

RESTRUCTURING THE DEPARTMENT OF ENERGY

JOINT HEARING
BEFORE THE
SUBCOMMITTEE ON ENERGY AND POWER
OF THE
COMMITTEE ON COMMERCE
AND THE
SUBCOMMITTEE ON ENERGY AND ENVIRONMENT
OF THE
COMMITTEE ON SCIENCE
HOUSE OF REPRESENTATIVES

ONE HUNDRED SIXTH CONGRESS

FIRST SESSION

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JULY 13, 1999
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RESTRUCTURING THE DEPARTMENT OF ENERGY

TUESDAY, JULY 13, 1999

HOUSE OF REPRESENTATIVES,
COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON ENERGY AND POWER,
JOINT WITH COMMITTEE ON SCIENCE,
SUBCOMMITTEE ON ENERGY AND ENVIRONMENT,
Washington, DC.

The subcommittees met, pursuant to notice, at 10:05 a.m., in room 2123, Rayburn House Office Building, Hon. Joe Barton (chairman of the Subcommittee on Energy and Power) presiding.

Members present Subcommittee on Energy and Power: Representatives Barton, Stearns, Largent, Burr, Shimkus, Wilson, Shadegg, Bryant, Bliley (ex officio), Hall, Sawyer, Gordon, Wynn, Klink, and Dingell (ex officio).

Members present Subcommittee on Science: Representatives Calvert, Ehlers, Miller, Metcalf, Johnson, and Costello.

Staff present: Kevin Cook, majority counsel; Harlan Watson, majority counsel; Sue Sheridan, minority counsel; and Michael Freedhoff, minority counsel.

Mr. BARTON. The joint hearing on restructuring the Department of Energy before the Commerce Committee and the Science Committee will come to order. I want to welcome my colleagues from the Science Committee. I also serve on the Science Committee, as well as on the Commerce Committee. I look forward to a very good hearing this morning.

As a member of both committees, I know how much attention each has focused on the Department of Energy in recent years. It seems that every time we turn over a rock in the Department of Energy, a new problem scurries out. Every time we try to change the bureaucracy in that department, obviously, the bureaucracy fights back.

With the latest revelations of Communist Chinese espionage at our nuclear weapons laboratories, everybody is now jumping on the Department of Energy reform bandwagon. Unfortunately, yet again, the bureaucracy in the Department seems to turn these reforms around to their own ends.

Think about this for a minute. The security at Los Alamos and other Department of Energy laboratories is so poor that the Communist Chinese were able to steal the designs for all of our nuclear weapons and the solution that is being considered by some is to give these labs even more autonomy, shielding them even further

from outside scrutiny. It is a mystery to me why anyone in the Congress imagines that that will result in enhanced security.

People must understand that we are up against a unique and firmly entrenched culture in the weapons laboratories. It is a culture that has yielded some outstanding scientific achievements, to be sure, but at a price of security leaks, environmental contamination, and blatant disregard for health and safety risks.

A Congressional Research Service study from several years ago reports that a University of California advisory committee on Lawrence Livermore and Los Alamos laboratories found, "...you see, management created a buffer between the government and the laboratories, shielding the latter from undue political pressures and emphasizing the importance of research excellence, intellectual freedom, and openness."

These are all noble goals, but nowhere is national security mentioned in that quote. That system is due to experience some political pressure, but it is of the overdue rather than the undue variety.

I believe the existing contract with the University of California should be terminated. I want to repeat that. I believe that the existing contract with the University of California should be terminated. I believe that academic institutions, in general, should be precluded from managing weapons research. Academic institutions simply do not place a priority on security or, for that matter, on cost control.

I remember how well a university consortium managed the Superconducting Super Collider project. I also remember how a university consortium managed the Brookhaven National Laboratory in such a way that it did not pay attention to the radioactive materials contaminating the groundwater around the laboratory.

Academia is very good at many things, but managing national weapons laboratories is not one of those things. We should let the academic institutions do what they do best, but not expect them to be good managers of the issues such as security, counterintelligence, or environment, safety, and health. If we are going to insist on allowing academic institutions to continue managing the weapons laboratories, and I hope that we do not, it should be on the same terms as private for-profit companies and subject to the same penalties if they violate their contract terms.

I even question whether the laboratories should continue to be run by contractors. Senator Rudman told us several weeks ago that his panel found four models of Federal agencies that accomplish their scientific and technical mission without sacrificing accountability: the National Security Agency, the Defense Advanced Projects Research Agency, the National Oceanic and Atmospheric Administration, and the National Reconnaissance Office. I do not know all the details about how these agencies operate, but there is one very obvious difference between these agencies and the Department of Energy weapons laboratories. The research activities of these four model agencies are managed by government personnel, not by contractors.

As we consider Department of Energy reform, it is essential that we address the role of contractors in DOE facilities and operations. Drawing a new organization chart does not alter the real source of

power in the Department of Energy, which resides with the contractors instead of with the government managers.

I believe the time has come to dismantle the Department of Energy, and I want to repeat that. I believe the time has come to dismantle the Department of Energy. The rationale for bringing a number of disparate functions together as a single cabinet-level agency was the energy crisis of the late 1970's. That rationale no longer exists. The emergence of competition in the energy markets mitigates against the need for a strong Federal hand in this area. Of the functions that still need to be performed at the Federal level, such as basic scientific research, stockpile stewardship, weapons research, and environmental cleanup, we can find the right home for those functions in other agencies.

Today, we are going to begin the difficult process of formulating legislation that will effect a comprehensive and lasting solution to the many problems plaguing the Department of Energy. This is not going to be a simple job, nor is it going to be one that we can accomplish in one hearing. We will undoubtedly need additional hearing days on this topic.

But I want to set a goal for the Energy and Commerce Committee members, and I certainly hope that my colleagues on the Science Committee agree to the same goal, of having a draft of a comprehensive Department of Energy restructuring bill ready for consideration before we leave for the August recess. Admittedly, that is a very challenging goal. We cannot criticize the partial solutions of other committees unless we are prepared on our two committees to offer a better alternative, and I am committed to trying to provide that.

That concludes my opening statement. I now recognize the distinguished chairman of the Science Subcommittee, Mr. Calvert, for an opening statement.

Mr. CALVERT. I would like to thank the gentleman from Texas, Mr. Barton. Obviously, I will not bring up the University of California right now, but I thank you for your willingness to host this hearing between our two subcommittees. I would like to thank our witnesses for their participation in this hearing. Mr. Chairman, with so many opening statements and a limited amount of time for the witnesses today, I will keep my remarks brief.

Like so many of my colleagues here today, I am very concerned about the ongoing problems that plague the Department of Energy's ability to carry out its core mission. It appears to me that this is an agency that has truly lost its way over the last two decades.

