

**HEARING TO RECEIVE TESTIMONY ON ENVIRONMENTAL MANAGEMENT STIMULUS FUNDING**

WEDNESDAY, APRIL 22, 2009

U.S. SENATE,  
SUBCOMMITTEE ON STRATEGIC FORCES,  
COMMITTEE ON ARMED SERVICES,  
*Washington, DC.*

The subcommittee met, pursuant to notice, at 9:33 a.m., in room SR-222, Russell Senate Office Building, Senator Bill Nelson (chairman of the subcommittee) presiding.

Committee members present: Senators Bill Nelson, Begich, Sessions, and Graham.

Committee staff member present: Jennifer L. Stoker, security clerk.

Majority staff member present: Madelyn R. Creedon, counsel.

Minority staff member present: Daniel A. Lerner, professional staff member.

Staff assistant present: Kevin A. Cronin.

Committee members' assistants present: Christopher Caple, assistant to Senator Bill Nelson; Lenwood Landrum and Sandra Luff, assistants to Senator Sessions; and Matthew R. Rimkunas, assistant to Senator Graham.

**OPENING STATEMENT OF SENATOR BILL NELSON, CHAIRMAN**

Senator BILL NELSON. Good morning and welcome to our hearing in the Strategic Forces Subcommittee.

Our witness is Dr. Ines Triay—did I say it right?

Dr. TRIAY. Yes.

Senator BILL NELSON. —the acting assistant Secretary of Energy for Environmental Management. Dr. Triay is responsible for Energy's efforts to clean up the vast quantities of radioactive and other contamination generated during the cold war.

Under the stimulus bill, the Department of Energy received \$5.1 billion to address a substantial backlog of these cleanup projects, and it hopefully will meet the various legally binding commitments to the States and the EPA and accelerate the cleanup activities, where it is possible. In the long run, this accelerated cleanup ought to save money by reducing the number of sites and the facilities that have to be maintained.

The funding under the stimulus bill for the Environmental Management Program is about the same as the annual appropriation for fiscal year 2009, which is approximately \$6 billion. Although

the Environmental and Management Program has been underfunded in the last several years, receiving the equivalent of a full year's appropriation is a very large amount for a single program to absorb and to manage. And so, under the requirement of Section 1603 of the stimulus bill, the funds have to be obligated by September the 30th of next year, 2010.

Well, because the Environmental Management Program has been underfunded in the past several years, the authorization bill for defense from last year, which is this present year, 2009, it authorized an additional 500 million to address the shortfall in 2009. Additional money is needed in this program, and the hearing today is to ensure that these extra funds and extra projects will be managed to ensure that the taxpayers are receiving good value for their money.

Dr. Triay, we look forward to hearing from you as how we're going to meet the goals of what the stimulus bill laid out, what projects are going to be funded, and how the projects will be managed, and the timetable.

Senator Sessions.

#### **STATEMENT OF SENATOR JEFF SESSIONS**

Senator SESSIONS. Thank you, Mr. Chairman.

And thank you, Dr. Triay. We appreciate your service. You certainly are challenged, and very few people have any idea how significant a financial commitment this nation is being asked to make with regard to this cleanup. It's just stunning, breathtaking beyond most anything anybody could imagine.

It is—will provide no real benefits, such as investing \$100 billion in the Defense Department or energy efficiency or productivity. It's mainly clean up a spill and an environmental hazard that has occurred. And so, we really—it's not a real benefit to us. And so, I think—of course it's a benefit in cleaning up, but I'm talking about the economy and the productivity of the Nation is not much enhanced by this effort.

So, I guess my fundamental concern is the cost. I raised that several years ago at some length in this committee, and remain baffled by the amount of money that we're investing here.

As the Chairman indicated, in addition to your \$6- billion base budget last—the stimulus bill added another \$6 billion. That is a huge amount of money. It's difficult for me to imagine how it could be spent effectively in the short timeframe it's been suggested it would be spent. So, you're challenged, no doubt.

The bipartisan Congressional Budget Office reports that only 40 percent of the emergency management recovery funding can be spent by the end of fiscal year '10, which I'm sure is true. You would just be throwing money away, probably, to try to spend it faster than that, and I'd be interested as to whether or not you can carry the money over, even though it was supposed to be stimulus, in the 2- year timeframe. But, we can't just waste that money. It's got to be productively utilized, and I hope that you'll have that flexibility.

Dr. Triay, I—in this committee, several years ago, maybe 3—I think I was chairman then, or maybe just—Senator Nelson had just taken over—the Department of Energy official came in, and I

said—blithely told us that there had been an error in the computation of how much this cleanup cost would be, nationwide, and it wasn't going to be \$100 or \$120 billion, I think, it was going to be \$180 billion. And I remember declaring in amazement that that had to be the largest cost overrun in the history of the Republic. Nothing had ever been seen like an \$80 billion cost overrun before.

Now I'm hearing that that's low, still. According to the 2009 report to Congress, the estimated total outstanding cost to complete cleanup at all of the remaining facilities, at this highest, pristine standard that we're talking about, range between 205 billion and 260 billion. And history being what it is, it probably will exceed 260 billion unless we can figure out a way to confront this problem.

I—you have a tremendous challenge. I don't know how you can do it, but I encourage you to stand up for the American taxpayer. I remember, at that committee meeting, Senator Graham from South Carolina, Lindsey Graham, talked about how they were able to speed up the Savannah River site cleanup by 23 years and save the taxpayers \$16 billion.

So, my question and my concern is, we have got to be realistic. How much good could we do, Mr. Chairman, with \$100 billion, \$150 billion, if we could figure out a way to do some of the things they did in—at Savannah River in South Carolina, and improve that cleanup, get the job done quicker, and do it at a cost that is going to be exceedingly high, by any standards, but more realistic?

So, I'm not against cleaning up. I'm not against the Senators and Congressmen who want to see everything possible done in their States, but you're in a difficult spot, and we're in a difficult spot. We have to protect the treasury of the United States, and we've got to ask, Are there some alternatives that we can utilize, as in South Carolina, that can get the job done effectively, quicker, and at less cost?

Thank you.

Senator BILL NELSON. Okay. Let's just start right there. And, Ms. Triay—or, Dr. Triay, who, by the way—you have good blood in you; you were educated in the State of Florida.

[Laughter.]

Senator BILL NELSON. We will, of course, put your lengthy statement in the record, and Senator Sessions and I are just going to start off with questions. So, let's just start off with his.

[The prepared statement of Dr. Triay follows:]

[SUBCOMMITTEE INSERT]

Senator BILL NELSON. What is it that you're cleaning up? And why is it necessary that we're going to spend all this money?

Dr. TRIAY. First off, Senator Nelson and Senator Sessions, I share your concerns on behalf of the money and the taxpayers that are footing the bill for this cleanup. So, you have the Environmental Management Program commitment and the Department of Energy commitment that we're going to be good custodians of the taxpayers' dollars.

With respect to what are we going to clean up, the National Defense Authorization Act of 2008 requires us to send a report, as you are aware, that delineated the life-cycle costs of the cleanup and also delineated strategic planning business cases that we put together in order to do exactly what you have talked about this

morning, which is to try to come up with ways of accelerating the cleanup and reducing the cost of the cleanup.

Those strategic planning business cases dealt with [inaudible] reduction and near-term completions. As a matter of fact, as Senator Sessions mentioned, some of the acceleration at Savannah River site came from being able to close areas at the site and clean them completely up.

We came up with a business case so that, by 2015, we would reduce the footprint that is the contaminated active area of the environmental management legacy complex by 90 percent by 2015. Based on that business case—

Senator SESSIONS. Could I interrupt?

Dr. TRIAY. Yes, please.

Senator SESSIONS. What—at Savannah River by 90 percent, or the other sites you were talking about?

Dr. TRIAY. The entire environmental management complex, and, in particular, Savannah River site, I believe, by 87 percent, and our Hanford site, which is the other very large cleanup—those are the two major cleanups of the environmental management complex—also by 90 percent.

