Low-Activity Waste Facility, the Balance of Facilities, and the Analytical Laboratory. In fiscal year 2008, the WTP project team plans to complete: close-in of the annex building in the Low-Activity Waste Facility; installation of roofing and completion of the building shell for the Analytical Laboratory; construction of the water treatment building in the Balance of Facilities; and renewal of construction for the High-Level Waste Facility and the Pretreatment Facility.

Idaho

Transfer spent nuclear fuel from wet to secure dry storage.—Promote the safe and secure receipt, dry storage, and packaging and future transfer of the spent nuclear fuel to a Federal geologic repository.

Continue shipments of transuranic waste to the WIPP.—Maintain program activities that support waste characterization, packaging, and transportation of remote-handled transuranic waste to WIPP that lead to reduced surveillance and operation costs.

Pursue ongoing sodium-bearing waste treatment facility construction, including efforts to gain necessary regulatory approvals for sodium bearing waste treatment and disposal.—The overall objective of this project is treatment and disposal of the sodium-bearing tank wastes, closure of the tank farm tanks, and performance of initial tank soils remediation work. Construction and operation of the sodium-bearing waste facility will reduce potential risk to human health and the environment by preventing the potential migration of contamination into the Snake River Plain Aquifer, which is a sole-source aquifer for the people of Southeastern Idaho.

Los Alamos National Laboratory

Characterize, certify, and ship above-grade transuranic waste inventory.—The Solid Waste Stabilization and Disposition Project includes the treatment, storage, and disposal of legacy transuranic and mixed low-level waste generated between 1970 and 1999 at LANL. Final disposal of the legacy transuranic waste from LANL will reduce risk to workers, as well as reduce security costs associated with transuranic waste.

Promote soil and water remediation and monitoring.—The LANL Soil and Water Remediation Project's objective is to identify, investigate and remediate, when necessary, areas with chemical and/or radiological contamination attributable to past Laboratory operations.

In fiscal year 2008, in order to fulfill the objective of protecting and monitoring the regional aquifer, as well as long-term surveillance and monitoring to provide necessary safeguards and protection for surface and ground waters, the following activities are planned:

- Perform groundwater monitoring at all major watersheds: LA/Pueblo; Mortandad; Canon de Valle; Sandia; and in close proximity to the major waste sites;
- Conduct stormwater sampling and implement erosion control measures;
- Install and monitor four wells in Pajarito and Bayo canyons; and
- Complete construction of 260 Outfall Corrective Measures for alluvial and surface water treatment system.

Oak Ridge

Continue design of U-233 down-blending project and begin Building 3019 modifications.—Down-blending the Building 3019 inventory for disposition is in accordance with the national non-proliferation goals by making the U-233 material unsuitable for use in weapons and reducing security costs at the Oak Ridge National Laboratory.

Ship contact-handled transuranic waste to WIPP.—Process 250 cubic meters of contact-handled transuranic debris and 170 cubic meters of remote-handled transuranic debris with shipments to the WIPP; and continue to dispose of low-level/mixed low-level waste at the NTS.

Complete the Molten Salt Reactor Experiment fuel salt removal remediation project.—Upon completion of active remediation, surveillance and maintenance activities of the Molten Salt Reactor Experiment facility will be provided until decontamination and decommissioning of the site has occurred.

Decontaminate and decommission building K-25 and K-27, including completing demolition of the K-25 west wing.—Surveillance and maintenance of the K-25 and K-27 buildings will be continued in order to maintain safe conditions. Demolition of K-25 east wing and K-27 will occur after the decontamination and decommissioning process.

Paducah

Complete construction and startup of the depleted uranium hexafluoride conversion facility (DUF₆).—The Paducah DUF₆ conversion facility is scheduled to begin operation in fiscal year 2008. The DUF₆ conversion facility will convert depleted uranium hexafluoride into a more stable form, depleted uranium oxide, which is suitable for reuse or disposition. The depleted uranium oxide will be sent to a disposal facility, the hydrogen fluoride by-products will be sold on the commercial market, and the empty cylinders will be sent to disposal or reused.

Store, treat, and dispose of legacy waste and newly generated waste.—The Paducah Gaseous Diffusion Plant is responsible for some waste streams generated by the United States Enrichment Corporation's operation of the Plant. In fiscal year 2008, we plan to complete expansion of five new sections of on-site landfill for non-hazardous waste disposal; perform ongoing characterization, packaging, treatment and disposal of 50 cubic meters of newly generated waste (mixed and low-level); and complete legacy low-level waste characterization, packaging, and disposal. The continued shipment and disposal of the waste will reduce potential for release into the environment from aging containers.

Portsmouth

Finalize construction and startup of the uranium hexafluoride conversion facility.—The Portsmouth DUF₆ conversion facility is scheduled to begin operation in fiscal year 2008. Like the Paducah facility, the DUF₆ conversion facility will convert depleted uranium hexafluoride into a more stable form, depleted uranium oxide, suitable for reuse or disposition.

Store, characterize, treat, and dispose of legacy waste generated by activities at the Portsmouth Gaseous Diffusion Plant.—We will continue to characterize, treat, and dispose of any newly generated waste; develop the management and disposal of low-level waste associated with 438 converter shells in storage with potentially classified waste; disposition of excess site equipment (vehicles, scrap, etc.) and disposition of poly bottle solutions which contain liquids with high fissile material and are required to be treated prior to disposal.

Continue transition activities from cold shutdown mode to decommissioning.—In fiscal year 2008, there is an increase in funding to support the transition of the Gaseous Diffusion Plant from a cold shutdown to decontamination and decommissioning. Activities include: conducting environmental monitoring and reporting for groundwater, surface water, sediment, biological, vegetation, and associated sample collection; performing enhanced uranium deposit mitigation measures for criticality

concerns in the process buildings to eliminate near-term safety issues; and initiating soil and groundwater investigation and/or remediation underneath approximately 140 buildings.

Savannah River Site

Consolidate on-site Plutonium to K Area.—In order to meet the Department's Design Basis Threat criteria, plutonium at SRS is being consolidated into one Category 1 Special Nuclear Materials Storage Facility. The receipt, storage, and disposition of these special nuclear materials at the SRS allows for de-inventory and shutdown of other DOE complex sites, while providing substantial risk reduction and significant mortgage reduction savings to the Department.

Ship all legacy transuranic waste to WIPP and treat low-level waste and mixed low-level waste.—In fiscal year 2008, SRS plans to dispose of transuranic waste previously characterized as mixed low-level waste; dispose of low-level waste and newly generated waste, including soil, groundwater and decontamination and decommissioning wastes; dispose of mixed low-level waste inventory and newly generated waste; and dispose of hazardous waste inventories, thus reducing potential exposure to project workers.

The end-state for this project is the shipment of all legacy transuranic waste to the WIPP, the treatment of PUREX waste, and the elimination of all legacy inventories and disposition of newly generated low-level waste, mixed low-level waste, and hazardous waste.

Continue groundwater corrective actions across the Site.—The SRS is working to prevent the spread of contamination into adjoining groundwater aquifers and nearby surface waters. Existing contamination in vadose zones, groundwater and surface water/sediments are currently being cleaned up, thereby reducing the risk to site workers, the public and the environment.

Treat, stabilize, and dispose legacy radioactive waste stored in underground storage tanks.—The continuation of the design and construction of the Salt Waste Processing Facility will aid the Defense Waste Processing Facility in the process of safely disposing of the liquid tank wastes. The Salt Waste Processing Facility will separate the high-activity fraction from the low-activity fraction of the salt waste stored in the underground tanks at the SRS. The completion of the Salt Waste Processing Facility will support the mission of SRS in meeting its Federal Facilities Agreement commitments for waste tank disposition.

Waste Isolation Pilot Plant

Operate the WIPP in a safe manner to support disposal capabilities for transuranic waste.—The WIPP in Carlsbad, New Mexico, is the nation's only mined geologic repository for the permanent disposal of defense-generated transuranic waste. All of the defense-generated transuranic waste from eligible generator sites must come to WIPP for receipt, handling, and disposal.

CONCLUSION

The fiscal year 2008 budget request enables risk reduction to continue. Challenges lie ahead but we are focused on our objectives and our strategy. Safety, performance, cleanup, and closure underpin our actions and initiatives. We are committed to work with all interested parties to resolve issues. We look forward to continuing to work with this subcommittee and the Congress to address your concerns and interests. Our success relies on our effective partnerships with our regulators, the communities, and our contractors to produce progress in accomplishing meaningful results for the American public.

I look forward to a continuing dialog with you and the subcommittee. This concludes my formal statement for the record. I will be pleased to answer any questions at this time.

Senator DORGAN. Mr. Rispoli, thank you very much.

We will hear from Mr. Sproat and then ask questions. But we have been joined by the ranking member, former chairman of this subcommittee, Senator Domenici. Senator Domenici, welcome.

OPENING STATEMENT OF SENATOR PETE V. DOMENICI

Senator DOMENICI. Thank you very much, Mr. Chairman. I am pleased to say a few words and thank you for that.

First, thanks to the witnesses for coming. I look forward to working with you as we put together this balanced bill for fiscal year

2008. I am glad that you are starting out this way, which would indicate to me that you want to get a bill; you do not want to go through what we did last year, with no bill.

I look forward to addressing many important issues revolving around research programs that can have a real impact on our energy security and will support cutting edge scientific research. We will also face a number of challenging issues, such as Katrina recovery and environmental cleanup. I appreciate your willingness, Mr. Chairman, to visit New Mexico to tour our great labs and hear from the people who have devoted their professional careers to supporting our Nation's security and nuclear deterrent. You did that with me and I am most appreciative and will not forget that.

Mr. Chairman, you have also selected a great staff. Doug Clapp and Franz Wuerfmannsdobler are exceptional and will serve the subcommittee well. Along with my two veteran people, I think we have a good team. Roger Cockrell is the best guy in town and you kept him on water projects and he will serve us well, Democrat and Republican.

I noted earlier that there are many challenging matters. Two of those issues are the topic of the hearing today, Yucca Mountain and environmental cleanup. Yucca Mountain, the budget provides \$494 million and makes the development and submission of the license application to the Nuclear Regulatory Commission (NRC) in 2008 a top priority.

I am going to skip through the Yucca, assuming that you have covered most of it, and go to the matter that is haunting the laboratory at Los Alamos with reference to cleanup. I think you know there is a big problem there. But I would say with reference to Yucca just one thing. Last year Senator Reid and I developed legislation to address the potential that waste might remain on site well past 2017, opening date for Yucca Mountain. As Mr. Sproat pointed out in the written testimony, at the Federal Government legal liability increases by \$500 million annually each year Yucca Mountain is delayed. Is that correct?

Mr. SPROAT. That is correct.

Senator DOMENICI. I will continue to work with the majority leader and the chairman to see if we can find an acceptable compromise that will reduce our legal liability in the near future. I hope you can think about that and work with us on that. That is a lot of money going right out the window for nothing.

Mr. SPROAT. Yes, sir.

Senator DOMENICI. The budget provides for environmental management at \$5.6 billion for defense and non-defense. The budget is in steady decline from the fiscal year 2006 level that was a record at \$7.3 billion. This is a reduction of nearly 25 percent. You have got a real job.

In particular, I am concerned at what this will mean to Los Alamos. Just 2 years ago the Department entered into a consent agreement, Mr. Chairman, with Los Alamos and the State to clean this up by 2015. That is a very important document and a very important commitment. Unfortunately, the budget requests for the past 2 years have been wildly inconsistent and insufficient to deliver on the agreed-upon cleanup milestones.

I have spoken with Secretary Bodman regarding my frustration with the lack of funding consistency and I believe the Department needs to set a budget baseline that matches our cleanup goals and then deliver on these commitments, not 1 year but multiple years. We simply cannot continue to make environmental management the bill payer for every new important R&D program.

PREPARED STATEMENT

I also realize that I need to make this appeal directly to OMB. I will do that, which has held the Department's budget flat. But when you have a consent agreement it would seem to me that you have got to pay for it. I understand the Secretary will go to New Mexico and try to work out something that is more doable, but yet over 12 or 15 years will do the job. We will all be interested in whether that works.

Thank you, Mr. Chairman.
[The statement follows:]

PREPARED STATEMENT OF SENATOR PETE V. DOMENICI

Mr. Chairman, I would like to welcome you to your first budget hearing as chairman of the Energy and Water Subcommittee. I look forward to working with you as we put together a balanced bill for fiscal year 2008.

I look forward to addressing many important research programs that can have a real impact on our energy security and will support cutting edge scientific research. We will also face a number of challenging issues, such as the Katrina recovery and environmental cleanup.

I appreciate your willingness to visit New Mexico to tour one of our great labs and hear from the people who have devoted their professional careers to supporting our Nation's security and nuclear deterrent.

It means a lot to me that you would make your first laboratory visit in New Mexico.

Mr. Chairman, you have also selected great staff—Doug and Franz are exceptional and will serve the subcommittee well. We will also continue to share the services of Roger Cockrell—the best water guy in town.

Mr. Chairman, as I noted earlier there are many challenging policy matters facing this subcommittee. Two of those issues are the topic of this hearing today—Yucca Mountain and environmental cleanup.

YUCCA MOUNTAIN

This budget provides \$494 million and makes the development and submission of the license application to the NRC in 2008 a top priority.

I believe that the Secretary recognizes the importance of ensuring that the license is of the highest quality and can be vigorously defended in 2008.