I look forward to hearing from our witnesses today regarding several legislative proposals to restructure the DOE's national security functions in response to the security lapses identified in the Cox and Rudman reports. I am especially interested in learning more about the effect of such proposals on non-defense research and development on environment, safety, and health protection.

Media reports earlier this year of possible security breaches within the U.S. DOE national laboratories gave the Nation a rude awakening. Furthermore, many of those media reports were confirmed by two major governmental reports, the House Select Committee on U.S. National Security, and the "Military Commercial Concerns with the People's Republic of China," the Cox report, and

the President's Foreign Intelligence Advisory Board, the Rudman report. Both of these reports have raised numerous concerns regarding the DOE's ability to manage our Nation's most vital national security secrets.

These serious security breaches at DOE have led to a number of restructuring initiatives, indicated by Mr. Barton, including several that were incorporated in both the House-passed and Senate-passed versions of S. 1059, the National Defense Authorization Act for Fiscal Year 2000. The Cox report recommends that, "the appropriate Congressional committee consider whether the current arrangements for controlling U.S. nuclear weapons development, testing, and maintenance within the Department of Energy are adequate to protect such weapons and related research and technology from theft and exploitation."

Even more specific are recommendations made by the Rudman report. This report suggests that DOE's weapons programs be placed within a new structure, called the Agency for Nuclear Stewardship, that would be responsible for all nuclear weapons activities, including safeguards and security. The report also recommends that the ANS weapons labs' management structure be streamlined by "abolishing ties between the weapons labs and all DOE regional and site offices and all contractor intermediaries."

It is my understanding that there are currently five separate bills before the House that would either restructure or would lead to restructuring of DOE. In addition, I am told that several Senators are expected to offer an amendment to S. 1009, the Intelligence Authorization Act for Fiscal Year 2000, that would establish the ANS that I had mentioned earlier to be headed by an Under Secretary for Nuclear Stewardship, who would also serve as the ANS Director.

I am looking forward to today's testimony and gaining a better understanding of this important matter facing Congress, and with that, Mr. Chairman, thank you and I yield back the balance of my time.

Mr. BARTON. Thank you. I might say, you are my subcommittee chairman, since I serve on your subcommittee on the Science Committee, so that is kind of interesting.

I would now like to recognize the ranking member of the full Committee on Commerce, Congressman John Dingell of Michigan, for an opening statement.

Mr. DINGELL. Mr. Chairman, I thank you. I will try and be as brief as I can.

I want to first commend the two chairmen for having this hearing today. I would observe that the subject we are inquiring into is one with which we are all very familiar. The problems we are discussing today are the same ones this committee has been trying to correct for well over a decade, the lack of security at weapons facilities, problems in security clearances, the handling of classified information, the foreign visitors program, and an abundance of things that raise real questions about security.

The recent report by our good friend, Senator Rudman, and the President's Foreign Intelligence Advisory Board unfortunately confirms that the Department of Energy as currently organized cannot adequately protect our Nation's most prized nuclear secrets. It doc-

uments security lapses over the past several decades in a clear and comprehensive fashion.

No one familiar with DOE disagrees that the current management structure needs to be vastly reformed. For precisely these reasons, I am concerned, however, about recent proposals to elevate the Department's dysfunctional weapons bureaucracy to the status of an almost completely autonomous agency.

Chairman Bliley and many of my Republican colleagues and Democratic colleagues share the concern about current legislative efforts to establish an agency in charge of nuclear weapons for the reasons described in the Rudman report. We are concerned that the same bureaucrats who have refused to implement President Clinton's recent security order and who have resisted reform efforts by both the Clinton and Bush Administrations would be running the agency with the same incompetence and disregard to the public interest as they have for so long, but they would be doing it with greater latitude and far less oversight than is currently the condition.

I want to make it very clear, I have been down this route, I have seen this thing, and I know. I remember the AEC, which was one of the most arrogant and incompetent agencies in terms of its administration that I have ever seen. I remember that they have a long history of disregard of the interests and the will of the Congress and a long history of disregard of good environmental and health practices, something which I will discuss briefly.

Allowing these proposals to become law would be simply tantamount to using gasoline to extinguish a fire. In every investigation concerning problems at the DOE weapons facilities and laboratories, the individuals responsible for the defense program have consistently and repeatedly denied the problems. They have punished whistleblowers. They have covered up their problems to their superiors in Congress. In a word, they have lied.

Proposals to set up a fully or semi-autonomous agency would only reinforce this pattern of behavior. It would insulate these programs from outside scrutiny and accountability. It would disregard the responsibility to the Congress, and it would encourage the same arrogance that we saw during the days of the Atomic Energy Commission.

The only beneficiaries of such a program would be the weapons bureaucracy at DOE. This would, indeed, be a remarkable act of political jujitsu, where the very institutions responsible for the security problems at DOE would emerge from scandal not merely intact, but even more powerful, more autonomous, and less subject to control than ever before.

These proposals also solve far more than the security problems raised by the Rudman report. They become magnets for all manner of unrelated concerns. If we want to solve security problems, then that is what we should do. A separate security agency within DOE may make sense, but a separate weapons bureaucracy will simply make new problems and compound old ones.

One particularly dangerous extraneous idea is to give the new agency the power to implement and oversee regulations relating to health, safety, and environmental protection. This is utterly foolish and it threatens the well-being of those communities that host

these facilities, because in the absence of oversight, history has shown us that the predecessor agency having all of these powers, like the AEC, will flout environment, health, and safety regulations and then diligently cover up their misdeeds.

In a 10-year period, the Department of Energy disposed of some of its radioactive and contaminated waste by spreading it on the ground at its Piketon, Ohio, facility and then rototilling it into the soil.

The Governor of Washington State was taken on a visit of the Hanford facility. Because there was a spill on his route, the signs were an embarrassment, so the signs were taken down. The Governor was driven through the area, and believe it or not, he was thoroughly radiated.

Now, these are some of the examples. Visit an atomic energy facility and you will find that it drips contamination, Superfund sites, hazardous waste, and nuclear contamination, brought about by a long period of diligent disregard of good safety practices and failure to properly supervise its contractors in a way which has put at risk the health and the safety not just of the communities but also of the people who work there.

In 1984, when a malfunction at another DOE facility caused radioactive dust to be released into the air, the response of the facility was to recalibrate the warning system so that the releases would no longer trigger an alarm. Is that not a wonderful way of addressing the problem? The public safety was protected by recalibrating the alarm so that no one would have a warning when these kinds of events occurred.

Mr. BARTON. I would like to remind my good friend that the normal opening statement is supposed to be no longer than 5 minutes.