So, we wanted to come up with a way to reduce the complex only to its highest-risk priorities—those are tank waste, special nuclear materials, and spent nuclear fuel—and do the majority of the cleanup for the remainder of the portfolio of environmental management—transuranic waste, low-level waste, soils and groundwater, and the decontamination and demolition of excess facilities.

When the President, as well as the Congress, started looking at options for the Recovery Act, these particular business cases became part of the discussion. And the business case that we have put forth essentially has us completing the footprint—the reduction of the footprint at both Savannah River site and our Richland operation—in other words, the Hanford site—by 45 to 55 percent; essentially half of what we had analyzed in the report that we sent the Congress in January of 2009. We would do that by 2011. And I would like to also mention that the activities in the Recovery Act funding that I have mentioned before—transuranic waste, low-level waste, soils and groundwater, and excess facilities decontamination and demolition—are activities that, by and large, the Environmental Management Program has done well.

As a matter of fact, here with me this morning, I believe I had the opportunity to—the honor, actually—to introduce you to some of the—my colleagues that are with me, and we have, not only Cynthia Anderson, who's the program manager for recovery funding, but we also have Frazier Lockhart, who's the Federal project director certified at the highest levels of—that the Department of Energy certifies Federal project directors.

The reason I bring this up is, Mr. Lockhart was the Federal project director when we finished the Rocky Flats cleanup. I would like to mention, just along the same lines that both of you have discussed this morning, that the Rocky Flats cleanup finished 50 years ahead of the originally scheduled completion, that the Rocky Flats cleanup finished 20 billion under the originally scheduled—excuse me, the original cost that was estimated. Similar figures are also available for the Fernald cleanup.

And even though I completely understand your concern, and, as a matter of fact, the Environmental Management Program has been heavily criticized for issues associated with project management, we have selected the activities in this portfolio for the recovery funding to play to our strengths. And even though we have had issues in other areas of the program, or in specific projects dealing with these four areas that we have delineated for this recovery funding, we are ready to be extremely effective when it comes to the activities in the Recovery Act funding portfolio.

Senator BILL NELSON. Can you share with us how you determined what the cleanup level would be?

Dr. TRIAY. The Environmental Management has a regulatory framework that is based on CERCLA and RCRA, as well as our own authority under the Atomic Energy Act. So, the majority of those cleanup levels are the result of agreements between the Environmental Protection Agency, the State, and the Department of Energy.

In addition to that, we have stakeholders, such as the other communities, and we have tribal nations that we have responsibility to consult with. So, these are negotiated cleanup standards that are agreed to for the particular cleanup.

Senator BILL NELSON. And that's how you come to the percentage cleanup that you're going to achieve.

Dr. TRIAY. That's correct.

Senator BILL NELSON. And the timetable in which you're going to do it, that's negotiated, as well?

Dr. TRIAY. The timetable is also negotiated, and it depends on the funding profile that is assumed. It depends on the degree of maturity of the technology. But, yes, the timetables are also negotiated among all of those parties.

Senator BILL NELSON. All right. Tell me about—of the material remaining, how do you go about accounting for all of that, of what you're not going to clean up?

Dr. TRIAY. What we—

Senator BILL NELSON. How are you going to manage those sites to account for the remaining material?

Dr. TRIAY. We have—for instance, for nuclear materials, we are consolidating all of our nuclear materials at the Savannah River site from our Hanford site, as well as Los Alamos National Laboratory, Livermore—Lawrence Livermore National Laboratory, as well as other parts in the complex. We have very strict controls associated with safeguards and security for ensuring the security of those nuclear materials that are being consolidated at the Savannah River site.

With respect to the radioactivity that, when we clean up, we may leave behind because we have not done 100- percent cleanup, in terms of not leaving the site at pristine conditions, we do surveillance and maintenance monitoring to ensure the protection of the environment with respect to the level of cleanup that we have agreed to with the State and the Environmental Protection Agency and other parties.

Senator SESSIONS. I would like to follow up on these agreements. Agreements can—made—some made many years ago? How—when

were these agreements, some of the major agreements, and when were they entered into?

Dr. TRIAY. Some of them, decades ago.

Senator SESSIONS. And I've seen it, for example, in agreements, consent—confirmed by Federal judges, like in desegregation cases; after 20, 30 years, it becomes not a feasible thing. And you can—those things can be amended. So, I guess my first question would be, If you have provisions in those agreements that don't make sense for the taxpayers of America, have you undertaken any evaluation to see to what extent they can be amended to accomplish the goal and also to contain these incredibly surging costs?

Dr. TRIAY. Senator, the—these agreements have been amended many times. And, as a matter of fact, on an annual basis the majority of the agreements are discussed with our regulators and the communities where we actually have the cleanup agreements. And, as I was describing before, we have significantly amended the agreements and delayed some of the completion of the cleanups.

Senator SESSIONS. That—is that done—does it have—when you say that, does it have to be done with the consent of all the parties to the agreement?

Dr. TRIAY. That is correct, sir. That's right.

Senator SESSIONS. But, now, of course, if I were—had signed an agreement, I might find it politically difficult to agree to any modification that reduced spending, reduced employment in my area, and would even minutely reduce the pristine nature of the cleanup. So, if we're dependent completely on the consent of the local people who have an agreement, sometimes you have to go—how do you—have you considered legal avenues of amending that, in light of changed circumstances?

Dr. TRIAY. Senator, we—this is one of the main things that we do in the Environmental Management Program, is to try to find a balance between the degree of the cleanup and a balance that is respectful of the taxpayer. So, notwithstanding the fact that the agreements started many decades ago—as I was saying, the States, as well as the regulators, EPA, as well as State regulators, tribal nations, local communities—have negotiated with us and agreed to delay many of the completions, as well as the degree of the cleanup.

Senator SESSIONS. Well, then—

Dr. TRIAY. For instance—

Senator SESSIONS. Okay, so—

Dr. TRIAY. Let—

Senator SESSIONS. Let me just—

Dr. TRIAY. Yes, sure.

Senator SESSIONS. Okay, you've made some progress here, and I think that happened at Savannah River. I think they—local people agreed to—get a speedier cleanup and a less-expensive cleanup. But, do you agree—where did this \$210- to \$260-billion figure come from? And is that what we now expect to do under the existing plans that you have at Energy? Is that your number?

Dr. TRIAY. These are the numbers—yes, these are the numbers that we have published in the report that was sent to Congress. Those came from that—strictly from that report.

Let me just elaborate a little bit on these life-cycle costs. Scope, cost, and schedule are difficult to be able to calculate for cleanups that are going to take decades. So, what we do is, we present a range, which is the range that you have quoted this morning. And the reason for the proposal that we made, or the concept that we presented in this particular report to Congress, was to tackle those large total project costs—total program costs, life-cycle costs, as well as the duration of the cleanup. We think that economies of scale, being able to have ability to accelerate the decontamination and decommissioning of some of these facilities that are deteriorating and, once that they deteriorate, they become even more expensive to clean up, was one of the ways to actually reduce the life-cycle cost and reduce the amount of time of the cleanup. So, that was, indeed, the reason for the concept that was presented in the report that we sent to Congress in January of 2009.

Senator SESSIONS. But, you would admit that, just a few years ago, the high-side estimate for the cleanup was 180 billion, I believe, and now the high-side estimate's 260. That is a—

Dr. TRIAY. It—

Senator SESSIONS. —incredibly huge overrun of just an estimate of a few years ago. Am I wrong about that?

Dr. TRIAY. Senator, let me address that. The General Accounting Office, that has been very critical of the Environmental Management Project management, has said that in the cleanup projects the two main reasons for the issues were, number one, the fact that the assumptions that were used were very aggressive, and the second one was lack of reality in the funding profile that we used for the life-cycle cost.