The Department has taken a new approach to standardizing the canisters used to package and ship spent nuclear fuel to the repository for storage. I am interested in this approach, but want to make sure this solution will cut costs.

I know the Department is very serious about completing Yucca Mountain by 2017; but the Congress still must pass authorizing legislation in order for Yucca Mountain to stay on even this new schedule. Although, I will assist in anyway I can in moving this legislation, I am not confident that this language will pass without significant changes, if at all.

Last year, Senator Reid and I developed legislation to address the potential that waste might remain on site well past the proposed 2017 opening date for Yucca Mountain. As Mr. Sproat pointed out in his written testimony that the Federal Government's legal liability increases by \$500 million annually each year Yucca Mountain is delayed.

I will continue to work with both the majority leader and Chairman Dorgan to see if there is an acceptable compromise that will reduce our legal liability in the near future.

ENVIRONMENTAL MANAGEMENT

The budget provides \$5.6 billion for defense and non-defense cleanups. This budget is on a steady decline from the fiscal year 2005 record level of \$7.3 billion. This is a reduction of nearly 25 percent.

I understand the Department has attempted to prioritize cleanups based on risk in order to fit within the budget constraints. But the facts paint a very different picture. The budget cuts will undermine the Department's existing cleanup obligations and will push back completion dates.

In particular, I am concerned about what this will mean for Los Alamos. Just 2 years ago the Department entered into a Consent Agreement with the State to cleanup the site by 2015.

Unfortunately, the budget requests for the past 2 years have been wildly inconsistent and are insufficient to deliver on the agreed upon cleanup milestones.

I have spoken with Secretary Bodman regarding my frustration with the lack of funding consistency. I believe the Department needs to set budget baselines that match our cleanups goals and then deliver on these commitments year after year.

We simply can't continue to make environmental management the bill payer for every new important R&D initiative. I also realize I need to make this appeal directly to OMB, which has held the Department's budget flat.

Nevertheless, I am committed to work with the laboratory, the State of New Mexico, the Department and Chairman Dorgan to find the appropriate level of funding for this cleanup effort.

Thank you Mr. Chairman.

Senator DORGAN. Senator Domenici, thank you very much.

CONSEQUENCES OF A REDUCED ENVIRONMENTAL MANAGEMENT
BUDGET

Senator DORGAN. Let me make a comment that I did not make at the start of this and then I am going to call on Senator Murray for a moment. I was looking back at the web site of the Department of Energy. They note that scientists early on in the weapons programs in this country's effort to produce nuclear weapons advised that the resulting waste stream presented very grave problems, but the DOE's own web site says: "The imperatives of the nuclear arms race, however, demanded that the weapons production and testing be given priority over waste management and the control of environmental contamination."

Well, we understand what happened and the Department of Energy's web site describes why it happened. Now there is a responsibility to address it, and I am very concerned about the proposed budget. What we are confronted with is a requirement to address these issues with a budget that is dramatically reduced, a budget that I think will result in substantially missed milestones. I am going to ask about that.

But I know that both of you will be required today to support the President's budget. That is your role. But I do want to ask questions about the consequences. What are the consequences of a budget that is a 23 percent reduction in 4 years for the EM budget? What is the basis of that, with so much cleanup work yet to be done across these complexes? How can such a great reduction in funding be proposed and what would be its consequences?

So I will ask those questions, but I wanted to, following Senator Domenici's comments, make those observations. I am going to call on Senator Murray.

STATEMENT OF SENATOR PATTY MURRAY

Senator MURRAY. Mr. Chairman, I will just submit an opening statement for the record. Just let me thank you for having this hearing. I look forward to working with you and Senator Domenici on the critical issues that your subcommittee is going to have to address this year, and I want to thank Mr. Rispoli and Mr. Sproat for being here today.

I appreciate the opportunity to talk about the importance of cleaning up waste across the DOE complex, but particularly at Hanford in my home State. I do want to just say quickly I am pleased the administration is keeping its commitment to getting the vit plant back on track and fully funded. It is a long process. We are in it for the long haul and I appreciate that.

I have a number of questions and I will be asking them after we have heard the testimony. Thank you, Mr. Chairman.

[The statement follows:]

PREPARED STATEMENT OF SENATOR PATTY MURRAY

Thank you Chairman Dorgan for calling this meeting to examine DOE's cleanup efforts across the country and thank you Mr. Rispoli and Mr. Sproat for coming here to testify today.

I glad to have the opportunity to talk about the importance of cleaning up waste across the complex and particularly at Hanford in my home State.

I am pleased that the administration is keeping its commitment to getting the vit plant back on track and fully funded.

I know that this is a long process and I am in it for the long haul. There are several important projects ongoing at Hanford and today I would just like to ask a few particular questions of you Mr. Rispoli.

Senator DOMENICI [presiding]. Thank you very much.

The chairman asked if I would just proceed with where he was going and ask you, Mr. Sproat to, wherever you were on the testimony, proceed.

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

STATEMENT OF HON. EDWARD F. SPROAT III, DIRECTOR

Mr. SPROAT. I had not started. Thank you, Senator.

Good afternoon, Mr. Chairman, Senator Domenici, Senator Murray. Thank you very much and I appreciate the invitation of the subcommittee to talk about the President's fiscal year 2008 appropriations request for the Office of Civilian Radioactive Waste Management, of which I am the Director. We have responsibility, as you know, to design, build, license, and operate the Yucca Mountain repository, the national high-level waste repository.

Fiscal year 2008 is a major critical year for the national repository program. This is the year when we have major deliverables that are due: the supplemental environmental impact statement for the repository, certifying the licensing support network and submitting the license application to the Nuclear Regulatory Commission.

The President's budget request, \$494.5 million, will allow us to achieve those milestones, which are on the critical path to opening this repository by 2017, which is our best achievable date. In my written testimony, which I ask be introduced in the record, there are more specifics about our deliverables for 2008 and the other de-

scriptions of funding of State and local oversight associated with the repository is also mentioned in that formal statement.

Let me talk a little about the impact of the fiscal year 2007 final appropriations, final authorization. For fiscal year 2007, which as you know has only been passed here in the past 3 or 4 days, the President—

Senator DOMENICI. You mean appropriations, not authorizations.

Mr. SPROAT. I am sorry, appropriations.

The President asked for \$544.5 million for the Yucca Mountain program, of which was appropriated \$444.5 million, which was \$100 million less than what the President asked for. So right now my management team and I are in the middle of the effort to understand the impacts of that on the program. While we are still evaluating the impacts of the final 2007 appropriation, it is likely but not yet certain that we will not be able to meet our best achievable schedule for opening the repository by March 2017. A 1-year slip is likely, but we are still evaluating the recovery options. So I have not given up on that 2017 date.

However, we will meet our commitment to deliver the license application for the repository to the NRC by mid-2008. It is certain, however, that we will have a reduction in force, across the program later in fiscal year 2007 and in 2008, even with the full fiscal year 2008 appropriation request of \$494.5 million. Exactly how much of a reduction in force and when it will occur we are still evaluating.

What I would like to talk about next is the issue of our ability to access or not access the Nuclear Waste Fund. I know certain members of this committee are probably very familiar with this issue. By 2009, fiscal year 2009, there is going to be a major turning point for this program. Sustained funding well above current and historic levels will be required starting in fiscal year 2009 if we are to complete this repository in 2017.

The current funding levels will not be adequate to support design and, if necessary, concurrent capital purchases, construction, transportation infrastructure, and the transportation and disposal casks that we will need to begin to design and purchase to open the repository by 2017. Now, one of the problems, I think as the committee is well aware, is that the Nuclear Waste Fund was created by the Nuclear Waste Policy Act and is funded by a one mill per kilowatt-hour fee on all nuclear generation in the country. As of today, the fund has a balance of approximately \$19.5 billion—that is with a “b”—which is invested in U.S. Treasury instruments. The Government receives approximately \$750 million per year in revenues from ongoing nuclear generation and the fund averages about a 5.5 percent annual return on its investments.

At the present time, due to technical scoring requirements, the Department cannot access the Nuclear Waste Fund receipts, interest, or corpus for their intended use without having a significant negative impact on the Federal budget deficit. In the legislation that the administration submitted to Congress last year and again we submitted yesterday, the President proposes fixing this problem by reclassifying mandatory Nuclear Waste Fund receipts as discretionary in an amount equal to appropriations from the fund for authorized waste activities. Funding for the program would still have

to be requested annually by the President and appropriated by the Congress from the Nuclear Waste Fund.

While the lack of access to the fund is not critical to the program in fiscal year 2008, it will have a serious consequence in fiscal year 2009 and beyond. For each year beyond 2017 the repository opening is delayed, the Department estimates that U.S. taxpayers' potential liability to contract holders will increase by approximately \$500 million per year. This will be in addition to the estimated current potential liability of approximately \$7 billion. There will also be added additional costs associated with keeping the defense waste sites, particularly the one in Senator Murray's site, open longer than originally anticipated.

So in summary, the President's fiscal year 2008 budget request will provide the needed funds to allow us to submit the construction application for Yucca Mountain in mid-2008, which is on the critical path. The significant reduction in the fiscal year 2007 funds will present challenges that I and my management team are working on and it puts in jeopardy our ability to meet the March 2017 date, but we are still working on some potential work-arounds.

PREPARED STATEMENT

Each year's delay beyond March 2017 will result in an increase in taxpayer liability, and therefore I respectfully urge the Congress to consider and pass the President's fiscal year 2008 budget request and the proposed Nuclear Waste Management and Disposal Act which we sent up to the Hill yesterday.

With that, I would be pleased to answer any questions the committee may have.

[The statement follows:]

PREPARED STATEMENT OF HON. EDWARD F. SPROAT III

Mr. Chairman and members of the committee, I am Edward F. Sproat III, Director of the Department of Energy's (DOE) Office of Civilian Radioactive Waste Management (OCRWM). I appreciate the invitation to appear before the committee to discuss the President's fiscal year 2008 budget request for my office which has the responsibility to design, license, construct, and operate a repository for the disposal of high-level radioactive waste, as defined in the Nuclear Waste Policy Act (NWPA) of 1982, as amended.

When I first came to this program last summer I outlined four strategic objectives to implement the President's priorities during my tenure. They are:

- Submit a high-quality and docketable License Application to the Nuclear Regulatory Commission (NRC) no later than Monday, June 30, 2008;
- Design, staff, and train the OCRWM organization such that it has the skills and culture needed to design, license, and manage the construction and operation of the Yucca Mountain Project with safety, quality, and cost effectiveness;
- Address the Federal Government's mounting liability associated with unmet contractual obligations to move spent nuclear fuel from nuclear plant sites; and
- Develop and begin implementation of a comprehensive national transportation plan that accommodates State, local, and tribal concerns and input to the greatest extent practicable.

The President's fiscal year 2008 budget request of \$494.5 million for this program is supportive and vital to achieving these objectives.

FISCAL YEAR 2008 KEY ACTIVITIES

Fiscal year 2008 will be a critical year for the program. It is imperative that the DOE submit a high-quality License Application to the NRC in 2008. This activity is on the critical path to opening the repository and allowing the Department to meet its contractual obligations to begin accepting and removing spent nuclear fuel

and high-level radioactive waste from 131 sites around the country. This budget request will provide the funding needed to complete that License Application.

In fiscal year 2008, our objectives are to:

- Submit a License Application for the repository to the NRC;
- Certify the Licensing Support Network in accordance with NRC requirements and regulations;
- Complete the Supplemental Yucca Mountain Environmental Impact Statement (EIS);
- Begin the defense of the License Application after submittal;
- Design the standard canisters to be used by the industry to package and ship spent nuclear fuel to the repository;
- Perform critical personnel safety upgrades at the Yucca Mountain site;
- Perform the analysis and deliver the report to Congress required by the NWPA on the need for a second repository; and
- Resolve comments and issue the final EIS for the Nevada Rail Line which is required to transport spent nuclear fuel to the repository.

In addition to the specific deliverables outlined above, the budget request also includes funds for the following activities:

- Funding for payments-equal-to-taxes to the State of Nevada and Nye County, Nevada, where Yucca Mountain is located. Our fiscal year 2008 request also includes funding for the State of Nevada and affected units of local government as well as funding for the University System of Nevada and Nye County and Inyo County, California, for independent scientific studies.
- Funding for cooperative agreements with State regional groups and other key parties involved in transportation planning. NWPA Section 180(c) pilot grants will also be pursued to support operational preparedness training and to refine the Section 180(c) program.
- Funding for program management and integration of the project components through formal baselines, procedures, and the system requirements hierarchy, and for resolving cross-cutting issues that impact the waste management system. This area has been weak in the past and is now targeted by senior management for improvement.
- Funding for program direction which supports Federal salaries, expenses associated with building maintenance and rent, training, and management and technical support services, which include independent Nuclear Waste Fund audit services, independent technical and cost analyses, and University-based independent technical reviews.

IMPACT OF FISCAL YEAR 2007 FINAL BUDGET AUTHORIZATION

The President's fiscal year 2007 budget request for the Yucca Mountain Program was \$544.5 million. The final budget authority received for fiscal year 2007 was \$444.5 million, a \$100 million reduction. While we are still evaluating the impact of the final fiscal year 2007 appropriation in conjunction with the President's fiscal year 2008 request, it is likely but not yet certain, that we will not be able to meet our Best-Achievable Schedule (attached) for opening the repository by March 2017. A 1-year slip is likely, but we are still evaluating recovery options. We will, however, meet our commitment to deliver the License Application for the repository in mid-2008.