Mr. DINGELL. Mr. Chairman, this is a subject which needs broad exploration. I ask unanimous consent to put my entire statement in the record where all may read it because it will benefit them greatly.

Mr. BARTON. We want to thank the former chairman for that statement and our friends from the Science Committee. That is one of the milder opening statements that Chairman Dingell has ever made.

Mr. DINGELL. I only do these things when I am outraged, Mr. Chairman.

Mr. BARTON. I can understand that. I share your concern.

[The prepared statement of Hon. John D. Dingell follows:]

PREPARED STATEMENT OF HON. JOHN D. DINGELL, A REPRESENTATIVE IN CONGRESS
FROM THE STATE OF MICHIGAN

I want to thank the Chairmen for holding this hearing today. The gravity of this issue is underscored by our Committees joining together on a bipartisan basis to try to address the very serious security and management problems at the Department of Energy. This is a subject with which I am all too familiar. The problems we are discussing today are the very same ones that this Committee has been trying to correct for well over a decade: the lack of security at our weapons facilities, problems in security clearances, the handling of classified information, and the foreign visitors program.

The recent report by Senator Warren Rudman and the President's Foreign Intelligence Advisory Board unfortunately confirms that the Department of Energy, as currently organized, cannot adequately protect our nation's most prized nuclear secrets. It documents security lapses over the past several decades in a clear and comprehensive fashion. No one familiar with DOE disagrees that the current manage-

ment structure needs to be vastly reformed to ensure it meets the highest standards of accountability.

For precisely these reasons, I am gravely concerned about recent proposals to elevate the Department's dysfunctional weapons bureaucracy to the status of an almost completely autonomous agency. Chairman Bliley, many of my Democratic and Republican colleagues, and I share concerns about current legislative efforts to establish such an agency in charge of nuclear weapons, for the reasons described in the Rudman Report. We are concerned that the same bureaucrats, who have refused to implement President Clinton's recent security order and who resisted reform efforts by both the Bush and Clinton Administrations, would be running this agency, with even greater latitude and far less oversight than is currently in place.

Allowing these proposals to become law would be tantamount to using gasoline to extinguish a fire. In every investigation concerning problems at the DOE weapons facilities and laboratories, the individuals responsible for the operation of defense programs consistently and repeatedly denied the problems, punished the whistle blowers, and covered up the problems to their superiors and Congress. Proposals to set up a fully or semi-autonomous agency would only reinforce this pattern of behavior by insulating these programs from outside scrutiny and accountability. The only beneficiaries of such a proposal would be the weapons bureaucracy at DOE. This would indeed be a remarkable act of political *jujitsu* where the very institutions responsible for the security problems at DOE would emerge from scandal not merely intact, but even more powerful and autonomous than before.

These proposals also "solve" far more than the security problems raised by the Rudman report. They have become magnets for all manner of unrelated concerns. If we want to solve security problems, then that's what we should do. A separate security agency within DOE may make sense, but a separate weapons bureaucracy will make new problems and compound old ones.

One particularly dangerous, extraneous idea is to give the new agency the power to implement and oversee regulations relating to health, safety, and environmental protection. This is utter foolishness and it threatens the well being of communities that host these facilities, because in the absence of oversight, history has showed us that these weapons facilities will flout environment, health and safety regulations and then cover up their misdeeds.

For example, in a 10 year period, beginning in 1974, the Department of Energy disposed of some of its radioactive and chemically contaminated waste by spreading it on the ground at its Piketon, Ohio facility and then rototilling it into the soil.

In 1984, when a malfunction at another DOE facility caused radioactive dust to be released into the air, the response at the facility was to recalibrate the warning system so that the releases would no longer trigger an alarm.

These are only two examples, but they are part of a pattern well known by those who have lived near DOE's Hanford, Rocky Flats, Savannah River or other sites in the days when these programs were shielded from oversight by the Department's environment, health and safety officials.

This danger is also recognized by Senator Rudman who appeared before the full Commerce Committee just a few weeks ago and said in no uncertain terms that he opposed giving this new agency the environment, health and safety functions currently vested in other parts of the Department.

I very much want to work with my colleagues on both sides of the aisle, on these committees and others, to truly address the problems at the Department of Energy. But these are longstanding problems that cannot be addressed with simple solutions. The addition of a new agency or undersecretary may be a fine place to begin, if it is done correctly, but we can never hope to solve these problems without addressing fundamental problems in the DOE culture and the Department's relationships with its contractors. Unfortunately, the proposals to date are not even inept simple solutions. They are dangerous proposals that threaten to undue all the good work done by our Committees and the Bush and Clinton Administrations to make DOE a safer place for its workers and those who host its facilities.

Mr. BARTON. I would now like to recognize the distinguished ranking member of the Energy and Environment Subcommittee of the Science Committee, Congressman Costello, for an opening statement.

Mr. COSTELLO. Mr. Chairman, I thank you and Chairman Calvert for calling this hearing today.

Mr. Chairman, while this committee and others in Congress have had many hearings on the security problems at the DOE labs, I be-

lieve this may actually be the first hearing to address consequences to the scientific missions of the Department that could arise as a result of the Senate reorganization proposals.

I believe that as Congress moves forward toward any reorganization proposal, we need to address three important considerations, and speaking of considerations, out of consideration to our witnesses today, I will make my statement very brief and enter the rest of the statement in the record.

But the three issues that I believe should be addressed, No. 1 is we need to fix the security problem with a security solution. Two is we need to ensure that environmental health and safety are protected. Finally, I have concerns about the impact that the Senate proposals could have on the science. The weapons labs each currently do almost \$100 million worth of non-weapons R&D each year. We must be able to continue to attract top-notch scientists to these labs.

I would like to enter the balance of my statement in the record and I look forward to hearing from our witnesses today.

Mr. BARTON. Without objection.

[The prepared statement of Hon. Jerry F. Costello follows:]

PREPARED STATEMENT OF HON. JERRY F. COSTELLO, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF ILLINOIS

While this Committee and others in Congress have had a multitude of hearings on the security problems at the DOE labs, I believe this may actually be the FIRST hearing to address consequences to the scientific missions of the Department that could arise as a result of the Senate reorganization proposals. I believe that as Congress moves towards ANY reorganization proposal, we need to address three important considerations.

First, we need to fix a security problem with a security solution. The Senate proposal to put the same individual in charge of both security AND nuclear weapons development is reminiscent of the way things were before President Bush's Energy Secretary, Admiral Watkins, put his own "Security Czar" in place to separate authority for security from that of weapons research and development. I look forward to hearing from General McFadden, who was appointed to that position.