Of that life-cycle cost, that essentially—you're discussing, essentially, an increase of \$70 billion; 40 percent of that was because we rebaselined the entire program to recalculate the life-cycle costs based on a funding profile that was more realistic, which was, essentially, around \$6 billion as an assumption, in terms—per year—in terms of how we were going to conduct the cleanup. When some of those agreements were signed, the annual budget that was assumed for some of those agreements went from \$7.5 to \$8 billion. So, by coming up with realism associated with the funding profile based on economic realities that we have in the country, 40 percent of that increase in the life-cycle cost was simply a matter of delaying the cleanup and moving it to the right so that, per year, we could be on the order between \$5.5 and \$6 billion per year. Another 40 percent of that increase in the life-cycle cost came from unrealistic assumptions, such as the amount of waste that we were going to be able to leave, for instance, in underground tanks; for instance, assumptions such as the nuclear materials portfolio of the Department of Energy was not going to be part of the environmental management cleanup, but was going to be transferred out of the Environmental Management Program. There's no question that some of that life-cycle cost increase is due to performance of our contractors. But, the vast majority of that life-cycle cost increase were because of assumptions that were too aggressive and lack of reality in the funding profile.

In addition to that, this particular report that we're talking about that was sent to Congress in January of 2009 delineated the

excess facilities that were not part of our environmental management portfolio, and were delineated by other programs, like nuclear energy, like NNSA, like the Office of Science, facilities that were no longer needed and also needed to be cleaned up, decontaminated, and demolished. That—those facilities in that report to Congress, we reported that the range of that particular amount of money to deal with those facilities, was between almost \$4 billion and \$9 billion. So, about 15 percent of that life-cycle cost increase came from the excess facilities that were transferred to the EM portfolio as late as this year and excess facilities that are part of the liability of the Department of Energy.

Senator BILL NELSON. Senator Begich, I need to get through just a few questions here, and then I'm going to have to excuse myself momentarily to go make a presentation in another committee. So, if you will indulge me, let me just go on and do that, and then I'll call on you.

With regard to what you're addressing to Senator Sessions, part of the growth in—that we've been talking about is growth in a number of projects. So, while there has been the growth in cost of individual projects, there have been, also, a lot more projects that have been added to the Environmental Management. And then, in the future, as the weapons complex reduces, those excess facilities that are no longer needed are themselves going to be—have to transfer to Environmental Management to decontaminate and to tear them down. Is that correct?

Dr. TRIAY. Correct.

Senator BILL NELSON. Okay. Now, let me ask you, on the stimulus-bill projects, how did you decide what projects were going to be funded?

Dr. TRIAY. First, projects that had an established regulatory framework, the reasons that both you and Senator Sessions have been talking about, where we don't have established regulatory framework becomes very difficult to be effective in the cleanup.

Second, proven technologies. In other words, we have had issues, serious cost and schedule issues in the Environmental Management Program, when we are doing first- of-a-kind projects. We made sure that the activities in the portfolio had proven technologies associated with the cleanup.

Number three, cost, schedule, and scope. Those plans had already been delineated by the Environmental Management Program so that we essentially had shovel-ready activities that could be started as soon as we received the funding.

Senator BILL NELSON. Are any of the stimulus funds used for ongoing construction projects?

Dr. TRIAY. No funds in the Recovery Act portfolio are used for construction projects. We have—all of the funding is for transuranic waste, low-level waste, soils and groundwater, and decontamination and demolition. There is one exception, which is \$300 million that have been given to the Office of River Protection in Hanford, and that is for them to improve the tank farm infrastructure to be ready for the—when the waste treatment plant starts—becomes operational in 2019.

Senator BILL NELSON. So, when you use the term "shovel-ready," you're talking about the projects you've just described.

Dr. TRIAY. Absolutely.

Senator BILL NELSON. All right. Now, are the projects that are going to be funded first with the stimulus-bill money, is this addressing the high-risk and the most cost-effective projects?

Dr. TRIAY. The highest-risk of the Environmental Management Program is, indeed, tank waste, special nuclear materials, and spent nuclear fuel. We—because the rules of engagement of the activities that we were going to put in the portfolio of the Recovery Act funding was established regulatory framework, proven technologies, and cost, scope, and schedule baselines that were already established, we did not put any activities in the Recovery Act funding associated with tank waste, special nuclear materials, or spent nuclear fuel, which actually are the highest-risk activities of the Environmental Management Program.

The reason for that, Senator, is that, as you were describing in your opening remarks, we, over the years, because the Environmental Management Program has been assigning their base program—in other words, the annual appropriated funds—to those highest-risk priorities, we have been deferring TRUW waste, low-level waste, soils and groundwater, and D&D, to the point as some of our excess facilities have become deteriorated so that when our workers try to go in to clean them up, they are at risk, and then all that happens is, the cleanup takes all that much longer and it costs all that much more. So, that is the reason why the Recovery Act funding is associated with the part of the portfolio that is not the highest risk.

Senator BILL NELSON. Senator Begish, I'm going to call on you, and Senator Sessions will chair the meeting until I can get back.

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

I want to kind of hone in on a couple of things regarding—I've just been, you know, scanning the report that was delivered in January, but let me kind of walk through the contractor lay of the land, and that is—make sure I understand it.

You now have double your capacity, in dollars, 6 billion to 12 billion. The contractors that you currently have, your goal is to modify 90 percent or so of those to do that additional work in those locations. And what is the current status of those modifications of those contracts? Have you done that? Or, when do you anticipate those contract modifications to be completed?

Dr. TRIAY. We have established an internal deadline for those modifications. They—let me explain a little bit, you know, how the process works.

The first thing that is done is that the government does an independent government estimate that is based on all the work that we have done on scope, schedule and—scope—baselines that I was describing a moment ago. So, then we put a modification to the contractor that is what we call "undefinitized," meaning that it—the Department and the contractor have not agreed on how much the work is going to cost and how long it's going to take, and the—so, essentially, all the scope is in those—in the—in that mod that is not undefinitized—that is not definitized, but the schedule and the scope are then negotiated. Those negotiations, based on the independent government estimates, are going to take on the order of 3 months.

Senator BEGICH. So, you anticipate that, from today, maybe mid-summer, you'll have those modifications completed.

Dr. TRIAY. That's correct.

Senator BEGICH. Okay. Now let me ask you a couple of questions on those. The 90 percent, these contractors that you have, of the contracting world that deals in this industry, or this area, how much of the capacity will you consume? All of it?

Dr. TRIAY. Senator—

Senator BEGICH. Or, let me ask it another way. I'm sorry.

Dr. TRIAY. Yeah.

Senator BEGICH. If I can interrupt. Are there contractors that are out there, that are not going to be part of this new equation because they're not current contractors, that could do this work?

Dr. TRIAY. Part of what we were trying to accomplish with the Recovery Act funding was, indeed, to have contractor—contract vehicles that were in the ready so that we could move forward with the work. In some cases, we have what is called a contract that we have already awarded, in terms of the contractors that are capable of doing work. It's like a task-order contract that—where we can compete those tasks among the contractors that have already been preselected. Some of the funds—like, for instance, all of the funds associated with the Oak Ridge National Laboratory decontamination and decommissioning of facilities in the laboratory—will be competed through those task orders. The majority, however, just like you have delineated, is going to go to contracts that are already in place, where the contractor has already been selected.

In terms of the capacity—you know, are we going to use all the capacity? We have required our contractors to utilize, heavily, subcontractors, especially small-business subcontractors, and, in addition to that, with respect to the capacity, you know, the amount of individuals that are out there looking for work, every time we have a day of people coming in to look for work, working for either the subcontractors or the prime contractor, we have a factor of ten higher than the people that we need. For instance, at Oak Ridge we had 76 jobs that were being competed for, and 1,000 people showed up for 76 jobs. At Hanford, 4,000 individuals showed up to get the jobs that were available. South Carolina, Savannah River site, thousands of workers in the union halls and a tremendous success, in terms of the people who want to work in this area. So, with respect to whether we can staff this work, I think that what the data that we have show is that we are going to be able to do that.