IMPLICATIONS OF NON-ACCESS TO THE NUCLEAR WASTE FUND

The NWPA established the requirement that the generators of high-level nuclear waste must pay for its disposal costs. As a result, the Nuclear Waste Fund was created and is funded by a 1 mil per kilowatt-hour fee on all nuclear generation in this country. As of today, the Fund has a balance of approximately \$19.5 billion which is invested in U.S. Treasury instruments. The government receives approximately \$750 million per year in revenues from on-going nuclear generation and the Fund averages about 5.5 percent annual return on its investments. At the present time, due to technical scoring requirements, the Department cannot access the Nuclear Waste Fund annual receipts, interest or corpus, for their intended use without a significant negative impact on the Federal budget deficit. Because the monies collected are counted as mandatory receipts in the budgetary process, spending from the Nuclear Waste Fund is scored against discretionary funding caps for the Department. In legislation the administration submitted to Congress last year and has submitted again to this Congress, the President proposes fixing this problem by reclassifying mandatory Nuclear Waste Fund receipts as discretionary, in an amount equal to appropriations from the Fund for authorized waste disposal activities. Funding for the

Program would still have to be requested annually by the President and appropriated by the Congress from the Nuclear Waste Fund.

While lack of access to the Fund is not critical to the program for fiscal year 2008, it will have serious consequences in fiscal year 2009 and beyond. Over the past 6 months, we have been developing a projected budget authority needs estimate by fiscal year through repository construction. It is based on projected funding requirements for construction of the repository and the transportation infrastructure needed to meet the Best-Achievable Schedule opening date of March 2017, assuming enactment of the Nuclear Waste Management and Disposal Act that the administration has introduced. Sustained funding well above current and historic levels will be required if the repository is to be built. Funding at current levels in future years will not be adequate to support design and the necessary concurrent capital purchases for repository construction, the transportation infrastructure, and the transportation and disposal casks.

For each year beyond 2017 that the repository's opening is delayed, the Department estimates that U.S. taxpayers' potential liability to contract holders who have paid into the Nuclear Waste Fund will increase by approximately \$500 million. This will be in addition to the estimated current potential liability of approximately \$7.0 billion due to the Department's not beginning removal of spent nuclear fuel in 1998 as required by contract. There will also be added costs associated with keeping defense waste sites open longer than originally anticipated. The Department has not yet estimated those costs. It can be seen, however, that each year of delay in opening the repository has significant taxpayer cost implications, as well as the potential for delaying construction of needed new nuclear power plants. Therefore, the administration believes it is in the country's best interest to expedite construction of the repository and the transportation infrastructure necessary to bring both defense and commercial spent nuclear fuel and high-level waste to Yucca Mountain.

In summary, the President's fiscal year 2008 budget request will provide the needed funds to allow submittal of the construction License Application for Yucca Mountain by mid-2008. The significant reduction in requested funding for fiscal year 2007, however, will present challenges and puts in jeopardy the Department's ability to meet the March 2017 opening date. And, each year's delay beyond the March 2017 date will result in increased potential taxpayer liability to utility contract holders as well as increased costs for storage at defense waste sites across the country. I respectfully urge the Congress to consider and pass the President's fiscal year 2008 budget request for the Office of Civilian Radioactive Waste Management.

I would be pleased to answer any questions the committee may have at this time.

BEST-ACHIEVABLE YUCCA MOUNTAIN REPOSITORY SCHEDULE

Milestone	Date
Design for License Application Complete	November 30, 2007.
Licensing Support Network Certification	December 21, 2007.
Supplemental Environmental Impact Statement (EIS) Issued	May 30, 2008.
Final License Application Verifications Complete	May 30, 2008.
Final Rail Alignment EIS Issued	June 30, 2008.
License Application Submittal	June 30, 2008.
License Application Docketed by NRC	September 30, 2008.

BEST-ACHIEVABLE REPOSITORY CONSTRUCTION SCHEDULE

Milestone	Date
Start Nevada Rail Construction	October 5, 2009.
Construction Authorization	September 30, 2011.
Receive and Possess License Application Submittal to NRC	March 29, 2013.
Rail Access In-Service	June 30, 2014.
Construction Complete for Initial Operations	March 30, 2016.
Start up and Pre-Op Testing Complete	December 31, 2016.
Begin Receipt	March 31, 2017.

The schedule above is based on factors within the control of DOE, enactment of the Nuclear Waste Management and Disposal Act, appropriations consistent with optimum Project execution, issuance of an NRC Construction Authorization consistent with the 3-year period specified in the Nuclear Waste Policy Act, and the timely issuance by the NRC of a Receive and Possess license. This schedule also is

dependent on the timely issuance of all necessary other authorizations and permits, the absence of litigation related delays and the enactment of pending legislation proposed by the administration.

Senator DOMENICI. Proceed. Do you want to go ahead?

Senator MURRAY. My understanding is Senator Dorgan had to step out for just a short while. So if it is okay with you, Senator Domenici, I will go ahead and start with my questions, and then I am hopeful—oh, he is back.

Senator DOMENICI. He has finished his statement.

Senator DORGAN [presiding]. Thank you very much. I apologize. I had a relative that had a little fender-bender. She is fine, but needed to talk to her dad, and it was not her fault.

Senator CRAIG. Of course, dad. I've been there.

Senator DORGAN. Thank you both.

Mr. Sproat, I apologize for having missed your testimony.

Mr. SPROAT. That is all right.

Senator DORGAN. But I have read your testimony and I appreciate your being here.

I will proceed to questions and I will defer my questions. Senator Domenici, do you want to begin?

NUCLEAR WASTE FUND LEGISLATIVE PROPOSAL

Senator DOMENICI. Mr. Chairman, I just want to extend—I know you have had this, but here is a very interesting proposal that is included in his testimony that we have not had come up from the administration before. I am not so sure that—I do not think we ought to throw it away. This \$19 billion sitting around in the fund is not being used and the fact that we continue to appropriate for the repository is driving some programs into bankruptcy while this grows. And they have an idea on how to moderate it and I think maybe we should look at it a little. It would just be saying maybe it ought to be used for its intended purpose.

Mr. SPROAT. What it is intended to be used for.

Senator DORGAN. All right. Did you wish to ask questions now?

Senator DOMENICI. No.

Senator DORGAN. Senator Murray, why don't you proceed.

Senator MURRAY. Thank you very much, Mr. Chairman.

SUPPLEMENTAL BULK VITRIFICATION TECHNOLOGY

The environmental management budget literature indicates that liquid tank waste is the highest priority issue, but there is a reduction in funding for the work done in the tank farm activities and there is zero funding requested for the supplemental treatment. I understand the need to thoroughly investigate potential technology, but this budget runs out of money prior to the cold test in June. Can you explain the logic in that, Mr. Rispoli?

Mr. RISPOLI. I believe, Senator, that you are addressing the testing for the demonstration project, which is a—

Senator MURRAY. Could you turn on your microphone.

Mr. RISPOLI. Sorry. Thank you.

I believe you are discussing the supplemental bulk vitrification technology, which is a supplemental technology that we have been talking about for several years now. We met with—I met with the contractor and the contractor's team just last week. As you know,

they have performed engineering scale, one-sixth scale tests on the technology, and they would like to do a full-scale test this summer.

I would point out that in a review of that particular project that was done independently, a technical review, we did find a number of technical issues. The contractor as a result of that review has been working on those technical issues and they believe that they have solved the most significant one at least, which is the migration of a highly radioactive technetium, which is soluble, to the surface, which would not then accomplish its intended purpose of encapsulating it in the glass.

They would like to demonstrate this in a full-scale test this summer. We have worked with them and we believe we can accomplish that full-scale test this summer.

Senator MURRAY. Do you have money in the budget to do that?

Mr. RISPOLI. We believe we can—yes. Yes, Senator, we believe we can accomplish that this summer.

Senator MURRAY. Okay, very good.

FISCAL YEAR 2008 FUNDING FOR HAMMER PROGRAM

Let me ask you about the funding for HAMMER. Year after year we get budgets with no request for HAMMER. You know what the facility is. It is a facility that trains many people actually, but our workers in particular, emergency responders and others dealing with hazardous material. Safety is, as you know, at the Hanford site a top concern and we want to make sure they have the best training possible.

I am concerned because we continue to see no funding, no funding in the CR, or in the fiscal year 2008 request. Did you ask for funding for the HAMMER facility?

Mr. RISPOLI. The HAMMER facility we intend to fund by having the contractors at Hanford buy their training through the HAMMER facility. That has been a model that has worked successfully. We do not envision that the HAMMER facility will not be supported. We believe we have a strong base of support for that facility from within the budget at Hanford through the contractors that require the training for their workers.

Senator MURRAY. Do you need any additional funding for HAMMER outside of that?

Mr. RISPOLI. Pardon me, Senator?

Senator MURRAY. Do you need any additional funding for HAMMER outside the private contractors?

Mr. RISPOLI. I believe that we can attain the support required for the HAMMER facility through that mechanism.

Senator MURRAY. Can you give me the budget for that separately from this and show me how that works on paper?

Mr. RISPOLI. Yes, I can.

[The information follows:]

HAMMER FUNDING

The base cost of the facility is \$6.4 million. This is funded by distributing the cost proportionally to each project at Hanford. The cost to conduct classes is funded through fees paid by attendees for each class.

HANFORD SITE MANAGERS VACANCIES

Senator MURRAY. Okay. I wanted to ask you about the lack of communication between management at the Hanford site and people back at headquarters. I understand that has been partly responsible for the struggles at the Hanford Vitrification plant. I know that you are working on that, but we are facing a situation today where two of our top manager positions are going to be vacant. We have Roy Schepens and the pending retirement of Keith Klein. There are three contracts that are scheduled for competition and there is a lot of work to be done at the site. There have been a lot of changes in the contractor teams and now the Federal leadership is in transition. It seems like a lot of musical chairs out there at a time when we specifically need continuity and leadership.

Can you tell me where you are on those positions?

Mr. RISPOLI. Yes, I can, Senator. Thank you. You are correct. Senator and members of the subcommittee, we are losing two highly skilled long-term professionals to retirement at the site out there. Roy Schepens is already physically retired and Keith Klein announced his retirement. In fact, he has been aspiring to do this for quite some time. It is the culmination of a remarkable career.

I can tell you that this week we are interviewing for Roy Schepens' replacement at headquarters. I would also tell you that we actually did something a little different for the Federal Government. We hired a search firm because we realized that not everyone would look to the Government web site to look for this type of a position if, for example, they are in private industry.

So we did everything we could to shake the trees to get qualified people to apply.

Senator MURRAY. Are you finding qualified people?

Mr. RISPOLI. Well, I personally know none of the names, but that is the way it is supposed to be. It has been paneled. There have been a group of experts, including some people who I am sure you would know, that went through and reviewed the candidates and then forwarded them to the selecting official for interviews and selection. The interviews again started this week. I am very optimistic that that process will have yielded some viable candidates that we can look at for that position.

In the case of Keith Klein, we do have some time because his retirement is not until the end of May. But again, given the time that it takes, we know that in fact Mike Weis, the deputy manager, will be the acting manager there. I believe you know Mike Weis. I am sure that he himself will be a contender for that position. We all have a very high degree of confidence in him and I believe that that will work out very well.

I might also mention that Shirley Olinger will be the acting manager of the Office of River Protection and she has been the deputy there for quite some time as well.

So I think in the management end for this interim period we are in good hands. For the one that was more imminent, we are interviewing now and we can go forward. You are correct in that we have three contracts that are being advertised. I will tell you that—you may recall from last year that we did appoint a Deputy

Assistant Secretary for Acquisition and Project Management. We are managing these efforts centrally. The work is done in the field, but we are managing the time lines separately. Having visited there myself, I can tell you that the team working on those procurements is robust, they are competent, they are qualified. They have got people that have done this before. And that, coupled with our new headquarters structure and oversight, I feel that we can get through this period even with the loss of the two managers that are out there.

With all of that said, Senator, I know that it is going to be—for the people of the community, they are going to see it as a tumultuous period. I think we just have to get through this together.

Senator MURRAY. I appreciate your personal attention to that.

Mr. Chairman, I have some other questions I wanted to submit for the record if I could.

Senator DORGAN. Without objection.

Senator MURRAY. And I appreciate your accommodation today.

Senator DORGAN. Without objection. Thank you very much, Senator Murray.

Mr. RISPOLI. Thank you, Senator.

Senator DORGAN. Senator Domenici.

Senator DOMENICI. Mr. Chairman, do you want to go?

Senator DORGAN. I will defer.

Senator DOMENICI. Do you have time to hold the whole meeting? I cannot do the whole.

Senator DORGAN. Yes.

Senator DOMENICI. I thank you.

MISSED CLEANUP MILESTONES AT LOS ALAMOS NATIONAL LAB

I want to ask some questions that are parochial and if I get to the others, fine. But I want to talk to you, Mr. Rispoli, about Los Alamos missed milestones. The Department has proposed \$140 million for Los Alamos—write that down—which is insufficient to clear up and clean up the milestones contained within the consent order that the Department entered into with the State in 2005. According to that June 15, 2006, baseline for the project, which assumes completion of all consent order milestones, the budget for Los Alamos would be \$283 million, more than double the request.