Second, we need to ensure that environmental health and safety are protected. The Senate proposal places the responsibility for environmental health and safety under the same roof as nuclear materials production—much like the Atomic Energy Commission of old. When we were still conducting above-ground nuclear explosions in Nevada, Congress held a series of hearings on the possible adverse health effects of those tests. The Atomic Energy Commission, anxious to continue their testing unimpeded, testified that there were no adverse health consequences of repeatedly releasing more radiation than was released in the Chernobyl accident—false statements that may have led to an increase in thyroid and other cancers for thousands of Americans.

Finally, I have concerns about the impact the Senate proposal could have on science. The weapons labs each currently do almost \$100 million worth of non-weapons R&D each year. We must be able to continue to attract top-notch scientists to these labs.

I look forward to hearing from our witnesses today, and am anxious to hear their thoughts on ways to reform DOE in a constructive way WITHOUT any unintended consequences.

Mr. CALVERT. Mr. Chairman, I would ask unanimous consent to insert Chairman Sensenbrenner's opening statement into the record.

Mr. BARTON. Without objection, so ordered.

We will also put Chairman Bliley's opening statement in the record in its entirety at this time, and all other members not present who are not given an opportunity to give an opening state-

ment in person will have their statement put into the record at this same point in the record.

[The prepared statements follow:]

PREPARED STATEMENT OF HON. TOM BLILEY, CHAIRMAN, COMMITTEE ON COMMERCE

Thank you, Chairman Barton, and welcome to our witnesses and our fellow Members from the Science Committee. Our two Committees have abundant evidence before us about the problems in the Department of Energy. The recent reports by the Cox Committee and the Rudman panel confirmed that the DOE laboratories allowed the Chinese to steal our Nation's most valuable nuclear secrets.

These security breaches have prompted some in Congress to attempt to legislate a partial solution by reorganizing the defense portion of the Department of Energy. These efforts are well-intentioned, but they miss the mark—they don't reach broadly enough into the non-defense side of DOE, and they don't reach down into the culture of the organization. The problems in DOE are both widespread and deep-rooted, and the solution must be truly comprehensive to be effective.

Senator Rudman stated in our hearing last month: "This is not about security... This is about accountability. This is about a chain of command that works. And counterintelligence [and] security are merely symptoms of problem of accountability." As the Members of the Commerce Committee know all too well from our years of oversight activities, the Department's approach to environment, safety, and health also reflects that same underlying lack of accountability.

Unfortunately, just moving around the boxes on the Department's organization chart does not solve the accountability problem, as it really doesn't change much of anything outside of Washington. This is an agency that is enormously resistant to change. In the words of Senator Rudman's panel, "the Department of Energy is a dysfunctional bureaucracy that has proven it is incapable of reforming itself."

Secretary Richardson and his predecessors have made valiant attempts to change DOE, but with only limited success. I believe the time has come for Congress to mandate comprehensive reform of that agency. But that reform cannot be partial, and it cannot be accomplished outside of the normal legislative process. Earlier this week, I and my colleagues from both committees, majority and minority alike, wrote to the Speaker expressing our concern about attempting "quick fixes" on the defense and intelligence authorization bills.

I would like to read one excerpt from that letter to Speaker Hastert. "We believe that we share with you many common principles for moving forward to address the serious problems at the Department. We all support the need to streamline the organizational structure and enhance the accountability of both agency officials and DOE contractors. We all agree that independent oversight of sensitive areas, such as security, counterintelligence, health, safety, and the environment is required. We all agree on the need to maintain a strong linkage between defense-related and non-defense science in DOE. We all agree that legislation to reform the Department of Energy must serve the long-term needs of the nation, not the immediate demands of any particular constituency." I ask unanimous consent that this entire bipartisan letter, sent to the Speaker by the Commerce and Science Committees, be placed in the record of this hearing.

Today marks the beginning of our joint effort to develop a truly comprehensive and effective legislative solution for the Department of Energy. I come at this problem preferring evolution over revolution, but it may be that incremental improvements within the existing Department won't go far enough, and more drastic measures may be necessary. The testimony of our witnesses today will be especially valuable in helping us understand how we can go about reorganizing the Department of Energy in a way that makes sense, that accomplishes meaningful and lasting reform, and that protects everything that is important to this Nation.

PREPARED STATEMENT OF HON. F. JAMES SENSENBRENNER, JR., CHAIRMAN,
COMMITTEE ON SCIENCE

The revelations of Chinese espionage at DOE, which first surfaced in the mainstream press and which were elaborated in the Cox and Rudman Reports, fundamentally call into question the ability of DOE to handle sensitive information. If our nuclear secrets are not safe, how can any DOE information be deemed secure?

I believe that the vast majority of Americans agree that an overhaul of the Department of Energy is long overdue. The issue is whether any of the current proposals on the table go far enough. The Rudman Report's finding of "[o]rganizational disarray, managerial neglect, and a culture of arrogance—both at DOE headquarters

and the labs themselves” largely echoes that of the 1995 Galvin report on the DOE labs. If the DOE and defense lab bureaucracies are “saturated with cynicism,” have an “arrogant disregard for authority,” and have “a staggering pattern of denial” to the point that our national security has been extensively and repeatedly compromised, I am afraid to even consider the state of the civilian labs that also work on classified scientific research and can harm as well as assist our national security. Thus, I believe the solution is not to concentrate on only the weapons labs, but to look at the entire complex. If the bath water is dirty, throwing out half the water will not clean the tub. In short, whatever the solution entails, I believe that it should address all the labs.

We also need to keep in mind the tension between science and security, and of the incredible scientific benefits attributable to the work at the DOE labs. We must ensure that while we safeguard the security of our Nation, we protect the scientific endeavors conducted at our DOE civilian laboratories.

And finally, we must ensure that there is adequate oversight of environment, safety and health matters at the DOE facilities. The Science Committee-on a bipartisan basis-has strongly supported the movement to external regulation of the civilian DOE labs, particularly in light of the safety fiasco at Brookhaven National Laboratory, which has cost the scientific community a world-class neutron research facility, the High Flux Beam Reactor. Consequently, I strongly believe that external regulation of DOE civilian labs must be part of any reorganization legislation.

The importance of these issues and the bipartisan concerns of both the Science and Commerce Committees are demonstrated here today by this joint hearing of both House Energy Subcommittees. I look forward to working with all Members on a bipartisan basis to craft legislation that best addresses the real problems of DOE.

Mr. BARTON. I would recognize the gentleman from Tennessee, Mr. Bryant, for a brief opening statement.

Mr. BRYANT. Thank you, Mr. Chairman. I thank you for hosting this hearing, and out of respect for the panel and the time that we have available, I would yield back my time.

Mr. BARTON. Then we would recognize the distinguished gentleman from Pennsylvania, Mr. Klink, for an opening statement.