Senator BEGICH. Let me ask you, if I can, just a couple more quick ones on the budget process, because I think, Senator Sessions, you brought up an interesting point of escalation. And I want to—you mentioned independent cost estimates. Do you have something that you could at least share with me—I don't know if other committee members would be of interest in this—but, when you've done these cost estimations, what the final outcome is, based on that? I'm guessing, here. I come from being a city mayor. They're never right, the estimations, and the costs are much more. And the danger I worry about here is, you're using—I understand the timetable, but, you know, rushing, which then is costing us more money, is somewhat dangerous. And why I say that is, these con-

tractors know they're getting the business. It's a guarantee. You're going to do the work with them. And so, when you've exceeded the cost of independent government estimates, what has been the penalty for those contractors? Or, have you just assumed that cost with a negotiated—because I understand everything is negotiated. We do that a lot, when I was in the city government, and you end up paying, still, but you negotiate, and they work that into their costs on the front end, because that's how they do the business. Now—so, I guess—do you have something you could share, you know, if it's the last 2, 3, 4 years of work, that you have had a cost estimate before the work is done, what the final work is done, and what did the contractor pay or not pay?

And then, on top of that, are there any of these contractors that are currently under any cloud with the Federal Government in any other work they do with your agency or any other agency? And what I mean by that is, Are there contractors that have issues with the Federal Government on cost overruns in any other business they do with the Federal Government?

Dr. TRIAY. Senator, let me answer the question in an—trying to tackle the serious issues that you have raised.

With respect to the—how we have analyzed the original cost and the actual cost, we do have some data indicating that, since 2004, the actual projects that were completed—we completed 19 projects, and, of those, 85 percent had cost success, meaning within 10 percent; 95 percent had schedule success; and all of them completed all of the scope.

Having said that—

Senator BEGICH. Can I ask you a quick—

Dr. TRIAY. Yes. Yes.

Senator BEGICH. What was the total value of those projects?

Dr. TRIAY. Over 6—

Senator BEGICH. Does that mean—

Dr. TRIAY. —over—way over \$6 billion.

Senator BEGICH. So, 10 percent—

Dr. TRIAY. And not for each—

Senator BEGICH. —is a big number.

Dr. TRIAY. —each one of them. I mean, the total. Yeah, the—

Senator BEGICH. Gotcha.

Dr. TRIAY. —they ranged from 11 million all the way to \$6 billion, individually.

Having said that, as I have already stated, the Environmental Management Program has had serious issues with schedule delays and increase of costs. So, let me also tell you what we're doing not ensure that this doesn't happen, moving forward.

First off, even though we have obligated 80 percent of the funds to the States, 80 percent of the 6 billion to the sites that we have in the different States, we have only authorized them to spend 30 percent of that 80 percent. In other words, 24 percent of the \$6 billion is the only thing that is going to be authorized for costing.

In addition to that, every time that we go from that 24 percent all the way to, hopefully, the 100 percent, meaning the \$6 billion, every 20-percent increment has to be authorized, not only by the office of Cynthia Anderson, who's the program manager for the Recovery Act funding, but also by the chief financial officer of the De-

partment of Energy. The Office of the Chief Financial Officer also has to, independently from the Environmental Management Program, signed off on that 20-percent interval authorization.

And let me tell you how we're going to decide whether the next 20 percent is going to be allocated or not. It's going to be based on cost performance index and schedule performance index. What that means is that we are going to require that those contractors that—the site—our field sites are asking for the additional—the next interval—are going to be at a cost and schedule between .9 and 1 or, of course, above. We require—we're going to require that that performance is there, based on rigorous earned-value-management system, which means that we know how are they doing with respect to the plan that was put in place, and the initial cost estimates that the government has recorded.

So, we are not even—it's not even a matter of what's going to happen after something happens, because it's not going to happen, to start with. If there is a nonperforming contractor at a particular site, we're going to evaluate whether the problem can be resolved; if it cannot be resolved, we're going to go to the next project in that site, and, if not, the money may very well have to be moved from one site to another one that is performing. This is about, of course, job creation, but also about performance for the cleanup.

Senator BEGICH. Very good. Thank you very much.

Thank you, Senator Sessions.

Senator Sessions [presiding]: Just one question. How many contractors in the last 4 years, to your knowledge, have been terminated for nonperformance or failure to performance—perform on time?

Dr. TRIAY. We have not terminated a contractor for nonperformance in the last 4 years. We have taken other contractual actions. And we have the scope work from the contracts that, that contractor is no longer going to do a part of the work, and we have competed, then, a particular part of the scope that was in the contract.

Senator SESSIONS. Senator Graham?

Senator BEGICH. Senator Graham, can I—I apologize. There is that other part of the question, and you just triggered me, and if I could just ask, to make sure we're clear.

Can you provide to me, or to the members of the committee who are interested, if any—again, these contractors that are currently doing the business, and will be doing the business, if any of them have any issues in front of the Federal Government in regards to costs or other types of issues, maybe with your agency or any other agency, could you provide that?

Dr. TRIAY. Absolutely.

Senator BEGICH. I apologize, Senator Graham.

Dr. TRIAY. We will provide that information, absolutely.

[The information referred to follows:]

[SUBCOMMITTEE INSERT]

Senator BEGICH. That was kind—you triggered me on that one.

Senator GRAHAM. Thank you. Thank you for your willingness to do this job.

I represent South Carolina, and obviously Savannah River site's a big issue for the State. And we've been through a couple of ad-

ministrations, and I think the overall theme of the hearing, here, is that we seem to be spending a lot of money on cleanup and not advancing the cleanup agenda as much as everyone would like. And so, we've got a new chance here to start over.

As far as the stimulus money goes, whether it be Savannah River site or any other site, can you assure us that you're not taking one-time money and creating new programs with it?

Dr. TRIAY. I can assure you of that, Senator. This work is work that was already clearly delineated in the report that the Department of Energy sent to Congress in January of 2009. There are not going to be future liabilities associated with starting any particular program or construction or anything of that nature. And we are committed to use the taxpayers' dollars wisely.

Senator GRAHAM. So, the bottom line is that the stimulus money, which is a 2-year funding stream, is not going to be used to create a program that has a funding stream past 2 years.

Dr. TRIAY. Absolutely, that is—that's a correct—

Senator GRAHAM. Okay.

Dr. TRIAY. —statement.

Senator GRAHAM. That's good.

Now, when it comes to energy independence, which is a laudable goal, bipartisanly pursued here, the National laboratories, I think, can be very important pieces of that puzzle. What's your game plan to improve the infrastructure of the National Labs? You know, I think the newest National Lab is Savannah River site, and—can you tell me, just briefly, where do you see the National Labs going, in terms of the funding from DOE?

Dr. TRIAY. We are very committed to the Savannah River National Laboratories [inaudible] and the Environmental Management Program. And coming back to some of the comments made by Senator Sessions on the daunting task of some of the part of the cleanup, as you know, the high-level radioactive waste and underground tanks is something that needs to be aggressively pursued. And Savannah River National Laboratory, my intent is for them to become the premier chemical separations laboratory in the world. I think that they completely—

Senator GRAHAM. Right.

Dr. TRIAY. —have the tools—

Senator GRAHAM. Yeah.

Dr. TRIAY. —and the type of people. So, we are going to invest in technology development in—not only at the Savannah River National Laboratory, but where the talent is across the complex. But, for chemical separations, clearly a lot of the talent is there at the Savannah River National Laboratory.

Senator GRAHAM. Two quick areas. One of the things we're doing at Savannah River site National Lab in the community is research on the use of hydrogen to fuel cars. And I know that's going to be part of the energy mix, is try to have vehicles fueled by hybrid—hydrogen. So, I'll talk with that—talk to you about that later on, more privately.

H Canyon. As you are, I'm sure aware of, that Savannah River site was chosen by the Clinton administration to be the MOX fuel facility, where it would take 36 tons of weapons-grade plutonium excess to our defense needs, and the Russians would take a like

amount, and take the plutonium pits that are nuclear bullets and turn 'em into plow shares to create commercial fuel. That program has been—you know, South Carolina has agreed to be a receiving site for this plutonium, so you could consolidate it there, save a lot of money, and eventually turn it into commercial-grade fuel, taking what would have been a nuclear-weapon-grade material down to commercial fuel level. And we're way behind in construction there. And I know that's a different bailiwick.