If the Department remains on its current path proposed as part of the 2007–2008 budgets, cleanup milestones will be missed and the cleanup will be delayed 2 years beyond the consent order deadline of 2015.

Now, sir, I am not sure that I understand how you can justify a budget that forces the Department to miss agreed-upon milestones and will result in fines and other penalties from the State. Can you tell me how you intend to keep the cleanup on schedule with the budget baseline you have offered for the 2008 budget?

Mr. RISPOLI. Senator, thank you. There are actually two parts to my answer on your question. As you know, we have been funding in the current fiscal year, we have been funding at a rate of about \$141 million per year, which is the same rate that we were funding at in the prior fiscal year. We did that notwithstanding that we were in a CR situation and that the budget for 2007 had about \$90 million. We recognized that were we not to fund at the \$141 million

level that we would have jeopardized milestones in the current fiscal year.

I personally met with Mr. Curry in his offices in Santa Fe. He has met with me here in Washington. I have met with his senior-most staff. We recognize that and we believe that we needed to provide the funds to the lab to be able to attain those milestones.

With all of that said, as you know, the State has issued four and is considering issuing a fifth notice of violation in 2007, none of which are related to funding shortfalls. They are basically all conduct of operations. We, both myself and Administrator Tom D'Agostino, are personally aware of the problem. We both talk with the contractor about this issue and it is a very difficult issue. I think we are making headway. I think we will be seeing some changes in the way that the laboratory itself approaches the management of that portion of the work, which I think is a good thing.

I would also mention that in the competition for this contract the contractor who won, the LANS organization, did in fact envision efficiencies, to be able to address going forward in a more efficient way. For example, we believe that at Los Alamos today, it costs us at least five times more per drum of transuranic waste to ship it to WIPP than it does anywhere else in the complex. So we do believe that we can attain efficiencies with the new kind of thinking that the contractor said they would bring to this issue.

Looking forward to the second part of your question, we know that the milestones created by the recent agreement needed to have a new cost and schedule baseline. The laboratory worked up a new cost and schedule projection so that we would know how to fund it. However, despite two tries to get that estimate through an independent audit, it has not passed.

So the challenge we have is until we really know what those efficiencies will bring and what this new cost and schedule can do, we do not know what the right amount of funds are to put on it. We know that we have been funding at \$141 million per year. We know that we have been not missing milestones with that level of funding. I would tell you that we need to reassess that once we have an independent audit of the cost and schedule for the environmental work at Los Alamos.

Senator DOMENICI. Well, look. I have done the charts and looked at them. You are going to miss the milestones, there is no question, by 2 years. And it is important to me that I know that you are working with Mr. Ron Curry. He is New Mexico's environmental man. It is my understanding that that relationship between the Environment Department and Los Alamos is not very good. Are you doing anything to improve it or do you know whether anything is happening out there that might improve it?

Mr. RISPOLI. Senator, I will tell you that I agree fully with you that the relationship has not been good. I think in fairness that the relationship between myself and Mr. Curry is strong and between his senior staff and us is strong. I think it is also noteworthy that the Federal Government changed its environmental manager. They have appointed Mr. George Rael of the NNSA to be the new leader of the environmental program for the Federal staff. And you probably heard the press release today that the laboratory itself will be

placing a new manager in charge of the environmental program there.

I do think that Mr. Curry and I are clearly in agreement that we want to have a good relationship and I do believe that these steps will get us where we want to be.

Senator DOMENICI. Could you please explain to me and the committee who is responsible for paying these fines? Is it DOE, University of California, or LANS?

Mr. RISPOLI. My understanding, Senator, is that because, in the case of the Los Alamos operation, that not all of the fines are attributable to LANS. In other words, some of them are, but some of them were direct contracts from the Los Alamos site office with contractors to do the work. My understanding is that the fines will, at least most of them will be borne by the Federal Government.

I am aware that in one case the contractor indicated they would take a fine, but I believe in most cases it would be the Federal Government.

Senator DOMENICI. Do you have any idea, just looking at them out there, to tell the chairman how many thousands of dollars they are allegedly fining us in those five fines, four fines?

Mr. RISPOLI. Senator, I only have one with me. That one alone is \$402,000 and it is a potential notice of violation. I can get you the answer for that for the record.

Senator DOMENICI. Would you get us the answer for the record?

Mr. RISPOLI. Yes, sir.

[The information follows:]

FINES ASSESSED AGAINST DOE AND LOS ALAMOS NATIONAL SECURITY (LANS)

In the past eight months, the New Mexico Environment Department (NMED) has assessed penalties against the Department and/or Los Alamos National Security, LLC (LANS) for five alleged violations of the Consent Order or other hazardous waste regulations. As of March 22, 2007, the five violations and the responsible parties are summarized below:

Description	Date	NMED Proposed Fine	Actual Fine (Responsible Party)
Improper disposal of debris from Incinerator Ash Pile.	7/12/06	\$88,930	\$51,000 (DOE to pay). ¹
Late Investigation Report submittal on Incinerator Ash Pile.	9/12/06	\$30,000 plus \$3,000/day from Oct 12 until project completion.	\$120,000 (DOE to pay). ¹
Failure to report new release associated with chromium groundwater contamination.	9/15/06	\$795,620	TBD (UC and/or LANS to pay—responsibility under negotiation). ²
Improper removal of hazardous waste from Sigma Mesa D&D project.	10/25/06	\$402,600	TBD (UC to pay). ²
Failure to comply with Work Plan provisions for Material Disposal Area-C characterization.	12/7/06	\$1,000/day for first 30 days (paid) plus \$3,000/day until new report submitted.	\$30,000 paid to date, but continuing at \$3,000/day (starting 1/5/07) until report is submitted) (LANS to pay).

¹ The National Nuclear Security Administration agreed to pay these penalties.

² DOE has directed the fines to the contractor, but negotiations are still pending regarding eligibility for reimbursement under the contracts.

As a general rule, LANS, the current Management & Operating (M&O) contractor, has the responsibility (and University California (UC) before it) for performing environmental remediation at Los Alamos National Laboratory (LANL). However, to reduce costs, some years ago DOE decided to contract directly with companies outside the M&O contractor to perform several environmental remediation projects, including remediation work on the Incinerator Ash Pile in TA-73. In the two cases of penalties associated with the Airport Ash Pile, listed as items #1

and #2 above, DOE has acknowledged that it is responsible for paying the penalties and LANS was not responsible for any activities that led to the alleged violations.

Under the current M&O Contract, LANS is responsible for paying for violations associated with environmental remediation work they are responsible for (see #5 above). The previous M&O contractor, the University of California, was likewise responsible under its M&O contract for fines and penalties. Some of the actions that led to the assessment of penalties occurred prior to the date that LANS took over the contract, June 1, 2006. As a result, UC may have responsibility for certain of the penalties and/or both UC and LANS may share in the liability (see #3 and #4 above). No final determinations have yet been made with respect to these penalties.

Senator DOMENICI. I am finished. Thank you very much.

Mr. RISPOLI. Thank you, Senator.

Senator DORGAN. Senator Craig.

CONTRACTOR PERFORMANCE

Senator CRAIG. Jim, let us stay on the cleanup theme for a moment because it is important for all of us and our labs to try to stay on those schedules as much as we can. How do you rate the Idaho cleanup contractor's performance, let us say compared with other cleanup projects at DOE?

Mr. RISPOLI. I believe that the Idaho contractors are both—doing very well. I think that they are performing at a level that we feel comfortable with. I am not suggesting that they are earning every penny of their fee because I do not honestly know to that level of detail. But I do know that when I look across the program that Idaho is performing very well for us.

Senator CRAIG. It is my understanding that they have come in in most instances ahead of schedule and under budget with most of their cleanup effort. Is that not true?

Mr. RISPOLI. In most areas that is true. As you know, even in one facility, the Advanced Mixed Waste, we had to make up for a lot of lost time and were successful in doing that. But yes, Senator, I would agree.

Senator CRAIG. Do you believe the best performers should be rewarded with additional funds to accelerate project schedules to achieve real cleanup results or would you expect good performers to do more with less because of their successes?

Mr. RISPOLI. I think the answer is a little bit of both. But I would offer to you that in many cases contracts provide incentives for contractors who can deliver more with less. In other words, we try to incentivize our contractors to do exactly that, that if they can perform work in a less than full funding situation they would then have opportunity to earn more fee.

Senator CRAIG. Could you please provide me, and I think all of us would be interested in, a copy of the remaining fiscal year 2007 EM budget when finalized and an explanation as to any impacts it would have on these projects? Of course, I am interested in the Idaho cleanup.

Mr. RISPOLI. You mean for the continuing resolutions?

Senator CRAIG. That is correct.

Mr. RISPOLI. Yes, Senator. That is—right now the continuing resolution is with OMB. It is in the final stages of being prepared to be brought to the Congress. But I would be happy to do that in a separate meeting with you.

Senator CRAIG. Rumors abound and we would like to put those away.

Mr. RISPOLI. Yes, sir.

PROPOSED LEGISLATION FOR NUCLEAR WASTE FUND

Senator CRAIG. Ward, again thank you for being before the committee and the working relationship we have with you. How confident are you in your ability to complete the Yucca Mountain license application by June 2008? You have discussed that some.

Mr. SPROAT. Senator, assuming that we receive the full amount that the President requested for fiscal year 2008, which is \$494.5 million, I am 100 percent confident we will meet that date.

Senator CRAIG. Does this require the Fix Yucca legislation you proposed, that was proposed by DOE yesterday?

Mr. SPROAT. No, Senator, it does not. In other words, the Fix Yucca legislation—and I am prepared to talk about any parts of that you would like—is not a prerequisite to the submittal of the license application. Parts of it are a prerequisite before the NRC would be able to grant us a construction authorization, primarily land withdrawal.

Senator CRAIG. What is your opinion of the Domenici-Craig Nu Way bill from the last Congress? Does the certainty of interim storage of defense waste at Yucca hurt or help this project?

Mr. SPROAT. I believe it would help this project because, No. 1, I believe it would give us legislative clarity, if you will, regarding the Department's authority to do interim storage of high level waste and naval spent nuclear fuel, which right now we believe—and it has been looked at by a number of people over a number of years. We currently believe we do not have that legislative authority to do that. So that certainly would give us that authority and capability and would allow us to move forward with, probably on an expedited basis, on figuring out how to make that happen.

Senator CRAIG. Thank you. Thank you both.

Mr. Chairman.

Senator DORGAN. Senator Craig, thank you very much.
Senator Bennett.

ATLAS MILL SITE CLOSURE DATE

Senator BENNETT. Thank you, Mr. Chairman.

Mr. Secretary, you probably will not be surprised that I want to talk about the Atlas Mill site. By nodding, I guess you are prepared to—

Mr. RISPOLI. Yes, sir, I am.

Senator BENNETT [continuing]. To talk about that.

We know that the first recommendation—or first comment perhaps is a better term—that came out of the Department as to when this would be done was it would take about 7 to 10 years, and that would put it 2017, 10 years from today.

Secretary Bodman before the Energy and Commerce Committee on the House side said it will occur around 2028. So he has added another 10 years to the 10 years that was the outside date we had, and I am not sure whether he is anticipating that that would take place in 1 year or if it would start in 2028 and then take another 7 to 10 years.

I am sure it comes as no surprise that Secretary Bodman's testimony set off a lot of alarm bells down in that part of my State. I would like to have you talk to us about that and tell us what you think is really going to happen, how much it is going to cost, and therefore help me understand what my responsibilities on this subcommittee ought to be to try to see to it that we get as close to the original projected date as we possibly can.

Mr. RISPOLI. Thank you, Senator Bennett. We are in the process now of evaluating proposals that we have in hand from the contractor community to do that. We expect to have an award this summer. The process that we would have in the Department, the 2028 is a good planning figure. That is the planning figure that we use, but it is exactly that. It is a planning figure, because the process that we would have will require the contractor to propose what technology, what efficiencies, and so forth they would employ.

We are assuming there will be one trainload per day, one trainload per day that would be hauling that material out to Crescent Junction. We are assuming a certain type of conveyor system to load the train cars, for example. But until we evaluate the proposals and develop a cost and schedule that can be independently audited, the 2028 number, while a good number and the best we have, is a planning number. It could be significantly better than that depending upon the contract mechanism chosen.

Of course, the other factor then is the annual funding. This year we are looking in the 2008 budget about \$23 million is in the budget for the funding. I think until we evaluate the proposal and look at what is the proper baseline, I think that we are at that early stage where we just do not know. As soon as we finish that evaluation, we will have a much better handle on what would a reasonable schedule and baseline be.

The 2028 is a good number, as I say, but we still have quite a ways to go in the evaluation process.

Senator BENNETT. Let me say back to you what I think I heard so you can tell me whether I am right or not. By midyear this year, you will have an understanding of which contractor you want and how that contractor will go about it?

Mr. RISPOLI. Yes, sir.

Senator BENNETT. And at that point, presumably you will know how soon the contractor can begin?

Mr. RISPOLI. At that point we would be ready to send in an independent review team to review the contractor's numbers, to say yes, this is a valid cost and schedule. So that will actually begin happening this summer, and typically the process is just a few months after that when we would know whether it is a valid cost and schedule.