Mr. KLINK. Thank you, Mr. Chairman. I am pleased you are holding this hearing today to begin a thorough and comprehensive review of what changes should be made to the total organizational structure of the Department of Energy.

This committee has a long and distinguished history of legislative and oversight activities regarding the DOE. For example, the independent Office of Security Evaluation was created back in 1989 because of this committee’s work on security issues. The Federal Facilities Compliance Act, which forced DOE to begin cleaning up its environmental mess, came out of our committee. A separate environment and health and safety office resulted from our work.

Several of our witnesses today will identify the key accountability problems at DOE. After decades of letting the contractors do what they want, DOE is still not able to assert control. The DOE culture everyone talks about is actually the contractor culture, but no proposal is on the table today to deal with the contractors’ resistance to change.

The Rudman panel made sweeping recommendations of structural change because of safeguards and security problems at the weapons complex but had no real understanding of either the contractor culture or how its recommendations would impact on the environmental, safety, and health responsibilities that the labs have resisted for many years.

According to a recent article in the National Journal, Senator Rudman even believes that the contractors who run the facilities are not responsible for security, although the contract gives them that job, and they were the parties that ignored Presidential secu-

rity directives. It is hard to believe that giving them more independence is going to solve that problem.

At our last hearing, neither Senator Rudman nor Secretary Richardson supported placing environmental, health, and safety activities in this new agency, but neither has proposed a viable alternative for these functions. They just have not looked at it, and Congress has not, either.

Certainly, we do not want to go back to the past where the General Accounting Office found that DOE facilities like Fernald and Oak Ridge, "overemphasized production, making environment and workers' safety and health secondary concerns."

Mr. Chairman, I have to ask and will ask our witnesses today why Congress cannot view the DOE as we do corporate manufacturers. Companies who manufacture widgets or computers do not tell us that they are too busy to fulfill their environmental, safety, and health requirements, and as Dr. Kettl states in his prepared statement in a slightly different context, these all impact the way a company does business, but it is not the way they do business itself. The structure is not the issue. The commitment and the ability of top management to enforce its commitment to carry out its primary mission safely, legally, and to hold people throughout the chain of command accountable is.

We see none of this in the current proposals before our Congress. Those proposals give more authority and less oversight to defense programs and its field organizations, apparently as a reward for having made such a mess of the security and of the environment.

I look forward to hearing from our witnesses because I am bewildered by all of these recommendations. Senator Rudman could not explain them to us when he was here. We on this committee have the scope of experience and the responsibility to look at all of the Department's roles, and, hopefully, to craft a solution that provides a structure so that the Department meets all of its responsibilities.

Mr. Chairman, with that, I yield back my time.

Mr. BARTON. I thank the gentleman from Pennsylvania.

I recognize the gentlewoman from New Mexico, whose district includes some of the weapons laboratories, for an opening statement, Congresswoman Wilson.

Mrs. WILSON. Thank you, Mr. Chairman. I appreciate the opportunity to comment today on the reorganization of the Department of Energy in order to more adequately ensure that our nuclear weapons programs are protected from espionage.

I am very pleased that within the last week, the Secretary of Energy has abandoned his strong opposition to any organizational change that would clarify lines of authority and accountability within the nuclear weapons complex through the formation of an independent agency within the Department of Energy. I believe that this will make it easier to craft constructive legislation on this subject.

I have not spoken on this issue before, but because I have worked with the nuclear weapons complex in the past and I am the only member of the Commerce Committee that represents one of these laboratories, I thank the chairman for allowing me to take some time today.

While the Cox and Rudman reports have brought renewed awareness of the management and organizational problems within the nuclear weapons complex, these concerns are not new. I will save the details for my written statement, but the Chiles report earlier this year, the Drell report in 1990, the Institute for Defense Analysis 3 years ago, and the Galvin report are only some of the distinguished and thoughtful groups that have recommended significant organizational change within the Department of Energy.

Today, a New Mexican and former member of the Commerce Committee, Secretary Richardson, is implementing a new round of reforms at DOE. Mr. Chairman, you should know that while some past Secretaries have been criticized for failing to give significant attention to these matters, Secretary Richardson is clearly indicating a willingness to tackle these issues. The fact is that every new Secretary and Assistant Secretary, recognizing that there are some serious problems, tries to implement reforms. The result has been an ever-increasing number of management overlays.

Beginning with Secretary Harrington, who created a separate Assistant Secretary for Environment, Safety and Health, the Department has increasingly relied on structures to oversee other structures. We now literally have overseers overseeing the overseers.

As an example, the Institute for Defense Analysis found that many DOE and contractor officials describe defense programs oversight as creating an inverted management pyramid, because the number of reviewers exceeds the number of hands-on workers. Contractors have cited examples where the work done by two or three people becomes the subject of review meetings involving 40 or more defense programs officials.

That example cites only the problem internal to defense programs. The problem expands exponentially when reviewers from other oversight functions are included. I can tell you it is sometimes hard to figure out just who is responsible. We have programs within one office complying with policies set by a second office in accordance with procedures set by a third office, verified by a fourth office. When you look at something like that, you have to wonder who is in charge.

The myriad of oversight and review does not improve performance. To the contrary, in some cases, it diminishes performance. It is my view that it is frequently easier to be an overseer than to be the responsible party.

As overseers have multiplied, the line between oversight and responsibility has been blurred and sometimes disappears. The frequent result is that when mistakes are made, everyone thinks they were the overseer and nobody takes responsibility.

I might also add, Mr. Chairman, that this duplication of oversight is tremendously expensive, both in its direct costs and because of the delays and inefficiencies it engenders.

I have come to the conclusion over the last several months and as a result of input and conversations with many constituents and others who understand these things much better than I that now is the time to make some serious management change. We should also be fully mindful of the potential consequences of that change. Reorganizations are disruptive to people. They require lots of time and attention by managers and create anxiety among employees.

Having overseen a major reorganization in State Government, I know that that is true, but I have been convinced that straightening lines of authority is important enough to warrant this potential disruption.

So what will we do to improve this situation? Our approach should be guided by three principles. First, any legislation must strengthen management lines of authority and accountability, not just move boxes around on an organizational chart. This must be about changing the way that our nuclear programs are managed and strengthening the authority of those in a clearly defined chain of command.

Second, our multi-program laboratories must continue to be able to do work on a wide range of subjects for many customers. Fully one-third of the work conducted at our national laboratories is not for the nuclear weapons program. There are tremendous advances in knowledge developed in the defense of this country that have applications in other areas. Great progress has been made in migrating that knowledge to other areas. Whether it is research in engine efficiency, supercomputing, micromachines, semiconductors, or non-proliferation, the labs must continue to be able to do work for others. Indeed, if we implement this correctly, we should enhance their ability to do so.