But, the material that we receive from the weapons complexes that can't be MOX'd, turned into commercial fuel, the goal was to run it through H Canyon and vitrify it. H Canyon, to me, is sort of a national treasure. In 2001, we passed the Defense Authorization Act, that said that H Canyon would be required to maintain a high state of readiness. What is your view of H Canyon?

Dr. TRIAY. We're committed to H Canyon. We're committed to the high state of readiness. And we, as we have discussed in some occasions with your staff, are always looking for ways to be efficient and effective, including H Canyon. As you know, that's a 50-year-old facility that we always are looking for improvements to the life-cycle cost of that facility. We have had General Accounting Office questions with respect to H Canyon, and our plan is to continue to use H Canyon for the excess plutonium processing, but, in addition to that, trying to accelerate the plutonium processing any way we can—

Senator GRAHAM. Yes, ma'am.

Dr. TRIAY. —for the obvious reasons.

Senator GRAHAM. And one final question. If you close Yucca mountain, which apparently is the game plan now, under the law that created Yucca Mountain, high-level defense waste would have priority. And a lot of the DOE sites have a—legacy materials from the cold war. You know, spent fuel is obviously a problem. That's—the goal was to take our spent fuel from commercial reactors and store it in Yucca Mountain. But, what has not been talked about nearly as much is high-level waste from the defense—from the DOE complexes and defense complexes that helped us win the cold war.

In terms of timelines for disposition, if Yucca Mountain is no longer available, how does that change the timelines to dispose of this high-level waste? And what do we do with it?

Dr. TRIAY. With respect to the timelines associated with the Environmental Management Program, as you know, Yucca Mountain is not part of the responsibilities of the Environmental Management Program.

Senator GRAHAM. But, it is a—

Dr. TRIAY. But—

Senator GRAHAM. —it is a place you would send the materials.

Dr. TRIAY. Of course. So, with respect to the Environmental Management Program activities themselves, we're a long ways away for the Yucca Mountain decision or potential repository to change any of our plans. As you know, we are constructing the soil waste processing facility at the Savannah River site to get on with the treatment of the tank waste and vitrification of that waste. As you also know, because you have visited all of these facilities and have been a leader, you know, for us for this work, we have the facility that

vitrifies the waste and is vitrifying sludge today, and has been for some time. So, we actually are going to continue with our plans and put all of the waste—we're going to vitrify all of the high-level waste. As you know, that is a very——

Senator GRAHAM. Right.

Dr. TRIAY. —robust waste——

Senator GRAHAM. Right.

Dr. TRIAY. —form——

Senator GRAHAM. Right.

Dr. TRIAY. —that affords a tremendous amount of protection to the environment.

With respect to what happens after that, we are going to rely on the blue ribbon commission that Secretary Chu is——

Senator GRAHAM. But, you don't see the timelines being changed because of the decision to close Yucca Mountain.

Dr. TRIAY. I don't see the timeline of vitrifying the waste being changed in any way because of that decision, no.

Senator GRAHAM. Okay, thank you. I look forward to working with you.

Senator SESSIONS. Well, on that question, if Yucca Mountain is not open, doesn't that—what impact does that have on you? And could that even drive up the cost of cleanup even more?

Dr. TRIAY. As I was saying to Senator Graham, we are decades away from any impact to the Environmental Management Program. We have——

Senator SESSIONS. So, it's going to be decades before you—but, your ultimate plan was to transmit this waste to Yucca, correct?

Dr. TRIAY. That is correct. But, right now——

Senator SESSIONS. What would you do with it if you didn't?

Dr. TRIAY. We are going to vitrify it, if it is high-level waste. If it is spent nuclear fuel, it's going to—going either into dry storage or a Savannah River site is going to be reprocessed through H Canyon and also vitrified. Those are very protective waste forms. And clearly dry storage for spent nuclear fuel is very protective of the environment. So——

Senator SESSIONS. I understand all that, but——

Dr. TRIAY. —we are—we're committed—we're committed——

Senator SESSIONS. Well, I just—let's—no. It has impact if we don't use Yucca, because—frankly, I share your view that the storage, in dry cask storage on site, is not a danger. Unless someone goes and sits on it, it's not going to be—it's not going to blow up, it's not a threat to the safety, if it's well managed, and it can stay there for decades. I have no doubt of that. But, in this political world we're in, most folks feel that's a unacceptable long-term solution. The long-term solution was to move it to Yucca. A decision to cancel Yucca alters your long-term plan for the disposal of that waste. Yes or no? Yes or no? If we cancel Yucca, doesn't that alter your long-term plan for disposal of this waste?

Dr. TRIAY. As I was saying, for the next 20 years, we were committed to get the waste into glass or into dry storage for spent nuclear fuel. So, for the next two decades, it doesn't impact the Environmental Management Program. And whether it affects it——

Senator SESSIONS. Was the plan——

Dr. TRIAY. —for the longer term——

Senator SESSIONS. —to transfer it, at some point in the future, to a national storage center, which has been generally considered to be Yucca? Is that correct?

Dr. TRIAY. That is correct.

Senator SESSIONS. Well—

Senator GRAHAM. Can I just—

Senator SESSIONS. Yes.

Senator GRAHAM. The reason this is important is because we've always wanted a pathway forward. You know, when Savannah River site agreed to take the 36 tons of weapons-grade plutonium, the Democratic Governor at the time—this was during the Clinton-Bush years—threatened to lay down in the road. And I got a statute passed that put penalties on the Federal Government if they didn't hit their timelines, because we sort of made a leap of faith, here, that we're going to take this material—and I told people in South Carolina it's going to—you know, the pits are going to be disassembled, it's going to create good jobs, we're going to vitrify what can't be MOX'd, and there'll be a pathway forward, either through MOX, vitrification, Yucca Mountain. And I guess what Senator Sessions is saying is that we need to reassure people that, 20 years from now or whatever, that there's going to be a pathway forward out. Because if we don't do that, then sites are going to be very reluctant, in the future, to embrace change.

You know, we also, with Senator Sessions' help, came up with a plan, when it came to storage of—tank-waste storage in South Carolina. We agreed—the State of South Carolina and the Department of Energy and the last administration—to leave some material in the heel of the tank that would save \$16 billion, instead of scraping it all out and sending it to Yucca Mountain to just fill the place up quickly with stuff that you could leave in South Carolina. We made a sort of a bold decision at the time to leave some of this waste in the tank, save a lot of money; wouldn't hurt South Carolina. We're behind schedule there.

So, I just—I know you're new here, you get a chance to start over, and I really do want to work with you. But, the one thing we're going to have to do is to assure these States and sites that are willing to do things differently, they're not going to get stuck. And that's the point. There's a lot of concern now that if Yucca Mountain is taken off the table, you know, have we been left holding the bag, here, 20 years from now, or 15 years from now? And this agreement to leave the tank waste behind in South Carolina, if it's behind schedule, were we smart to do it? So, you know, help us work through these issues, because I think we can save a lot of money if we'll just look at this whole stuff anew.

Dr. TRIAY. We are completely committed to meeting our commitments to the States to have a path out for high-level waste, as well as the spent nuclear fuel. As Secretary Chu has shared with you, we're looking at the blue ribbon commission to ensure that we have those options that are viable, that will meet our commitments to the States.

Senator GRAHAM. Thank you.

Senator SESSIONS. Well, I know you don't want to, you know, get into a political fray, here. I'll just do it. There are a lot of ramifications for not proceeding with Yucca. And it's not just commercial-

reactor spent fuel, it's nuclear cold-war residue, fuels like this. And if we don't do Yucca after all we've spent on it, I don't know what we're going to do. There's no plan out there. Maybe this blue ribbon commission can solve it, but we've gone from having a plan to having no plan. That's what Senator McCain has complained about, and I think he's correct.

Nuclear power is a part of our reality, and nuclear weapons are going to be part of our reality, as long as I'm on this Earth, I assume. And it's just a problem that I'm worried about.