Senator BENNETT. So let us go through it. Let us just put some dates on it. Let us say you know by July. You pick the contractor. Let us give you 90 days, August, September, and October, so you will know by November whether the contractor is good or not. Assuming that he or she is, you will know in November what the time schedule will be?

Mr. RISPOLI. I think that is a reasonable time line, yes, sir.

Senator BENNETT. So let us say that the first shipments can then start, what, 5 years from November? Will it take them that long

to put the conveyor belt in or whatever, or 5 months? Or do you have any sense of the timing?

Mr. RISPOLI. No, sir, I do not know that yet, because I do not know what technologies or what approaches those who are bidding will actually propose to us. So I cannot say when they would have the system in place to begin loading the rail cars and moving the material away from there to Crescent Junction.

Senator BENNETT. Well, let us assume for just a minute that the contractor physically could do it in a year, within a year after November, so that it could start moving as early as November of 2008.

Mr. RISPOLI. I think that is a reasonable—at this point in time, I think that is a reasonable assumption. I would offer to you that actually once we have the proposals evaluated it would be very appropriate at that time for me to visit with you and give you more detail, once that is available information.

Senator BENNETT. Okay. But what I want to nail down and be absolutely sure, Secretary Bodman's use of the term "2028" did not signal a determination on the part of the Department to put this off an extra 10 years?

Mr. RISPOLI. I think the Secretary was referring to the best number we have today, which is a 2028 number based upon an assumption of costs and assumption of annual funding profile. I think that once we see what the approach is and what the actual cost is likely to be, we can evaluate that and see how good or how not good the 2028 number is. But we just do not have a better number today.

Senator BENNETT. I understand that. But again, what I hear you telling me is that the Department's use of the 2028 as a planning date is not a signal that they have decided to slow this down or delay it?

Mr. RISPOLI. I would not take it to be that, no, sir. I would agree with you. That is true.

Senator BENNETT. Because that is the signal that got sent in the press, that they were thinking, gee, this could be done by 2018. On the timetable we have talked about, 2018 is logical if they start in November of 2007. It takes them a year to get the thing in place, 2008, and it takes them 10 years to get it done, it is 2018. So 2028, that is the outside year that you think it could happen if the Congress does not fund it properly or if the contractor runs into unforeseen difficulties. But for planning purposes, you say this will be done by 2028, but that is not the statement we are going to delay it to 2028?

Mr. RISPOLI. That is true because, as I mentioned earlier, we know we are going to move it by train. We know that our planning today is one train per day. That may or may not be optimal. It may be the best that can be done, depending upon the physical parameters, traffic and things like that.

Senator BENNETT. When you brief me later this year, we can go into all of those. But the point I wanted to make and that you now have confirmed is that Secretary Bodman's testimony was not a statement that the Department wants to delay this project.

Mr. RISPOLI. I do not think that we took it as a delay. Again, it was just a planning number that we had, and that is the number

we gave to the Secretary to use based upon what we know today, which is not very much.

Senator BENNETT. Thank you.

Senator DORGAN. Thank you.

Senator Allard.

LESSONS LEARNED APPLICATIONS TO OTHER CLEANUP SITES

Senator ALLARD. Thank you, Mr. Chairman. I apologize for being late. I apologize for not hearing the testimony because you did talk about Rocky Flats, which I think is a success story that we do not talk enough about.

Mr. Chairman, when I first got involved with Rocky Flats having been elected to the U.S. Senate, it was a cleanup project laid out over 70 years, \$35 billion in costs. We were able to put together an accelerated program of cleanup, bring it down to 10 years, and we were able to finish that project 1 year ahead of the redone schedule with savings of hundreds of millions of dollars. I think one of the key aspects of good cleanup were the incentives that we built into the contract which really kept things moving.

We had very cooperative employees with the Department of Energy working out there and citizens in the area, who made it their goal to get the cleanup done. The agency had bought into it. But I do think that there are a lot of lessons to be learned by this.

Are we going to apply some of the lessons learned in this cleanup to other sites? Because this is the largest cleanup I think in the world, frankly, where we have had a success story like this, where we have been under budget and ahead of schedule. I would like to know if there are lessons learned here that can be applied to other projects where we might have nuclear cleanup.

Mr. RISPOLI. Senator Allard, absolutely. And I believe that we actually touched on this at the ceremony itself out in Colorado last year. We are addressing lessons learned from Rocky Flats in a couple of ways. I will mention two of them.

The first is that we have established a lessons learned section of our internal house web site, you might say. So that not only for the Rocky Flats situation, but many others as well, we can better share lessons learned. We are so spread out geographically that we realize that oftentimes different organizations are facing similar challenges, and so use the electronic media as best we can to get that out.

The other is that at the Rocky Flats cleanup not only the prime contractor, but even a number of the subs had people with a lot of experience. As that job closed down, they have actually sent those people to other places to help with similar situations in other places.

PREPARED STATEMENT

But I believe that you are absolutely right. We had some tremendous success there. I would likewise say we gave in our opening a few photos of places that are not as big, but certainly just as significant, such as the Fernald site in Ohio, where we again had similar successes in lessons learned, and we are working to promulgate those.

Senator ALLARD. While I think about it, Mr. Chairman, I would like to make my full statement a part of the record if I might.

Senator DORGAN. Without objection.
[The statement follows:]

PREPARED STATEMENT OF SENATOR WAYNE ALLARD

Thank you, Chairman Dorgan, for holding this hearing today. I am proud of the work that Senator Domenici accomplished last year and I look forward to working with you as the new Chairman, as well as the other members of this committee. I would also like to thank the panel for coming today and offering their testimony.

This is my third year on this subcommittee, and I like to take advantage of all the opportunities to hear from the Department of Energy's EM Assistant Secretary about Rocky Flats. I think it is important for many reasons to talk about this success story, because if you were to visit the site today, you would see what Rocky Flats looked like more than 50 years ago. It is pristine and quiet with little to remind you that it once was the place of the most dangerous building in the United States.

I remember the time-frame when the Department of Energy, then the Atomic Energy Commission, established Rocky Flats as a nuclear weapons production facility. I remember the decades of production and the many workers who toiled to protect our country—24 hours a day, 7 days a week.

The first time I toured Rocky Flats—with the site's extensive security controls, enormous concrete buildings, and tons of weapons-grade plutonium still on site—it was unimaginable what it would look like today. I remember the worries of security threats, wide-spread contamination, industrial pollution, and radioactive fall-out. And, most importantly, I remember the early estimates for cleaning-up Rocky Flats—70 years and \$35 billion.

So, Mr. Chairman, I thought I would again touch on this success because we are fortunate to have come so far and to have achieved so much. The picturesque Rocky Flats that exists today seemed like a dream just 10 years ago. Few believed the site could be successfully cleaned-up. Even fewer believed that the clean-up could be completed early—15 months ahead of the already accelerated schedule and hundreds of millions of dollars below budget. We in Congress, and the Department of Energy, need to celebrate this success and hopefully channel it into other clean-ups around our country.

Again, thank you Mr. Chairman for bringing us here today, and I look forward to the testimony of the witnesses.

CLEANUP FUNDING STRATEGY

Senator ALLARD. The other idea when we were working on this—I was on the authorizing side in the Armed Services Committee and this was under my jurisdiction at the time. Part of the thinking was that once we get Rocky Flats clean then that begins to free up dollars for cleaning up other sites. Is that happening, and we are getting expedited cleanup in some of these other sites?

Mr. RISPOLI. I think that right now we are looking at over the next, in 2006, 2007, 2008, 2009, at a number of sites—it is in my statement for the record; it is also in the budget—that are being cleaned up. I believe what we are looking at after that are essentially the really big sites that we will be at for a long time, driven more by schedules and technology problems, such as Hanford, Savannah River, Oak Ridge.

In fact, at Oak Ridge we will even be adding more. I reviewed a proposal just yesterday that will add even more square footage to the program for D&D such as we did at Rocky Flats.

Senator ALLARD. Well, I hope that you continue to push cleanup on those other sites, because they were also cooperative in this effort. There was an extra amount of dollars that went to the cleanup of Rocky Flats to speed up cleanup, so we could point to a success story. The idea was that once we got it cleaned up it would free

out other dollars so that they could proceed at a more rapid pace in getting their cleanup problems handled. So I hope that you keep that in mind when you are putting together your budgets and working with those other areas.

GLOBAL NUCLEAR ENERGY PARTNERSHIP

Can you give us an update on where the Department is on the Global Nuclear Energy Plan proposed by the administration several years ago?

Mr. RISPOLI. Unfortunately, Senator, I cannot. I am not—

Senator ALLARD. Can you, Mr. Sproat?

Mr. SPROAT. Just so I am clear, Senator, are you talking about the Global Nuclear Energy Partnership?

Senator ALLARD. Yes, I am.

Mr. SPROAT. That is not under my area of responsibility and I would prefer that if you would like an update on that, let me take that question for the record and ask Assistant Secretary Spurgeon to come back and brief you on that. That is under his area of responsibility.

Senator ALLARD. This is where we have the MOX and all that and it is now a MOX Plus facility.

Mr. SPROAT. Yes, sir.

Senator ALLARD. All right. If you could respond to the record, I would appreciate it.

[The information follows:]

ADVANCED FUEL CYCLE INITIATIVE

The Global Nuclear Energy Partnership (GNEP) is funded under the Advanced Fuel Cycle Initiative (AFCI) within the Office of Nuclear Energy. AFCI activities are currently focused on developing a detailed roadmap for implementing the GNEP initiative, including supplying information to support a Secretarial decision on the path forward for GNEP. The Secretarial decision on the path forward for GNEP, and subject to compliance with all applicable law and regulation, longer-term, AFCI activities are anticipated to include supporting supply arrangements among nations to provide reliable fuel services worldwide for generating nuclear energy. There has already been considerable progress internationally to encourage such arrangements.

The GNEP Statement of Principles has been endorsed by Japan and France and is currently being considered by Russia, China, and the United Kingdom. A U.S.-Russian Action Plan was submitted to President Bush and President Putin in December 2006. Similar action plans are being prepared for Japan and France. Domestically, the Department has sought input from the private sector to assist the Department in developing an appropriate business model for the proposed nuclear fuel recycling center and advanced recycling reactor components of GNEP, including potential scope, cost, schedule, and technical risk.

DOE is also working with the Nuclear Regulatory Commission (NRC) to provide information regarding potential commercial separations plants and advanced reactor concepts. DOE is working to develop a Memorandum of Understanding on interactions with the NRC for GNEP similar to that which is in place regarding the Next Generation Nuclear Plant.

Mr. RISPOLI. I would point out that the MOX facility in particular at the Savannah River site is an NNSA project, and I think that all of it is kind of held together and has to be dealt with in the context of the nuclear future for the Nation. But the MOX project in particular, if you have a question on it, that would be appropriate for the NNSA.

Senator ALLARD. Okay, I appreciate it. And it all has to happen together.

Mr. RISPOLI. I think they are all interconnected, yes, sir.

Senator ALLARD. Yes. And I think that we need to look at reprocessing our nuclear rods. We have got technology now where we can, with the reprocessed rod we bring the waste stream down to 5 percent. It is highly toxic, but we bring it down to 5 percent, which I think helps take care of some of our storage issues. And with the new technology it is much more difficult to convert to a nuclear weapon, I understand. So I think that it would help quell some of the opposition that we have had in the past when we looked at reprocessing rods.

Thank you, Mr. Chairman.

Senator DORGAN. Senator Allard, thank you very much.

We are coming up on some very big decisions in these areas, the MOX facilities, Global Nuclear Energy Partnership (GNEP) and Reliable Replacement Warhead program (RRW), many of which are related and have significant consequences. We likely will be holding some hearings in this subcommittee on those very issues. I have not set a date, but I expect to do that.

Let me just say that I went to graduate school in Colorado, knew of and saw Rocky Flats at the time, and about 2 weeks ago flew over Rocky Flats on a commercial airline going from Denver to North Dakota. It is quite remarkable to look down and see what has been done at that site. I was duly impressed, and I appreciate your raising that issue. That is, I think, an example of great success.

MISSED MILESTONES CONSEQUENCES

Mr. Rispoli, you heard the comment that I and my colleague Senator Domenici offered about the 23 percent reduction over 4 years in funding. I respect that you are here to represent the President's request to Congress and you would not be a very diligent subordinate if you did not fully support that. But clearly there are consequences to that, and can you tell me the milestones that will be missed? You talked about meeting 90 percent of the milestones. What about the milestones that are missed, and is the budget request simply a reflection that these are lesser priorities than the other issues?

Mr. RISPOLI. Mr. Chairman, if I may address it this way, everywhere that we operate we have milestones that are established by some sort of an agreement, whether it be a tri-party agreement with the EPA and the State or a consent order with the State or some other agreement. We have milestones. And intrinsic, built into all of those agreements generally is a provision to renegotiate milestones as you face technical difficulties and the State recognizes that you have made every effort to comply.

So a normal process is in fact that we need to recognize that and address milestones that for one reason or another cannot be met.

Senator DORGAN. Yes, but this is not about technical difficulties. I am talking about funding.

Mr. RISPOLI. Yes, I understand.

Senator DOMENICI. And with so much cleanup work yet to be done and your description to Senator Allard of the big projects yet to be started, how does one justify reducing funding for these things? How do you justify it?