Third, the independent agency within the Department of Energy must have necessary support staff and functions within it to operate independently. The whole point is for the head of this new agency to be accountable and not subject to other directorates within the DOE.

Let me say a final word, Mr. Chairman, about the alternatives in front of us. Some have proposed that this complex be turned over to the Department of Defense. I believe that is wrong for the same reasons it was wrong when the Atomic Energy Commission was created. Those responsible for deciding how to use nuclear weapons in war should not have the authority for designing and building them. The reasoning was sound then and it is sound now.

There are others who would turn our national laboratories into civil service institutions as government-run labs. If there is one thing that has protected the laboratories from being completely choked by DOE management, it is that they are operated by contractors who bring some non-government management experience to the laboratories. Sandia's relationship with AT&T and then Lockheed Martin Corporation has been a relationship that has benefited the lab and the country. We want to make sure that we do not damage that which we are trying to protect.

Mr. Chairman, the national laboratories, especially the ones in my State, literally saved millions of lives through their work in World War II and during the Cold War. They abound with dedicated, patriotic, and truly gifted men and women working for this Nation's security as their top priority. We should not scapegoat the labs or the people that work there. We need a fundamental re-emphasis on the nuclear weapons work at the Department of Energy, recognizing that the rules and regimes that govern the rest of DOE cannot be entirely used in the nuclear weapons complex.

I believe that the best approach now on the table comes from the Senate, the Kyl-Domenici-Murkowski amendment, because it is a

true chain of command approach with all the discipline that entails. I truly believe that this approach, if it had been used in the past, may well have avoided some of the security problems we have now discovered and that this approach will help us avoid them in the future.

I hope that the committee will find my comments useful as it continues its work. Thank you, sir.

Mr. BARTON. Thank you.

I recognize the distinguished full committee chairman, Mr. Bliley, and understand that you just want to put your opening statement in the record, is that correct?

Chairman BLILEY. That is correct, Mr. Chairman.

Mr. BARTON. We appreciate your attendance at the hearing.

The gentleman from Maryland, Mr. Wynn, is recognized for an opening statement.

Mr. WYNN. Thank you, Mr. Chairman. I genuinely appreciate your calling this hearing this morning to deal with what I consider to be a very serious problem, the consequential loss of classified materials and weapons design information, as well as giving us an opportunity to explore the protection of the public's health and safety in this important area. Needless to say, both the Cox report and the Rudman report have clearly outlined serious breaches in our national security, specifically China's acquisition of U.S. technology.

Without belaboring the point, Mr. Chairman, I would just say quite briefly that we need changes not only in Washington, but equally important, we need them at the field level. If we do not make significant reforms at the contractor-run labs and facilities, our efforts at preventing further breaches will not be effective, and I hope in the course of this testimony, significant emphasis will be given not to, as my colleague said, moving boxes around here in Washington, but what we do in a very practical way with the people who are on the front lines because that is where the problem actually occurred and we need to have some reforms there as well as here in Washington.

I relinquish the balance of my time.

Mr. BARTON. I thank the gentleman from Maryland.

I would recognize the gentleman from Michigan, Congressman Ehlers, for an opening statement.

Mr. EHLERS. Thank you, Mr. Chairman. In the interest of time, I will be very brief.

I would simply point out, DOE has a problem. In fact, we could say DOE is the problem. But I think we also have to recognize, as Mrs. Wilson has pointed out, that we have some outstanding scientific work done by some outstanding scientists at these laboratories. In fact, it is the leading research in the world. The problem we face here is not simply how do we correct the administrative problems, the management problems, but also how do we do that while continuing to maintain this outstanding research and continuing to support the research scientists and keep them out of the fray so that the work that they are doing will continue unhindered. I hope that we are able to do that. Thank you.

Mr. BARTON. I thank the gentleman.

I would recognize the gentleman from Ohio, Congressman Sawyer, for an opening statement.

Mr. SAWYER. Thank you very much, Mr. Chairman. I will not read my entire statement, but I would like to associate myself with most of the remarks of the previous three speakers, particularly the gentleman from Michigan, Mr. Ehlers. He has put his finger on the heart of what I believe to be what is most at risk in a too rapid approach to reorganization, and that is not the culture that has preoccupied so many of us with regard to security but rather the culture of science that is at the heart of the research that has gone on at our national laboratories. Each of the three speakers previous to me have touched on that in one or another way and I would like to reiterate that.

Working from the ground up is really at the heart of finding that solution and understanding that the civilian science and the weapons work that has gone on at our laboratories throughout their existence has never been easy, but the interrelationship has always been important. Preserving that is at the heart of what we need to do, while enhancing the security that is a necessary concomitant of that work.

With that, Mr. Chairman, I would like to submit the rest of my statement for the record and surrender the balance of my time.

Mr. BARTON. We thank the gentleman.

[The prepared statement of Hon. Thomas C. Sawyer follows:]

PREPARED STATEMENT OF THOMAS C. SAWYER, A REPRESENTATIVE IN CONGRESS
FROM THE STATE OF OHIO

The semi-autonomous agency that Secretary Richardson agreed to last week will be the first major reorganization of the nuclear weapons complex in more than two decades. The ramifications of this new agency should be fully considered by Congress. I am concerned that the current legislative proposals to create this new agency have been hastily put forth without proper Committee examination.

The Rudman Report rightfully concludes that the Department of Energy "has a deeply rooted culture of low regard for and, at times, hostility to security issues." However, it is not clear to me how the proposed semi-autonomous organization would address this underlying culture. Current proposals offer a quick fix—streamlining the chain of command from the Secretary of Energy to the head of the new semi-autonomous agency, and from that agency to Congress. Yet, how can this top-down approach be enforced in the field? In order for DOE reorganization to be effective, accountability must run out to the field level. Current legislative proposals simply do not reach far enough. The problems in our Nation's labs are profound and deserve a more comprehensive solution.

Furthermore, I am concerned that these legislative proposals will weaken environmental, health and safety oversight. A new semi-autonomous organization focused on weapons development is likely to pay less rather than more attention to these issues. While it is important to shore up security in our nation's labs, we cannot throw out the baby with the bath water—we cannot destroy hard won environmental, safety and health standards while trying to restructure DOE's security structure.

Senator Rudman testified before this Committee that it was not his intention to move environmental, health and safety oversight over to the proposed semi-autonomous organization. Yet, both the Kyle amendment and the House DOD authorization bill—the two main legislative vehicles addressing DOE reform—would create a semi-autonomous organization with little environmental, safety or health accountability.

I am also concerned that current legislative proposals draw a division at the facility level; causing tensions between science and weapons technology in the same lab. For example, the labs at Los Alamos, Sandia, Livermore have both nuclear weapons work and life sciences. It appears that the new security organization would separate civilian science and weapons work, compromising important scientific interaction.