Senator Begich, did you want to—I hadn't gotten—

Senator BEGICH. I do, I just wanted—

Senator SESSIONS. —finished up, but you interject—

Senator BEGICH. Yeah.

Senator SESSIONS. —right now, if you'd like.

Senator BEGICH. If I could, thank you very much.

Let me—because I'm new to this whole process here, let me make sure I understand this right. When you say that, for two decades, you're—approximately two decades—could be more, could be—but, that you feel very secure that you have ability to move the waste and put it properly away. It's a question of after that, that you're now planning for, but not yet definitive of where that is.

Is that—

Dr. TRIAY. That is—

Senator BEGICH. —is that—

Dr. TRIAY. —exactly correct. However, committed to finding a path out.

Senator BEGICH. I understand that. Now, when I look at—and I've got to look at the name of this report, and I think this is the same one you referenced a couple of times. I think—yeah, the January 2009 report.

Dr. TRIAY. Correct.

Senator BEGICH. You know, I've been just kind of flicking through it real quick, here, but on page 79—it's in your summary—it's—you know, it's not the appendix that has all the detail by each project within the projects, but it's a pretty good summary, and it shows the remaining costs in 2008. And I have a high and low number on that. And then you have "planned completion date" date range. When I did a quick check here, a lot of these projects will be done within the 20 years. Right? I mean, there are some big ones that aren't. I recognize that. But, help me understand, just so I get the connection between these "project completed," the concern that Senator Sessions has, and Senator Graham, that—are we talking about the remaining projects that I've checked off that are, in some cases, 75 percent complete at that stage—but, are they—what's the—

Dr. TRIAY. The—we only have high-level waste and spent nuclear fuel with respect to the projects that are listed here on page 79. Three sites.

Senator BEGICH. Which ones are those, just so I'm clear?

Dr. TRIAY. The Hanford site, Savannah River site, and the Idaho site.

Senator BEGICH. Where is the last one? I'm sorry.

Dr. TRIAY. Savannah River site, Hanford site, and the Idaho site.

Senator BEGICH. Oh, Idaho, okay.

Dr. TRIAY. So, those are—those are the three sites that we are committed to delineating a solution for a path out for the spent nuclear fuel and the high-level waste. And, as you can see, those sites, you know, have—

Senator BEGICH. A longer period.

Dr. TRIAY. —a longer period to—for completion. And in Idaho, in particular, the agreement that we have with the State in one of the negotiated agreements is for the year 2035.

Senator BEGICH. 2035, okay.

Let me end on that, but I'll go back—I have some other questions, but I'll—

Senator SESSIONS. All right.

Senator BEGICH. —they're a separate issue.

Senator SESSIONS. Just to note that this \$6-billion increase in funding was a stimulus-package bill that DOE projects would create 13,000 jobs. But, to give an indication of how much money \$6 billion is, that averages, just by mathematics, \$461,000 per job. So, I want to say, first of all, in terms of a pure jobs package, this is not—it can only be considered as a—money to get this job done, an advance payment to you, the Department of Energy, to perhaps accelerate it and keep up with where we need to be with regard to cleanup.

Dr. TRIAY. Senator Sessions, the—that figure that you quoted, of course, is—we would have to divide that by the amount of years, because obviously we don't want to hire somebody and then fire them. In other words, we would hire one person for 2 and a half years.

So, having said that, let me just address, you know, your concern—

Senator SESSIONS. Well, first of all, I know you've got to—you're going to have to buy technology, equipment, and machinery, all of which makes the cost per employee go up. I'm just saying, as a pure jobs bill, this is not a big winner, in terms of jobs per dollar invested. But, it does create jobs, no doubt.

Second, what I want to stress with you, as I stressed with Secretary Bodman and your predecessors, is that I consider the amount of money we're talking about unacceptable. \$260 billion is unacceptable. And we're paying you to do something other than business as usual.

Now, I—are you bringing in experts, thoughtful people who can help you do some of the things that were done in Savannah River that got the project quicker, saved \$16 billion, and got us on the right track in a better way?

We need to save this money. If you took \$1 billion, \$2 billion a year, and used it to incentivize windmills or hybrid cars or other things that could benefit this country, research and development in clean coal, and the things of that nature, it would be huge over the next 20 years. It would be huge.

So, right now we're spending it on a cleanup program that continues—it's indisputable—it continues to go up in dramatic fashion. It was 120 billion, as I recall, just a few years ago. And then we were—it was announced, in this committee, this subcommittee, that it was 180. And now you announce, in January, with your re-

port, that it's 220 to 260. These—it just continues to go up. And somehow we've got to get off this treadmill.

Are you looking creatively—are you in—are you demanding of every employee under you that they are thinking on how we can do this project in an effective way?

And it may require some renegotiation of contracts and agreements. I understand that's driving some of this. But, if an agreement no longer makes sense—Senator Graham worked with you to make that change that seemed to be effective. Are you thinking in that way?

Dr. TRIAY. Absolutely, Senator Sessions. The reason I brought up the strategic planning that led to footprint reduction and near-term completions is because that strategic planning, as delineated in this report, also talks about tank waste, which is half of that life-cycle cost, and, in addition, talks about spent nuclear materials and spent nuclear fuel. We are looking at every possible opportunity, but, in particular, at transformational technologies and concepts.

Secretary Chu has talked to me, in no uncertain terms, about his expectations of us looking at those transformational technology development or concepts that are actually going to dramatically—could dramatically reduce tank waste, spent nuclear materials, and—

Senator SESSIONS. Well, let's just follow what Senator Graham suggested, that, as I understand it—I may be wrong, but, as I understand, the South Carolina agreement was that you get 90 percent of the waste removed and then you've got a tank that has some residue, minor residue that's not easily recoverable, except by digging up the entire tank and treating the entire tank as a nuclear waste, and they agreed that you get every bit of it out the tank that's possible, and they agreed that you could leave the remainder there to gradually decay over the years, in years to come. Is our plan, at the other sites, the complete, pristine removal of the tanks? And is that a factor in the higher cost at the other sites?

Dr. TRIAY. No, sir. We don't have plans at other sites to remove the tanks. But, just so that I can tell you, Senator Sessions, I was the lead technical assistance to Congress from the Department of Energy on Section 3116 of the National Defense Authorization Act of 2005, which I believe is the section that you're talking about, where we were able, as a result of that, to leave waste, after consultation with the Nuclear Regulatory Commission, as low-level waste as part of the tanks. So, we are completely committed to making sure that we look at these transformational technologies and concepts that can reduce the cost, especially in the area of tank waste, spent nuclear fuel, and special nuclear materials.

And you have my commitment for the Environmental Management Program to work with this subcommittee and ensure that we work collaboratively, but expeditiously, to reduce the life-cycle cost and reduce the amount of time that this cleanup is going to take. You are completely right about the fact that we need to look very creatively at how to deal with this cleanup.

Senator SESSIONS. Well, thank you. I—it's just—nothing comes from nothing. The money spent is—should compete with other energy environmental concerns, and it—\$260 billion is a lot of money that could, I think—if we did this thing right, we could reduce that

cost and save \$100 billion, and that \$100 billion could be better used in other ways to improve the environment, would be my thinking. And I certainly hope that we're not locked into some sort of agreement we made 30 years ago, or a mindset in energy that does not look for these new, creative ways to deal with it. I'm glad to hear you're committed to that. I did talk to Dr. Chu about it, and he—I think he understands the immensity of the money that this cleanup program costs, and it provides an opportunity to do better things with limited dollars, if we can save 'em.

Dr. TRIAY. Yeah. We—

Senator SESSIONS. Thank you, Mr. Chairman. And thank you for your good leadership. I do have to make another appointment. And I know you're pleased with the new FEMA director from your State. You had to go introduce him at the committee hearing today. I hear good things about him.

Senator Bill Nelson [presiding]: Indeed. And thank you for your continued leadership, Senator Sessions. And it's a pleasure to work with you. And we've got a lot of work to do in this subcommittee.

Senator SESSIONS. Yes, we do. And I look forward to—we're working on a time with you to discuss your trip [inaudible].

Senator BILL NELSON. Thanks.