Mr. RISPOLI. I understand the question, yes, Senator. What we did was—and this may not be on the mark to answer your question. What we did was we recognized all the milestones and within those milestones we applied a risk-based approach to where do we get the greatest risk reduction for the funds that you appropriate and give us to operate our program.

In so doing, there were some milestones that we believe related to low-risk activities, generally but not always, generally D&D of a building, for example, or D&D of a number of buildings. And those came to the bottom of the list. So when it was time to make budget decisions, we tried to focus the resources where the greatest risk reduction would be and leave for the lower end some of the D&D and other related types of activities.

And you are correct that the budget could not cover all of those, but that is the rationale that we used.

Senator DORGAN. But that is still not quite responsive. You are talking about how you focused. I am asking the question of why, given the body of work in front of us—which, and I am new to this, but it appears to me to be very substantial—why on earth would we be talking about a 23 percent reduction in funding over 4 years?

Mr. RISPOLI. Yes, sir, it is a significant difference when you look across the years. I would point out that the annual cost for funding, for example, Rocky Flats, Fernald, all these other closure sites, was about \$1 billion a year and those sites did complete. So when you look at the difference between a year or 2 ago and today, we would certainly recognize that \$1 billion worth of annual requirement basically was completed, and so we had to redirect our resources and attention to other places.

Senator DORGAN. But would you agree it is counterintuitive, given the amount of work and given the fact that we will miss milestones, not for technical reasons but because we are suggesting this is not a high enough priority to even maintain level funding, to be talking about budget cuts in this area?

Mr. RISPOLI. I understand your question, Senator, and I am not disagreeing with your point at all. But I would also point out that at the time those milestones were set up it assumed technologies that did not exist or in some cases, like at Hanford, we have had to use two or even three technologies instead of one. We assumed that certain regulatory things would be in place. They were not in place. There were extra quantities of things that had to be done that resulted in consuming more resources to get the work done.

So there are many, many factors to this that led to a funding profile that got us to where we are today.

Senator DORGAN. Is the reduction in funding in recent years a component of what has led to the estimated increase in the life cycle costs of the program?

Mr. RISPOLI. Any life cycle cost is a balance—I believe again you are correct—it is a balance between the amount that you can provide to that project on its funding curve and the life and the duration of the project. Certainly, in general if you have a shorter duration you would have a lower cost.

Senator DORGAN. Do not misunderstand the intent of my questions. Because we have got competing interests for funding in this subcommittee, with some very big projects and some very impor-

tant ones, I am trying to understand the circumstances that have led to certain requests, in this case a request for a budget cut in an area that seems to me to be in significant need of perhaps, at minimum, level funding, given the workload in front of us.

Well, you have done the best you can to avoid directly answering my questions. But I think if I can find an interpreter I will understand what you have said. Again, I am not making fun of you. I understand your role here. Your role here is to support the President's budget. Ours is to try to evaluate with limited resources and nearly unlimited needs and wants, how to allocate and economize.

So I appreciate you being here. And I did start in a very positive way, talking about Rocky Flats.

Mr. RISPOLI. Yes, sir. Thank you.

Senator DORGAN. When we get these projects completed and you look at it, it is almost breathtaking to see because you would not believe it could be done until you have seen it after the fact. And I appreciate that.

Mister—is it “SPROUT” or “SPROAT?”

Mr. SPROAT. “SPROAT.”

YUCCA MOUNTAIN UPDATED BASELINE

Senator DORGAN. Mr. Sproat, does the Department of Energy plan to update these 6-year-old cost estimates for the project before it submits the license application?

Mr. SPROAT. Yes, Senator, we do. As a matter of fact, when we set the new best achievable milestones schedule for the repository last summer, basically at that point in time we were rebaselining the project, saying—taking a look at how long it would take to build the repository, the railroads, the transportation infrastructure. That required us to go back and take a look at what our budget authority request annual requirements should be between now through repository construction.

We did that. We had it reviewed by an independent outside engineering construction firm. We incorporated their comments. That work has been completed. I just got released from the Office of Management and Budget this week to release those figures. Right now what we are doing is packaging those figures in a way that when people read it they can make sense out of it, and I suspect we will be able to send that revised budget authority request case flow up here to the Hill within the next 2 weeks.

YUCCA MOUNTAIN REDUCTION IN FISCAL YEAR 2008 TRANSPORTATION REQUEST

Senator DORGAN. The fiscal year 2007 budget request for the program sought \$67.7 million for transportation. In 2008 you are requesting \$15 million for transportation. Can you describe to me what that precipitates, what does that mean?

Mr. SPROAT. The basic reason that reduction was made is because we do not need the money in fiscal year 2008.

Senator DORGAN. Okay, so it is a timing issue.

Mr. SPROAT. That is exactly right. The primary reason is that in early—in 2006, we were prepared to make a record of decision of selecting what is called the Caliente route, the Nevada Rail Line route through Nevada to the repository. At that point in time,

though, the Walker River Payute Tribe, who owns the land, came to us and said: We would like you to evaluate an alternative route through our reservation. They had previously not been willing to do that.

As a result, and taking a look at that potential route, we see a significant opportunity for both schedule and dollar savings. So we are currently doing an environmental impact review of that route. As a result, that is pushing off the record of decision for the Nevada Rail Line for about a year.

So we are putting a lot of money into transportation this year through the environmental impact statement work, but the record of decision to decide which rail line we are going to go with is not going to be made until probably about a year plus from now, and therefore we do not need as much money in transportation as we did in 2007.

Senator DORGAN. A quick question. Does the DOE have the authority to commence construction of a rail spur to Yucca Mountain in the absence of the NRC construction authorization for the repository?

Mr. SPROAT. We believe we do. However, we have requested clarification of that authority in our legislation that we sent up here to the Hill yesterday. We do believe we have that authority, but we suspect that without clear legislative direction we will probably end up in some legal lawsuits and litigation regarding that. So that is why we are including that in our legislation.

Senator DORGAN. Your program will not be a stranger to legal action, will it?

Mr. SPROAT. No, sir, it will not.

ADDITIONAL COMMITTEE QUESTIONS

Senator DORGAN. Let me thank both of you very much for being here and for being involved in these programs. Both are important programs.

Do my colleagues have any additional questions?

If not, we will be sending some additional questions to you and ask for your response.

We will leave the record open until this Friday, March 9, at 5 o'clock, so the questions can be submitted.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO HON. JAMES A. RISPOLI

QUESTIONS SUBMITTED BY SENATOR BYRON L. DORGAN

LOS ALAMOS MISSED MILESTONES

Question. Mr. Rispoli, the Department has proposed \$140 million for Los Alamos cleanup, which is insufficient to the cleanup milestones contained within the Consent Order the Department, has entered into with the State in 2005. According to the June 15, 2006 baseline for the project, which assumes completion of all the Consent Order Milestones, the budget for Los Alamos should be \$283 million more than double the request. If the Department remains on the current path proposed as part of the fiscal year 2007 and fiscal year 2008 budgets, cleanup milestones will be missed and the cleanup will be delayed by 2 years beyond the Consent Order deadline of 2015. Mr. Rispoli, I am not sure I understand how you can justify a budget

that forces the Department to miss agreed upon milestones and will result in fines and other penalties from the State. Please clarify.

Answer. The President's request for fiscal year 2008 for LANL is an appropriate amount and is based on the Consent Order requirements in the budget year and the site contractor's performance since assuming responsibility for cleanup in mid-fiscal year 2006. The contractor continues to develop the legacy cleanup program baseline, and when complete later this year we anticipate that a new baseline will be validated. We anticipate that this will be accomplished in time to inform the fiscal year 2009 budget process.

The budget level that your question refers to for Consent Order compliance (\$283 million) is consistent with an amount that the Los Alamos site contractor has identified as part of a proposed revision to the legacy cleanup program cost and schedule baseline which it submitted to the Los Alamos Site Office. This revised amount addresses all aspects of cleanup scope at the site (soil and water remediation, legacy transuranic waste disposition, and decontamination and decommissioning), not only the environmental restoration activities that are subject to the requirements of the Consent Order. This revision has undergone an external independent review by the Department's Office of Engineering and Construction Management that revealed a number of deficiencies that require corrective actions.

Question. Mr. Rispoli, can you tell me how you intend to keep cleanup on schedule with the budget baseline you have offered in the 2008 budget?

Answer. The Los Alamos site contractor has developed and submitted to the Los Alamos Site Office a proposed revision to the legacy cleanup program cost and schedule baseline. This revision has undergone an external independent review by the Department's Office of Engineering and Construction Management that revealed a number of deficiencies that require corrective actions. That process is continuing, and when complete later this year we anticipate that a new cost and schedule baseline will be validated. We anticipate that this will be accomplished in time to inform the fiscal year 2009 budget process.

RENEGOTIATING THE LANL CONSENT ORDER

Question. Last week, I spoke with Secretary Bodman about the challenges facing the Los Alamos National Lab in complying with the various cleanup milestones. It was his belief that he needed to take action to find a workable cleanup strategy within the existing budget constraints. I believe it is important for the Department to implement a cleanup strategy that is sustainable within the existing budget constraints.

I expect the State to push back in a very public fashion and I understand their frustration, but no matter how many fines or penalties the State levies it will not do anything to cleanup the sites. We need a partnership between the State and the Department to negotiate realistic cleanup goals. Can you tell me what your plan is to prioritize cleanup at LANL and work with the State on a path forward?

Answer. The Department is committed to the cleanup of the Los Alamos National Laboratory. Our priorities at the site are to reduce risks, to improve our performance such that we can meet the requirements of the Consent Order, and to accomplish these goals efficiently. To meet these priorities, we have to make some changes. These changes have started already, and include personnel changes on the environmental side at the contractor level. We have also made a significant management change at the Los Alamos Site Office with the reassignment of Dan Glenn, previously the Pantex Site manager, to Los Alamos. He brings a fresh perspective to assessing and addressing the problems at Los Alamos. He also brings his experience in developing and implementing ideas leading to the successful resolution of complex issues at the Pantex site in Texas that should improve performance at Los Alamos. We anticipate that this kind of fresh start at both the contractor and Government management levels will foster improved relations with the State.

We are in the midst of the validation process for a new, comprehensive and integrated baseline for the complete scope of the Los Alamos legacy waste cleanup. When this baseline is in place, we expect to see improved activity planning and efficient execution of the cleanup work at the site.

Question. Based on your current budget request, will this result in delaying the cleanup beyond the existing 2015 deadline?

Answer. We recognize that without efficiencies in work performance at the site and an executable comprehensive cost and schedule baseline for the work, we will have difficulty in meeting the overall cleanup date of 2015 in the consent order. When the Department completes its review of the new proposed cleanup baseline for Los Alamos and is able to validate it later this year, we will assess whether the

completion date for overall cleanup of the site as contained in the consent order is still achievable.

FINES

Question. Mr. Rispoli, it is my understanding that there is some sort of provision in the consent order that says if the Department does not provide adequate clean up funding the Lab cannot be held responsible. Is that true?

Answer. Section III.K.3 of the consent order states that no provision of the consent order shall require the Government to obligate or pay funds in contravention of the Anti-Deficiency Act, and that payment or obligation of funds by the Government for activities required by the Order shall be subject to the availability of appropriated funds. Based on this provision, the site cleanup contractor would not be responsible for non-performance if sufficient funds were not appropriated.

LOS ALAMOS NATIONAL LABORATORY (LANL) SAFETY CONCERNS

Question. Mr. Rispoli, it is my understanding that the relationship between the New Mexico Environment Department and Los Alamos is not very good. I understand that LANL had safety concerns with the drilling operation, what were those concerns and do you believe they were justified?

Answer. The hazards involved in drilling four boreholes between two pits at Material Disposal Area C were a major concern for the Department. The borehole drilling was potentially dangerous because it risked penetrating the radionuclide inventory and compressed toxic gases at the landfill. Material Disposal Area C is a 1960s vintage disposal area and, as is the case with many of these old landfill sites, the actual distance between the pits cannot be determined reliably from the design drawings from that era. Similarly, the integrity of the soil ridges between the waste pits is difficult to determine after so many years since placement of the wastes.

Therefore, the contractor had to rely on geophysics data to determine the safe drilling locations for the boreholes. Upon review of the geophysics data by all parties, Los Alamos Nuclear Services, NNSA, and the New Mexico Environment Department, resolution was reached that placement of four boreholes between waste pits in one location of Materials Disposal Area C could be accomplished after taking worker and environmental risks into account. The drilling was done using a geo-probe to confirm the existence of the boundary between waste pits without entering the waste pits. Safety procedures required that the geo-probe insertion and subsequent drilling be done by workers in level B protection consisting of breathing air and chemical protection suits. The use of level B protection also involves physical risk to the worker during the drilling activities as their vision and movement is restricted by their trailing breathing air hose apparatus. To mitigate this additional hazard, mockups were conducted of all activities with the protective clothing to ensure that the work could be conducted safely and that the field procedure could be implemented as written. These precautions and appropriate work planning enabled the drilling to be completed without incident.

The Department requires that all work be done safely at every site. Given the nature of the hazards involved, I believe the concerns were justified and the contractor took the appropriate safety measures to implement the requirements set forth in the consent order.