While well intentioned, I am not convinced that current proposals have properly addressed the security concerns at Department of Energy. In fact, I would venture to say that the solutions offered thus far would do more harm than good. I hope that the witnesses today will address the pros and cons of the proposed reorganization, and also address other solutions that the Commerce Committee should consider.

Mr. BARTON. I would recognize the gentleman from Washington State, Congressman Metcalf, for an opening statement.

Mr. METCALF. It has been pretty well been said, and in the interest of time, at this time, I will pass.

Mr. BARTON. I would recognize the gentleman from Oklahoma, Mr. Largent, for an opening statement.

Mr. LARGENT. No statement.

Mr. BARTON. Mr. Miller, we recognize you for an opening statement.

Mr. MILLER. It is good to be here. For the sake of time, I will submit my statement for the record.

[Additional statement submitted for the record follows:]

PREPARED STATEMENT OF HON. TED STRICKLAND, A REPRESENTATIVE IN CONGRESS
FROM THE STATE OF OHIO

Thank you, Mr. Chairman. As you know, one of the U.S. Enrichment Corporation's (USEC) uranium enrichment plants is located in my district in Piketon, Ohio. My colleague from Kentucky, Mr. Whitfield represents a similar facility in Paducah, Kentucky. Both of these plants were privatized last year and are operated by USEC, Inc. However, the DOE is responsible for the environmental work being conducted at the site.

Since privatization, the workers at Piketon find themselves answering to more than one landlord. And, to make matters even more complicated, the DOE contractor responsible for the environmental cleanup is in the process of subcontracting a majority of their work. Furthermore, the Office of Nuclear Energy, Science and Technology is the agency primarily responsible for the Department's program designed to stabilize the potentially hazardous material resulting from the enrichment process. While I recognize that the uranium enrichment plants may represent a unique situation, the lack of overall coordination at the sites raises some serious concerns. Mr. Whitfield and I have been working with the Department to ensure that both of the enrichment facilities have greater oversight at headquarters. While I am encouraged by the Department's responsiveness and hope that we will continue to make progress on these issues, I remain concerned that the existing structure is too convoluted for effective management.

Today, we are here to discuss proposals to restructure the DOE to respond to serious national security problems associated with work at DOE Laboratories. I shared with you the circumstances faced by Piketon and Paducah because they provide an example of what happens when in a complex organizational structure, ultimate authority over decision-making becomes fractured and unclear—decisions made by one entity may directly conflict with decisions made by another. Without a well-defined decision-making process with a direct and consistent link to headquarters, the mission of the organization suffers. I have seen evidence that this is happening at Piketon and I fear that the establishment of a semi-autonomous Agency for Nuclear Stewardship within DOE will further complicate the department's ability to accomplish its mission.

Given the seriousness of the national security problems facing DOE, I question the wisdom of restructuring the decision-making process in a manner that effectively eliminates the Secretary's ability to respond to security needs, programmatic priorities and budget conflicts in a comprehensive manner and therefore potentially fails to solve the real problems we are addressing today.

Mr. BARTON. All members present, having had the opportunity to give an opening statement, either giving one or yielding that time, we will now welcome our first panel, and our only panel, to this joint hearing. Each of you gentleman and lady, your statement will be in the record in its entirety.

We will start with Mr. Rezendes of the GAO and we will go right down the line. We are told that Dr. Happer is in traffic, but, hopefully, he will be here by the time we get through the first four and then we will give him an opportunity.

We welcome someone who is no stranger to the Energy and Commerce Committee, Mr. Victor Rezendes, who has told me that this will be his last appearance before this committee or subcommittee in his current capacity. We welcome you today and we thank you for your past testimony and your good work on behalf of the taxpayers. You are recognized for 7 minutes.

STATEMENT OF VICTOR S. REZENDES, DIRECTOR, ENERGY, RESOURCES, AND SCIENCE ISSUES, RESOURCES, COMMUNITY, AND ECONOMIC DEVELOPMENT DIVISION, GENERAL ACCOUNTING OFFICE

Mr. REZENDES. Thank you, Mr. Chairman. It is a pleasure to be here today to testify on reorganizing DOE. We recently testified before this committee that security problems at DOE's national laboratories reflect a lack of accountability. Security problems have languished for years without resolution or repercussion to those responsible. Achieving accountability in DOE is made difficult by its complex and ever-changing organizational structure. Past advisory groups and internal DOE studies have often reported on the Department's dysfunctional structure, with unclear chains of command among headquarters, field offices, and contractors.

While the current security lapses raise serious concerns, they are just the management problem du jour. Problems in environmental cleanup, health and safety, and science could easily have triggered today's debate.

Events in 1997 at Brookhaven National Laboratory in New York illustrate the consequences of organizational confusion and accountability lapses. The Secretary of Energy at the time, Frederico Pena, fired the contractor operating the laboratory when he learned that the contractor had breached the community's trust by failing to ensure it could operate safely. DOE's own oversight report on Brookhaven concluded that the Department did not have a clear chain of command over environmental, safety, and health matters, and as a result, the performance suffered in the absence of DOE's accountability.

To correct meandering lines of authority, operations officers now report directly to program officers, but this approach to reporting was tried under former Secretary Watkins and was eventually abandoned when the field and laboratory staff became frustrated of having to report to both program and staff offices on similar issues. Furthermore, DOE's reluctance to allow external oversight for nuclear safety and worker health and safety at its facilities perpetuates the Department's lack of accountability.

To solve recent national security problems, several organizational reorganization options have been proposed. While each proposal clarifies some lines of authority in the national security area, they are a piecemeal approach and ignore the broader organizational issues. Historically, DOE has made piecemeal changes in response to contemporary problems without undertaking a more fundamental assessment of its missions. None of these efforts have had long-

term success. Reorganization efforts that ignore the broader picture could create new, unintended consequences.

To gain insight into DOE's structural issues, experts we consulted in 1994 supported the view that, as a minimum, a serious reevaluation of DOE is called for. Our respondents included a former President, four former Secretaries, Deputies, and Under Secretaries and Assistant Secretaries of the Department of Energy. Overwhelmingly, the respondents emphasized that DOE should focus on its core missions. A majority favored moving many of the remaining missions from DOE to other entities.

DOE is taking some steps to improve management. Although these changes are important, they assume that the existing missions are still valid in their present forms and that DOE is still the best place to manage them. We believe a more fundamental rethinking of the missions is in order.

Two fundamental questions might be helpful here. First is which missions should be eliminated because they are no longer valid government functions. Second, for those missions that are governmental, what is the best organizational placement responsibilities? Once agreement is reached on the appropriate governmental missions, a practical set of criteria can be used to evaluate the organizational structures for each mission.