Following up on this, Dr. Triay, Environmental Management was going to focus on a number of sites that could be cleaned up and closed much more quickly. And Rocky Flats was one of those. And Congress went along with that, on the condition that, when Rocky Flats was finished, the savings would be applied to accelerate cleanup at other sites. Well, with the accelerated cleanup at Rocky Flats, there were substantial savings, but those savings were not used to accelerate cleanup at other sites. What are you going to do with the stimulus money to accelerate cleanup?

Dr. TRIAY. The stimulus money will be used to deal with those deferred projects that constituted the portfolio of accelerated cleanup at some of these other sites. We are going to ensure that we reduce the footprint at our two largest sites—Hanford as well as Savannah River—by between 45 and 55 percent. We are going to ensure that we—disposition of thousands of cubic meters of transuranic waste and low-level waste. And in addition to that, we are going not deal with some of the main issues associated with contaminated soil and groundwater.

In my testimony, in particular, I talk about in Idaho, Oak Ridge, Savannah River site, Hanford. If you actually look at the majority of our life-cycle costs, it deals with Savannah River, Hanford, Idaho, and Oak Ridge. Savannah River, we have—we are going to be closing major contaminated areas and two nuclear reactors. We also think that it is imperative that if we are able to reduce the footprint, we see reductions to our surveillance and maintenance costs. In other words, the cost of opening the doors every morning and being able to maintain the complex in a safe and secure posture.

So, I believe that—Senator, that you're not going to be disappointed with the dramatic amount of decontamination and decommission that is going to be done with the Recovery Act funding and with the amount of waste that is going to be dispositioned.

Senator BILL NELSON. Back on the jobs, do you have an estimate of the new jobs that are created by the stimulus bill, how many are going to be Federal and how many in the private sector?

Dr. TRIAY. With respect to the Federal jobs, we are going to be hiring on the order of 90 individuals, 90 employees, into the Federal workforce. The rest of up to the 13,000 jobs are going to be in the commercial sector.

Senator BILL NELSON. Now, after the stimulus-bill money is over, which is in a couple of years, what happens to those jobs?

Dr. TRIAY. What we had in mind was to partner with the energy sector of the Department of Energy. So, essentially what—part of our vision in proposing this dramatic decrease in the footprint was to have vast tracts of land that were then cleaned up and would become an asset to that particular community. We in the Environmental Management Program are focused on the cleanup; however, there are other parts of the Department of Energy that are focused on energy, and other parts that are focused on other missions, like science, like other parts of defense. So, we thought that, by cleaning up these vast tracts of land, we would be then able to put this resource on the table for ideas, such as, for instance, energy parks in the different sites that now those lands we're in, and then ready for beneficial reuse. So, our thought was that, by doing that amount of footprint reduction, we would be able to give a—the communities the opportunity to use the infrastructure, very well trained workforce, as well as the ability, based on a lot of geohydrological characterization of those sites over the years, to explore, even within the Department or outside the Department, in a totally commercial venture, the opportunity to continue with those jobs past the 2 and a half years, because then those vast cleaned-up tracts of land will become an asset to the community.

Senator BILL NELSON. Okay. Now, you've got to have—at the same time that you're dealing with the stimulus money, you've got to handle and manage your own regular cleanup activities. How are you going to do both of 'em together?

Dr. TRIAY. We have stood up an office for the Recovery Act funding. As a matter of fact, the program manager, Cynthia Anderson, was the P division director at South Carolina, as I was saying; Frazier Lockhart was a—the Federal project director of Rocky Flats. So, we have very good talent. But, in addition to that, the Environmental Management Program, in 2007, was at 1,370 employees. Today we have higher and more extended offers so that we increased our employees to—essentially by 300, to 1,680. That doesn't count the 90 individuals that we're going to hire specifically for economic recovery. So, we have—we're going to have an increase of on the order of 400 employees between 2007 and today.

And we believe that we are going not be very demanding customers of these economic recovery activities, and that we're well poised—we have high-level individuals in the area of science and engineering, but also acquisition and project management. In the area of project management and contract management, in particular, we have gone from—we essentially have increased by 116 employees. We—in addition to the Federal employees, we have partnered with the U.S. Army Corps of Engineers so that they can also provide augmentation to the Federal employees that are in the

Environmental Management Program. We have over 50 individuals deployed from the U.S. Army Corps of Engineers and their contractors, so that we can strengthen project management and contract management, in addition to the strengthening that we have done of our own Federal staff.

Senator BILL NELSON. It's your intention to obligate the rest of this money within the next 5 months, and to have the work completed in 2 and a half years, by the end of '11. And yet, we've seen that's what's gotten us into a fix in the past, where we do these accelerated projects. So, what is your plan to develop realistic baselines or milestones for each of these stimulus-bill projects?

Dr. TRIAY. Cost, scope, and schedule baselines have been developed for 90 percent of the portfolio before the Economic Recovery Act. And I have—as part of this increase of 300 employees in the Environmental Management Program, we have stood up a cost-estimating group in our Consolidated Business Center for Independent Government Estimates, and we're going to have the Office of Engineering and Construction Management continue to perform independent audits of all of our baselines, including the baselines that are associated with this work.

As I was saying before, in this case, in addition to having realistic baselines to start the work, we're going to put also independent verifications before we increase the ability for the contractors to cost work at 20-percent intervals. That will require not only the Environmental Management Program, but the Office of the Chief Financial Officer. We are extremely aware of the fact that we need to perform, that we have to ensure that we use this money effectively, and the baselines that are going to be put in place are going to be realistic, they're going to have independent auditing of their degree of integrity, and we're going to have risk management plans so that we identify the vulnerabilities that we have associated with the work, and that we are vigilant about dealing with those risks before we commit further dollars that can be costed against the Economic Recovery Act activities.

Senator BILL NELSON. Thank you, Dr. Triay.

Senator Begich, will you adjourn the meeting when you're through with your questions?

Senator BEGICH. That would be fine, Mr. Chairman.

Senator BILL NELSON. I'm going to slip on out to another appointment.

Dr. Triay, thank you. You came very well prepared. I want to commend you. If you would, go ahead and introduce your colleagues that you said you wanted to, and we'll make it part of the record.

Dr. TRIAY. Thank you, sir.

Cynthia Anderson is the program manager for the Recovery Act, and she was the P division director from South Carolina, from the Savannah River site. Frazier Lockhart was the Federal project director that pushed closure of the—of Rocky Flats, highest-level certification from the Department of Energy. And I would also like to introduce Merle Sykes, who's the Deputy assistant Secretary responsible for the life-cycle cost as well as the strategy planning associated with the Environmental Management Program.

Senator BILL NELSON. Okay, thank you.

Senator Begich?

Senator Begich [presiding]: Thank you very much, Mr. Chairman. I'll be brief. I just have a couple of quick questions.

And I might have missed this, so just—if you could clarify this, if I got the number right. There's about—with the stimulus bill, in the 11,000-or-so, or 12,000, private contractor employees, there's about 90 that will enter your agency as agency employees. Is that—give or take a few.

Dr. TRIAY. Yes. Ninety additional—

Senator BEGICH. Okay.

Dr. TRIAY. —Federal employees.

Senator BEGICH. Right. Do you—so, as the stimulus winds down, in 2-plus years—2, 2 and a half years—these 90 are intended to stay on, because you believe there's additional responsibilities and work for them in the future. Is that what I understand? Or, potentially could be.

Dr. TRIAY. Potentially. In—the National Academy of Public Administration published a report in 2007 indicating that the Environmental Management Program needed to increase their staff, from 1,370, by 200, immediately. And they had done some benchmarking on comparable industry, such as NASA, being one of the main comparable industries to the Environmental Management type of projects. And they indicated that, at some of those other agencies, we would have two to six times the oversight that we have in the Environmental Management Program.

So, the Environmental Management Program really has been a—in the past several years, understaffed when it comes to oversight. General Accounting Office, other bodies, have heavily criticized our performance of—in our projects, and, in particular, the oversight that we have provided to a project management and contract management. And we think that those 90 individuals would probably have opportunity to continue to work in Environmental Management.