TECHNICAL AREA-21

Question. Mr. Rispoli, in fiscal year 2007 the Department requested \$18 million in funding to initiate decommissioning of TA-21—a former plutonium facility—in order to characterize the extent of the contamination beneath this facility. However, the fiscal year 2008 request does not provide any funding to support this cleanup which has a cleanup deadline of 2013. Every year this project goes without funding is another year delay in the consent order. Mr. Rispoli, your fiscal year 2007 budget requested \$18 million for TA-21 cleanup, since Congress didn't spell out how the funds are to be used, can you tell me if you intend to use the funds to begin the D&D work?

Answer. As part of the prioritization process that is associated with the development of the Environmental Management budget, my office examines the requirements to ensure safety, to provide essential services, and to undertake environmental compliance and risk reduction activities throughout the DOE complex. Typically, decontamination and decommissioning activities are not associated with high priority risk reduction requirements. The work at Technical Area 21 at Los Alamos falls into this latter category. In addition, Los Alamos does not have an approved cost and schedule baseline for the work. Once the cost and schedule estimates are independently verified, we will have a higher confidence level. We anticipate that

this independent verification will be accomplished in time to inform the fiscal year 2009 budget process. At that time, the Department will review activities for Los Alamos National Laboratory cleanup including the decontamination and decommissioning work scope.

Question. Without any funding requested in your fiscal year 2008 budget how do you intend to recover from this delay and meet the 2013 consent order milestone for this project?

Answer. As part of the prioritization process that is associated with the development of the Environmental Management budget, my office examines the requirements to ensure safety, to provide essential services, and to undertake environmental compliance and risk reduction activities from across the DOE complex. Typically, decontamination and decommissioning activities are not associated with high priority risk reduction requirements. The decontamination and decommissioning work at Technical Area 21 does not yet have an approved cost and schedule baseline. An appropriate confidence level in the scope, cost, and schedule profiles for these work activities is needed before we proceed. This confidence would be indicated by the validation of the baseline that is expected later this year, in time to inform the fiscal year 2009 and out-year budget process. At that time the Department will review activities for Los Alamos National Laboratory cleanup and whether the completion data for overall cleanup of the site as contained in the Consent Order is still achievable.

LOS ALAMOS NATIONAL LABORATORY

Question. Mr. Rispoli, the lab has been working hard to accelerate the disposal of high priority drums of TRU waste at WIPP. Unfortunately, this involves sorting through more than 12,000 drums of waste and then verifying their contents. This has been slowed by the NNSA Site Office's unwillingness to accept responsibility for the accelerated cleanup plan. It is my understanding that the Defense Nuclear Facility Safety Board supports the accelerated approach, but the NNSA Site Office has not yet signed off on this new plan.

Do you favor the accelerated approach proposed by the contractor and do you believe it will result in the acceleration of shipments to WIPP?

Answer. The Administrator of the NNSA has directed his Headquarters Chief of Nuclear Safety to work with the NNSA site office and the contractor to identify and implement an acceptable plan to dispose of the high priority drums presently stored above ground in fabric structures. This approach is focused on accelerating the safety documentation as well as the necessary upgrades to nuclear facilities required to characterize and package high priority drums for disposal at the Waste Isolation Pilot Plant (WIPP). In addition, the NNSA team is poised to evaluate and approve innovative approaches in the work plan that meet the intent of federal requirements and DOE Orders to ensure that the project is achievable. The project is now on an aggressive schedule with the goal of initiating shipments of high priority waste later this year and completing by January 2008. These shipments are among the Department's top priorities for waste shipments destined for disposal at the WIPP.

ACCELERATION OF TRU WASTE TO WIPP

Question. What can your office do to help the LANL site office become more comfortable with this strategy?

Answer. The Office of Environmental Management and the National Nuclear Security Administration (NNSA) are collaborating in various aspects of the project to ship the high priority drums of above-grade stored legacy transuranic waste to the Waste Isolation Pilot Plant. In addition, the Waste Isolation Pilot Project office will support the shipping schedule that will be identified under this project. I have directed my staff to be mindful of your concerns regarding the LANL site office in their continuing regular interactions with NNSA.

SANDIA CLEANUP

Question. Mr. Rispoli, your fiscal year 2008 budget does not provide any funding to complete the remaining cleanup project at Sandia National Lab. It is my understanding you are waiting for the State of New Mexico to give the final approval before you place a cap on the landfill. Why has the State not approved this final action and what source of funding do you intend to use to complete this project?

Answer. The Sandia Site Office has been working closely with the New Mexico Environment Department (NMED) to satisfy additional requests for information to support the proposed regulatory decision to allow placement of a permanent cap on the mixed waste landfill. This has resulted in additional scope being added to the project in the form of a requirement for development and application of a contami-

nant fate and transport model, collection of soil gas samples from the landfill and immediate surroundings, participation in a formal public review and comment resolution on the Corrective Measures Implementation Plan, a Corrective Measures Implementation Report, and a Long-term Monitoring and Maintenance Report. These products must be delivered and accepted by NMED and the process activities completed before approval can be provided for installation of the final landfill remedy. Some measures, such as preparation of the landfill surface to allow emplacement of the cap sub-grade soil layer, have been permitted by the regulators, and this work has been completed.

We had not anticipated the extent of these additional requirements. Unexpended project funds from fiscal year 2006 are being used to fund this work but the additional scope requires funds that exceed the available balances. Under the Revised Continuing Appropriations Resolution, 2007, the Department has provided an additional \$4.7 million to support these activities.

CONSOLIDATION OF SPECIAL NUCLEAR MATERIAL

Question. Mr. Rispoli, the Department has inventories of special nuclear material including plutonium, highly enriched uranium and spent fuel that exceeds our national security mission needs and is very costly to secure. As I have expressed several times before, I believe the Department needs to work quickly to consolidate and dispose of this material to reduce costs and eliminate the proliferation risks. Can you please explain to the subcommittee your strategy for the consolidation of this material and challenges you face in consolidating this material?

Answer. The Department's Nuclear Materials Disposition and Consolidation Coordination Committee (NMDCCC), established in 2005 to address nuclear material consolidation and disposition issues, recently completed an implementation plan (IP) for consolidation and disposition of surplus non-pit, weapons-usable plutonium. While the IP recommends consolidating this material to the Savannah River Site (SRS), any decisions on proposed consolidation and disposition are subject to review under the National Environmental Policy Act (NEPA), other applicable laws, and a final determination by the Secretary.

Challenges facing the Department for consolidating plutonium include completing required environmental reviews, assuring support from the South Carolina Congressional delegation and local authorities, and complying with legal requirements. For example, prior to shipping additional weapons-usable plutonium to SRS, Public Law 107-107, National Defense Authorization Act for Fiscal Year 2002, requires submittal to Congress of a plan for disposal of plutonium that would have been disposed of using the Plutonium Immobilization Plant that was cancelled in 2002.

With respect to highly enriched uranium (HEU) and spent fuel, the deputy secretary has approved the Enriched Uranium (EU) Disposition Project which would provide for continued operation of SRS's H-Canyon facilities. As part of the project, surplus HEU materials currently managed by the Environmental Management Office, the National Nuclear Security Administration (NNSA), and Naval Reactors will be sent to SRS and processed in the H-Canyon facilities for disposition purposes. Spent fuel currently stored at the Idaho National Laboratory (INL), and in various domestic facilities and other countries, that is aluminum-clad (this is the only type of cladding material that is compatible with the H-Canyon processing capabilities) will also be shipped to SRS and be disposed of through processing in H-Canyon, along with the aluminum-clad spent fuel already at SRS. The uranium from processing the spent fuel and HEU materials is planned to be blended down to a low enrichment and sold to the Tennessee Valley Authority for use in manufacturing fuel for its commercial nuclear plants. As a result, additional waste will be generated from continued operation of H-Canyon, but that amount is relatively small. Approximately 225 additional Defense Waste Processing Facility (DWPF) canisters will result from operation of H-Canyon through 2019. There is sufficient space in the site tanks to store this waste prior to transferring it to DWPF for vitrification. The EU disposition plan also includes processing in H-Canyon of approximately two metric tons of weapons-usable plutonium that cannot be disposed of using the Mixed-Oxide (MOX) Fuel Fabrication Facility or the proposed Plutonium Disposition Project due to specific contaminants. Therefore, H-Canyon processing is critical to our efforts to consolidate plutonium.

MIXED-OXIDE (MOX) FUEL FABRICATION FACILITY VS. VITRIFICATION

Question. Mr. Rispoli, your budget requests \$15 million to perform design work on the Plutonium Vitrification Demonstration project in South Carolina. As I understand it, this facility will be able to handle up to 13 tons of plutonium that can not be processed through the MOX plant. Could you explain to the subcommittee why

you are pursuing this project and why this is not an acceptable solution for the 34 tons of U.S. surplus weapons grade plutonium the United States and Russia have agreed to eliminate from their stockpiles.

Answer. We have proposed the Plutonium Vitrification Disposition Project in order to be able to disposition plutonium that, because of isotopic content and impurities such as chlorides and fluorides, are not suitable for processing in the MOX Fuel Fabrication Facility as currently designed. This plutonium was to be disposed of using the Plutonium Immobilization Plant, but construction of that facility was cancelled in April 2002 when the decision was made to proceed with only the MOX plant. We are required by law to have a disposition path out of the State for all surplus plutonium stored at the Savannah River Site (SRS) and the proposed Plutonium Vitrification Disposition Project, together with the MOX plant and continued operation of the H-Canyon facilities, will ensure there is a disposition path for all plutonium currently at SRS or that may be sent there in the future. The proposed Project is subject to review pursuant to the National Environmental Policy Act (NEPA) and compliance with other applicable laws relating to potential consolidation and disposition of plutonium at SRS.

The current concept, process, and planned capability of the Plutonium Vitrification Disposition Project would be unsuitable to disposition the additional 34 metric tons (MT) of surplus plutonium planned to be processed in the MOX facility. Significant changes would be required in the design, footprint, process and throughput of the new project. It is envisioned that the proposed Plutonium Vitrification Disposition Project would be designed to fit in the basement of an existing facility and sized to disposition up to approximately 13 MT of lower purity plutonium by vitrifying it in lanthanide borosilicate (LaBS) glass. LaBS glass is well suited for plutonium with higher quantities of impurities and does not degrade the quality and performance of the product for long-term storage and disposal. However, when mixed with plutonium, LaBS glass produces a significant radiation field. This effect is manageable for vitrifying the plutonium not suitable for the planned MOX facility, but would not be desirable for a significantly longer campaign such as the additional 34 MT of higher purity plutonium. That is because in order to maintain the radiation exposure to operators as low as reasonably achievable, it would take about an additional 20 years of operation to vitrify the additional 34 MT of plutonium or require a substantially more complex and costly facility. Therefore, adding the 34 MT of surplus plutonium planned to be processed in the MOX facility to the 13 MT planned to be vitrified would likely require changing the waste form from glass to ceramic in order to eliminate high radiation.

Although the reaction that causes the high radiation levels does not occur when the plutonium is mixed with ceramic, the ceramic does not accept impurities and maintain its quality as well as glass. Much of the 13 metric tons of plutonium contains significant impurities that could result in cracking of the ceramic pellets. The cancelled Plutonium Immobilization Plant that was to immobilize plutonium in ceramic required blending a large amount of pure plutonium with the impure plutonium in order to dilute the impurities to an acceptable level. There is not enough pure Pu in the 13 metric tons to dilute the impurities to an acceptable level.

The lanthanide borosilicate glass planned to be used in the vitrification process is preferred over ceramic for vitrifying relatively lower quantities of impure plutonium not only because it can accommodate more impurities than the ceramic, but also because addition of the lanthanide allows a larger amount of plutonium to be included in each can of glass. Also, the change would require construction of a new and larger facility (similar to that of the cancelled Plutonium Immobilization Plant) vs. modification of an existing facility because production of the ceramic waste form requires much more space than exists in the K-Area facility.

Additionally, the Plutonium Vitrification Disposition Project would utilize the can-in-canister concept where small cans of vitrified plutonium are placed inside Defense Waste Processing Facility (DWPF) canisters and the canisters are then filled with high activity waste glass. The cans of vitrified plutonium need the high-level waste glass to surround them in order to qualify the waste package for disposal at Yucca Mountain; this high-level waste glass also provides resistance to proliferation. With a ceramic waste form and the additional 34 MT of plutonium, approximately 100,000 cans of ceramified plutonium would be generated, requiring 3,600 DWPF canisters of high activity glass. That would require processing beyond the planned DWPF completion date of 2026 by approximately a decade and require about 2,000 more DWPF canisters of glass waste than will be produced from processing all of the Savannah River tank waste. Taking into account the additional waste resulting from the entire Enriched Uranium Disposition Project through 2019, which is approximately 200 to 250 additional DWPF canisters, there is simply not enough high-level radioactive glass at SRS to over-pour the plutonium glass or ceramic generated

from 13 MT of plutonium to meet the spent fuel standard required to assure proliferation resistance in the repository. Since neither the plutonium-ceramic nor the vitrified plutonium can be sent to the geologic repository without being inside DWPF canisters filled with glass waste, this approach is not viable.

For all these reasons, the proposed Plutonium Vitrification Disposition Project is not viable for the disposition of the plutonium destined for the MOX plant.

WASHINGTON STATE—HIGH LEVEL WASTE VITRIFICATION PROJECT

Question. Mr. Rispoli, the Department has faced enormous challenges in containing the cost of this massive project to vitrify the millions of gallons of high level waste stored in underground tanks in Washington. This project was originally budgeted for \$5.7 billion in 2003. Today, after several independent evaluations, the Department estimates that the total projects cost will be \$12.3 billion and will be completed by 2019. Can you please explain why the original baseline was so low and why you believe this new cost estimate will not escalate further over the next decade?