Senator BEGICH. So, you anticipate—would it be the 2011 or 2012 budget that you would see an increment in order to provide continual funding for those 90? Because, in theory, the stimulus money runs out; these guys are temporary full-time, by definition.

Dr. TRIAY. It—

Senator BEGICH. But, your point is that they could be utilized in the future, so you would see an increment in—would it be 2012?

Dr. TRIAY. In terms of program direction, which is the account where those monies would come from, as I was stating before, we have augmented our Federal staff from other agencies, such as—the U.S. Army Corps of Engineers has over 50 individuals that, through their own contractors, have been part of our efforts to improve our projects and our contracts. So, in terms of a bottom-line increase of the dollar amount, that is not a given. In other words, we can't—

Senator BEGICH. I understand.

Dr. TRIAY. —within the account, make sure that we mentor some of our own Federal employees to take over for a—that assistance that is being provided to us from others that have had more success and are more experienced in project management and contract management.

Senator BEGICH. But, in order to do that—and I would just give you a cautionary flag on the Corps, because we do a lot of business in Alaska with the Corps; they have 4-plus billion in the stimulus bill that they have to manage. I have concerns over their capacity to manage that. They're similar steps, as you of, you know, existing projects. They don't want to create new projects, so forth, which I commend them for that. And there's very specific in the stimulus bill how we detailed how the Corps could do projects, or not, with the stimulus money. So, I'd—a little flag of caution there, only because of—their capacity is in question.

But, saying that, when you mentor up your folks to then supplant what the Corps was doing—I mean, I guess my question is, Is it 2011 or 2012 that you're—I mean, you've got to have an increment; you can't just—90 people added to your payroll, it comes from somewhere.

Dr. TRIAY. Right. I mean, all—

Senator BEGICH. That's all I'm—

Dr. TRIAY. —all I was trying to say is that it may not be necessarily straight math, you know, that we need to add 90 individuals times \$140,000 per year—

Senator BEGICH. Gotcha. No.

Dr. TRIAY. —and that that is a straight math of how the program direction dollars are going to increase in 2012. Obviously—

Senator BEGICH. Understood.

Dr. TRIAY. —it would be in 2012.

Senator BEGICH. But, 2012 is approximately—

Dr. TRIAY. Yeah, it's approximate, yes.

Senator BEGICH. Okay.

Dr. TRIAY. Yes.

Senator BEGICH. And then, two quick ones. On the—again, that chart on 79—on page 79, which is a great summary, are those—when I look at the high and low, just so I understand how you've done this, over the life span of the project, then those are inflation-adjusted or are they in today's dollars?

Dr. TRIAY. The life-cycle cost is in—is escalated, you know, the ones that are—

Senator BEGICH. Okay. So—

Dr. TRIAY. —here on page 70.

Senator BEGICH. Okay. So, when I—

Dr. TRIAY. And just so—just so that you know, in terms of the ranges of the years, you know, that—some of them that you were reading—

Senator BEGICH. Right.

Dr. TRIAY. —what—the ranges of the—

Senator BEGICH. Balance.

Dr. TRIAY. —of the funding, the life-cycle cost funding, it goes from a 50-percent confidence level to 80-percent confidence level. That's—those—

Senator BEGICH. No, I—

Dr. TRIAY. —that range comes from that.

Senator BEGICH. No, I—that's great. What I just wanted to make sure—so, what has the greatest bearing on this number, on these numbers, is—if you got additional increments above what you've projected, which is 5 and a half to 6 billion, this number has a po-

tential of going to the lower spectrum. Is that—I just want to make sure we're on the same page.

Dr. TRIAY. Absolutely.

Senator BEGICH. Okay.

Dr. TRIAY. Absolutely. That is why I was telling, I believe, Senator Sessions—

Senator BEGICH. Senator Graham.

Dr. TRIAY. —that 40 percent—

Senator BEGICH. Yeah, Sessions and Graham.

Dr. TRIAY. —over the life-cycle cost was when we adjusted the funding per year down to about—

Senator BEGICH. Gotcha.

Dr. TRIAY. —between 5.5 and 6, we had to move the activities to the right, and therefore, the escalation of the dollars caused 40 percent of the increase in life-cycle.

Senator BEGICH. In that life-cycle change, that 40-percent number that you've identified—and I might have not heard you correctly earlier—the old estimate was, like, 7 and a half billion, 8 billion, per year? Is that right? Am I right, in that range?

Dr. TRIAY. That is correct.

Senator BEGICH. So, that—so, the increment of 1 and a half to 2 billion has an impact of 40 percent. Let me rephrase that—1 and a half billion to 2 billion per year has an increment increase of 40 percent on these projects.

Dr. TRIAY. That is correct.

Senator BEGICH. That—am I saying that right? I just want to make sure I get the—

Dr. TRIAY. That is exactly correct.

Senator BEGICH. I'm trying to keep the math as simple as I can manage it, dealing with folks—dealing with nuclear energy and so forth. So, I'm just trying to keep it in my mind.

So—well, that helps a lot, because it—what it argues is, you know, if you can adjust up the budget over time, back to that number, making it more realistic, the amount of money, potential savings, is huge. I mean, in theory.

Dr. TRIAY. That is true, but—

Senator BEGICH. In theory.

Dr. TRIAY. But—

Senator BEGICH. I mean, it's not—

Dr. TRIAY. In theory, but—

Senator BEGICH. Yeah.

Dr. TRIAY. You know that there—of course you know, Senator, that there are economic realities—

Senator BEGICH. Sure.

Dr. TRIAY. —and that we need to do our part, you know, to allow other parts of the Federal Government to do their job effectively, as well.

Senator BEGICH. I appreciate that. I thank you.

The last question—or, actually, two quick ones. You mentioned, with the contractors, you have a lot of small-business component—or potential small-business component. Do you keep track of your DBE, your disadvantaged business enterprises, or your—disadvantaged business percentage on these contracts and what participation? And if so, could I get that, at some point? I don't need that

right now, but—of the contracts that you have—that are going to be extended, let me put it that way—let's just be—stimulus only. The ones that will be added to and modified for the purpose of stimulus, what percentage of DBE, or disadvantaged business, or minority-owned businesses, have part of that business? Can you get that to us?

Dr. TRIAY. Absolutely. We will definitely do that. We keep track of it. We—the Environmental Management Program is very successful, actually, in having small business and—do a major part of our work. So, we will definitely give you that information.

[INFORMATION]

Senator BEGICH. That'd be great.

And then, the last question, and then I'll close off the meeting, and that is, Of the amounts that you get on the—again, now let's put stimulus aside—the 5 and a half, 6 billion, that you roll through on an annualized basis—of that—not what is obligated, but what is actually expended in work per year—do you have a number that you could share with me now, or maybe, again, at a later time, the last 4 years of—not what was obligated, but actually expended in actual completion work? Is there such a number that you might have available?

Dr. TRIAY. I'm having Merle Sykes identify herself and come to the table, but I believe that that number is 80 percent. But, my all means, Merle, please.

Senator BEGICH. About 80 percent. So, about 4.8 billion, give or take a little bit there, because your number may vary—is actually expended on contractual and/or work completed regarding—or in relation to these projects. And then 20 percent is obligated for work that may occur, you know, 12, 14, 16, 18 months out, or whenever that obligation period is. Is that—

Dr. TRIAY. That is correct.

Senator BEGICH. Okay. Great. Thank you very much. And, as a new member, I appreciate allowing me to ask a few questions, some of them very naive, but learning a little bit more about the process.

I need to adjourn the meeting, but I want to make sure it's noted for the record that the record will be—remain open until Monday night for additional questions for the record.

[The information referred to follows:]

[SUBCOMMITTEE INSERT]

Senator BEGICH. I just want to, again, thank you, your staff, for all the work you've done.

Dr. TRIAY. Thank you, Senator.

Senator BEGICH. This meeting is adjourned. Thank you.

[Whereupon, at 11:13 a.m., the hearing was adjourned.]