Answer. The Department of Energy, with the advice and assistance of the U.S. Army Corps of Engineers has implemented several major initiatives to ensure that we fully understand what is required to successfully complete the Waste Treatment Plant (WTP) project and begin plant operations.

The major reasons for the increases in the estimated cost and the delays in schedule result from faulty initial estimates and the overly optimistic treatment of uncertainty and risk for the following: (1) design of novel technology for a large, complex nuclear-chemical plant (pulse jet mixing pumps, non-Newtonian fluids, etc), (2) quantity, procurement and availability of equipment and materials, (3) availability and productivity of professional and craft labor, and (4) environmental and safety regulatory compliance (fire proofing, seismic ground motion, etc.). These were further aggravated by conditions created by deficiencies in the acquisition strategy and management approach. It is important to note that the March 2003 performance baseline was established with a design completion of 30 percent, using a majority of estimating tools which were based on parametric costs from similar facilities. The December 2006 performance baseline was established with a design completion of 78 percent, using a majority of estimating tools which were based on costs from material take-offs. This provides a more highly detailed cost estimate that enables higher confidence.

The Department has increased its confidence in the success of this project as a result of implementing several key actions that addressed its project management capability, management of calculating technical risks, and the project's cost and schedule baseline. Over the past 18 months, the Department has retained a broad range of external, senior professionals from private industry, academia, and other government agencies to thoroughly review the key elements of the WTP. Key initiatives to reinforce the confidence in the project are as follows:

Strengthen Project Management

The Assistant Secretary for Environmental Management has established a Headquarters' senior-level waste treatment and immobilization plant oversight team. The team is fully engaged in all aspects of the project;

The Department commissioned an independent expert team that completed an after action fact finding review to better understand the management issues associated with the project. All of the recommendations have been or are in the process of being addressed;

DOE has recruited talented personnel in the areas of contracting, procurement, contract law, and project management;

The WTP contractor is implementing an earned value management system (EVMS) to track variances to the baseline. The system is being independently certified to be fully compliant with the requirements of the American National Standards Institute/Environmental Industry Association (ANSI/EIA) 748-A-1998. This system, currently in use by the contractor as a management tool, will accurately report project cost and schedule performance;

A structured daily, weekly, and monthly project reporting system is in place, and a Quarterly Performance Review is conducted by the Assistant Secretary for Environmental Management;

The Secretary of Energy is engaged in the WTP project and meets with senior principals of Bechtel National Inc. on a regular basis.

Verify Technology

The Department commissioned a broad group of distinguished independent senior professionals from private industry and academia to thoroughly review all tech-

nology aspects of the WTP process flow sheet. The flow sheet report was finalized in March 2006 and identified 28 issues that have already been or currently are being addressed;

DOE is on a path forward to having the final earthquake seismic and ground motion criteria approved by the Secretary of Energy. DOE has retained the U.S. Army Corps of Engineers to oversee the drilling of one core hole and three deep boreholes to confirm the geophysical properties of the layers of bedrock below the WTP project site. Borehole drilling commenced in June 2006 and was completed in October 2006. We forecast that the Secretary of Energy will approve the final seismic and ground motion criteria by September 2007;

The Defense Nuclear Facilities Safety Board has been actively engaged in the seismic issue and all safety related technical issues from the commencement of the project. Also, I meet monthly with the Board to share information and discuss issues.

Establish a Credible Project Cost and Schedule

In August 2006, the U.S. Army Corps of Engineers delivered to the Department an independent review of the contractor's May 2006 estimate-at-completion, which provided a qualified validation of the cost and schedule baseline—with the addition of \$650 million and three months of schedule contingency.

In addition, two other external independent reviews were implemented (March 2006 and October 2006) to confirm the quality of the WTP cost and schedule baseline and project management systems.

In December, 2006, as a result of the independent reviews, the Department's Office of Engineering and Construction Management validated a final total project cost of \$12.263 billion and schedule completion date of November 2019. The revised project cost and schedule was approved by the Deputy Secretary of Energy on December 22, 2006.

Based on the actions we have taken and the reviews by independent industry experts, the project is now reinforced with a strong project management framework, a clear understanding of the technical issues, and a credible project cost and schedule baseline.

WASHINGTON STATE—TRI-PARTY AGREEMENT

Question. Mr. Rispoli, in 1989 the Department entered into a Tri-Party Agreement between the U.S. EPA, the State of Washington and DOE to set cleanup milestone for Office of River Protection. Since the agreement has been signed, the Department has been forced to work through hundreds, if not thousands of changes to this agreement and renegotiate revisions to the compliance orders. It seems inevitable that the Department will miss milestones and will be forced to renegotiate the consent agreement when neither party fully understands the extent and the nature of the existing contamination. It appears that the Department is accepting an enormous amount of risk to sign-up to an enforceable agreement without understanding the full extent of the cleanup. How has the Department worked through the thousands of missed agreed upon milestones?

Answer. The Department of Energy (DOE) remains committed to the cleanup at the Hanford site in accordance with the Tri-Party Agreement (TPA). It is important to remember that the TPA is a "living" document that was designed to be updated. For example, there are TPA milestones that call for new milestones to be defined at specified points in time. Similarly, new sections are added to the TPA, as appropriate. To clarify, DOE has missed relatively few agreed upon milestones. In fact, DOE has completed 96 percent of the milestones within schedule from the start of the TPA. There were originally 161 milestones, and today there are 950 completed milestones and 235 milestones to go for a total of 1,185 milestones. In accordance with the terms of the TPA, there have been 442 approved change requests, 6 amendments, and 3 modifications known as "Director's Determinations."

As with any "living" document, the TPA parties explore opportunities to improve safety, effectiveness, efficiency, and flexibility of the Hanford cleanup. To do this, the parties engage in regular dialog to ensure the milestones make sense and further the intent of the TPA.

Question. What has been the process for the Department to engage the other interested parties to work out an achievable solution?

Answer. The Department of Energy (DOE), the Environmental Protection Agency, and the State of Washington have engaged in a series of large and small group meetings to understand technical and schedule issues regarding the Waste Treatment Plant, supplemental treatment for low-activity tank waste, tank waste retrieval, and groundwater remediation. The goal of all of the parties remains safe, timely, risk-informed cleanup of the Hanford site.

QUESTIONS SUBMITTED TO HON. EDWARD F. SPROAT III

QUESTIONS SUBMITTED BY SENATOR BYRON L. DORGAN

SECOND REPOSITORY

Question. Mr. Sproat, I read an article that quoted you as saying that the threat of a second nuclear fuel repository would convince Congress to approve the legislation the administration sent up yesterday. I couldn't disagree more with this analysis. For Members to take your threat seriously it must be believable and I don't believe your statement is. Of all the options we have before us today, including GNEP, do you believe this administration would endorse the creation of a second repository?

Answer. This was never intended to be threat of a second repository; rather, it was meant to communicate a statutory requirement. Section 161(b) of the Nuclear Waste Policy Act (NWPA), as amended, requires the Secretary of Energy to report on the need for a second repository. That report is required to be submitted to the President and the Congress between January 1, 2007 and January 1, 2010. Without passage of the provisions in the administration's proposed legislation that would remove the administrative capacity limitation provisions in section 114(d) of the NWPA limiting the capacity of Yucca Mountain to 70,000 metric tons of heavy metal until a second repository is operational, this report will likely conclude that a second repository is needed to dispose of the commercial spent nuclear fuel from the existing fleet of commercial reactors and the remaining defense high-level radioactive waste that cannot be disposed within the 70,000 metric ton limit. While GNEP spent nuclear fuel recycling has the potential to reduce the volume of spent nuclear fuel to be disposed of in Yucca Mountain it will be many years before there is sufficient information on which to make reasonable projections as to when and to what extent advanced recycling facilities will be deployed.

YUCCA MOUNTAIN AUTHORIZATION

Question. Yesterday, the administration sent up legislation, identical to the version from the 109th Congress, which I introduced on behalf of the administration. It is my understanding that passage of this legislation is critical if you are to meet the 2017 operations goal you have set for the project. If Congress fails to enact this legislation, what impact will this have on the opening or operations of Yucca Mountain?

Answer. First, without passage of the administration's legislation the Nuclear Regulatory Commission cannot grant a construction authorization for Yucca Mountain because permanent land withdrawal is required as a condition to receive a construction authorization. Second, without the funding reform proposed in the legislation, the Department is highly unlikely to have sufficient budget authority available to construct the repository to our best-achievable schedule for initial repository operation in 2017.

CANISTER HANDLING AND STORAGE

Question. Mr. Sproat, the budget discusses a new canister storage approach that will simplify the canister handling operations at Yucca Mountain. Can you please explain this new approach has [sic] how it will impact the overall project costs? What do utilities think of this new approach?

Answer. The canistered approach, utilizes the transportation, aging and disposal (TAD) canister for the receipt of most of the commercial spent nuclear fuel expected to be disposed of at Yucca Mountain. The use of the TAD canister will eliminate hundreds of thousands of individual spent fuel assembly handling operations at the Yucca Mountain facilities, which will allow the Department to simplify the design of the repository surface facilities and their operations. This, in turn, will result in less costly facilities and reduced operating costs. Regarding overall program costs, any increased program costs for the purchase of the TAD canisters is expected to be off-set by programmatic savings in facility construction and operations. The Department cannot speak for utilities as to their views; on this approach. However, during the development of the TAD performance specification requirements, the Department did attend several industry meetings to receive technical input for the TAD performance specification. At these meetings the industry was generally supportive of the canister development effort.

GOVERNMENT LEGAL LIABILITY

Question. Mr. Sproat, included in your statement you indicate that Federal Government's legal liability for failure to accept spent fuel by 1998 will increase by \$500 million annually after 2017. This will be on top of the existing \$7 billion liability. Why isn't the administration doing anything in the meantime to reduce or eliminate this well defined problem? Why wait until 2017?

Answer. If the Department starts accepting spent nuclear fuel in 2017, we estimate that the liability to the U.S. Government to be \$7 billion; that liability will grow by \$500 million per year every year the repository is further delayed. The Department believes that the best approach to limiting the Government's liability is to begin acceptance of commercial spent fuel at the repository at the earliest possible date. The passage of the administration's proposed legislation to ensure the timely opening of Yucca Mountain is the most significant step urgently needed to limit the liability. The Department also believes that an interim storage facility at another location could not be sited, licensed, constructed and begin operations appreciably sooner than the Yucca Mountain repository begins accepting spent fuel. Moreover, under the current law, an interim storage facility could not be constructed until after NRC grants a construction authorization for the repository and then only an amount of spent fuel equivalent to 10,000 metric tons of heavy metal could be accepted at the storage facility until the repository begins operations, at which time the limit would increase to 15,000 metric tons.

Question. Why hasn't the administration considered an interim strategy to stage the fuel or set it aside for recycling in light of the looming legal liability?

Answer. The Department's best-achievable schedule for commencing operations of the Yucca Mountain repository is 2017. The Department believes that interim storage could not be undertaken appreciably sooner than when Yucca Mountain could be open. Moreover, under the current law, an interim storage facility could not be constructed until after NRC grants a construction authorization for the repository and then only an amount of spent fuel equivalent to 10,000 metric tons of heavy metal could be accepted at the storage facility until the repository began operation, at which time the limit would increase to 15,000 metric tons.

NEVADA RAIL LINE

Question. Mr. Sproat, this budget requests \$15 million to support work on the Nevada rail line, yet the legislation you have just sent to the Hill requires Congress to withdraw land for this rail line. Why would we spend any amount of funding in this project until we are certain that we can get access to the land we will need to build the project?

Answer. The President's fiscal year 2008 budget requests \$15 million for transportation projects, which includes \$5 million for work with States, Tribes, and other stakeholders on national transportation planning efforts. The \$10 million requested for work on the Nevada Rail Line Project will be used to complete the environmental impact statement on possible rail alignments. This information is necessary to define the ultimate path a rail line to Yucca Mountain would take in Nevada and to support the granting of either a permanent withdrawal of lands or a right-of-way for the Nevada Rail Line. The proposed legislation would withdraw land for the repository but not for the Nevada Rail line.

LAYOFFS

Question. Mr. Sproat, the Department recently announced layoffs of contractor staff in order to restructure the workforce. Can you tell me how this will impact the project and if you expect additional layoffs during this fiscal year?

Answer. The OCRWM prime contractor, Bechtel SAIC Company (BSC) located in Nevada developed a workforce restructuring plan (WRP) that is consistent with the level of funding provided in fiscal year 2007. The WRP will result in layoffs of approximately 65 BSC employees. This will allow BSC to assess and realign, where necessary, those skills that are essential to successfully completing the License Application by February 2008. The funding reduction and the WRP have no impact on the license application submission, but the program will defer non license application related activities in fiscal year 2007. Because the funding received by the program for fiscal year 2007 was \$100 million less than the President requested, we do anticipate making additional reduction in force later in fiscal year 2007 and in fiscal year 2008. The timing and size of those further reductions are currently being evaluated.

SUBCOMMITTEE RECESS

Senator DORGAN. This hearing is recessed.
[Whereupon, at 3:32 p.m., Wednesday, March 7, the subcommittee was recessed, to reconvene subject to the call of the Chair.]