Finally, another set of criteria developed by the National Academy of Public Administration in another context could be useful in determining whether DOE should remain a cabinet-level department. Although DOE has a strategic plan, it assumes the validity of its existing missions and their placement in the Department. But DOE alone cannot make these determinations. Our work has shown, to be effective, decisions about structure and functions of the Federal Government should be made in a thorough manner with careful attention to the effects of change in one organization on the working of other organizations.

Thank you, Mr. Chairman.

[The prepared statement of Victor S. Rezendes follows:]

PREPARED STATEMENT OF VICTOR S. REZENDES, DIRECTOR, ENERGY, RESOURCES, AND SCIENCE ISSUES, RESOURCES, COMMUNITY, AND ECONOMIC DEVELOPMENT DIVISION, UNITED STATES GENERAL ACCOUNTING OFFICE

Messrs. Chairmen and Members of the Subcommittees: We are here today to testify on proposals for reorganizing the Department of Energy (DOE). As you know, there is renewed concern about DOE's management of its missions after recent revelations that foreign countries have obtained nuclear weapons designs and other classified information. Our testimony today discusses (1) long-standing weaknesses in DOE's management that we have identified over the past several years, (2) the effect that current proposals to deal with national security weaknesses would have on addressing these weaknesses, and (3) a framework for evaluating DOE's missions and possible reorganization. Our testimony is based on our management reviews of DOE and our past and ongoing work on a wide variety of DOE programs and activities.¹

In summary, the current security problems facing DOE underscore long-standing weaknesses in the Department's management structure and processes. While the current security lapses raise serious concerns, any number of past DOE management problems could have easily triggered today's debate. For example, DOE's long-standing failures in managing major environmental cleanup projects also illustrate the need to fundamentally change how DOE operates. At the core of DOE's weaknesses is its inability to manage its disparate missions within a highly complex or-

¹A list of related products appears at the end of this statement.

ganizational structure. In particular, unclear lines of authority throughout DOE have long resulted in weak oversight of contractors and poor accountability for program management, leading us to identify contracting as a “high risk” activity. For decades, DOE has failed to respond to reports by us, external experts, and its own consultants that highlight these weaknesses. Additionally, DOE has resisted independent regulatory oversight over nuclear and worker safety, perpetuating a perception that it lacks accountability. DOE has also been reluctant to open up key laboratory contracts to new bidders, reducing confidence that it has hired the most capable and responsive contractor.

While the recent proposals for reorganizing DOE’s national security mission will clarify some lines of authority, a more complete solution is needed. Current proposals assume that existing missions are still valid in their present forms and that DOE is still the best place to manage them. Along with many of the experts we surveyed, we think a more fundamental rethinking of missions is in order. A framework exists for evaluating DOE’s missions by asking basic questions about both the validity of missions and their organizational placement. Indeed, now is an ideal time for reconstructing DOE into a more manageable agency.

Background

Created predominantly to deal with the energy crisis of the 1970s, DOE’s mission and budget priorities have changed dramatically over time. By the early 1980s, its nuclear weapons production had grown substantially; and following revelations about environmental mismanagement in the mid-to-late-1980s, DOE’s cleanup budget began to expand—and now overshadows other activities. With the Cold War’s end, DOE found new or expanded missions in industrial competitiveness and science. Responding to changing missions and priorities with organizational structures, processes, and practices that had been established largely to build nuclear weapons has been a daunting task for DOE. For example, DOE’s approach to contract management, first created during the World War II Manhattan Project, allowed private contractors to manage and operate billion-dollar facilities with minimal direct federal oversight, yet reimbursed them for all their costs regardless of their actual achievements. After a number of reports by us and other oversight groups, DOE is now attempting to impose modern standards for accountability and performance.

DOE Has Long-Standing Management Weaknesses

We recently testified that security problems at DOE’s laboratories reflect a lack of accountability.² The well-documented history of security lapses in the nuclear weapons complex shows that DOE fails to hold its contractors accountable for meeting essential responsibilities. Achieving accountability in DOE is made difficult by its complex and ever-changing organizational structure. Past advisory groups and internal DOE studies have often reported on the Department’s dysfunctional structure, with unclear chains of command among headquarters, field offices, and contractors. For example:

- The FBI, which examined DOE’s counterintelligence activities in 1997, noted a gap between authority and responsibility, particularly when national interests compete with the specialized interests of the academic or corporate managements that operate the laboratories. The FBI found that the autonomy that DOE grants has made national guidance, oversight, and accountability of counterintelligence programs arduous and inefficient.
- A 1997 report by the Institute for Defense Analyses (IDA) cited serious flaws in DOE’s organizational structure. IDA noted long-standing concerns in DOE about how best to define the relationships between field offices and the headquarters program offices that sponsor work. IDA concluded that “the overall picture that emerges is one of considerable confusion over vertical relationships and the roles of line and staff officials.” As a consequence of DOE’s complex structure, the Institute reported, unclear chains of command led to the weak integration of programs and functions across the Department and confusion over the difference between line and staff roles.³
- A 1997 DOE internal report stated that “lack of clarity, inconsistency, and variability in the relationship between headquarters management and field organizations has been a longstanding criticism of DOE operations... This is particu-

²*Department of Energy: Key Factors Underlying Security Problems at DOE Facilities* (GAO/T-RCED-99-159, April 20, 1999).

³*The Organization and Management of the Nuclear Weapons Program, Institute for Defense Analyses* (March 1997).

larly true in situations when several headquarters programs fund activities at laboratories.”⁴

- DOE’s Laboratory Operations Board also reported in 1997 that there were inefficiencies due to DOE’s complicated management structure. The Board recommended that DOE undertake a major effort to rationalize and simplify its headquarters and field management structure to clarify roles and responsibilities.⁵
- As far back as 1982, an advisory group recognized the need for organizational change in DOE. In its 1982 report, DOE’s Energy Research Advisory Board noted the “layering and fractionation of managerial and research and development responsibilities in DOE on an excessive number of horizontal and vertical levels.”⁶

Our own work has shown that DOE’s success with managing big projects is not outstanding. From 1980 through 1996, we found that DOE conducted 80 projects that it designated as “major system acquisitions”—its largest and most critical projects—ranging in cost from \$100 million to billions of dollars.⁷ As of June 1996, 31 of the projects had been terminated before completion after total expenditures of over \$10 billion. Only 15 of the projects were completed, and most of them were finished behind schedule and with cost overruns. Furthermore, 3 of the 15 completed projects had yet to be used for their intended purposes. The remaining 34 projects continue, many with substantial overruns and “schedule slippage.” For example, we found that DOE has spent almost one-half billion dollars building the in-tank precipitation facility at its Savannah River location. The project was originally expected to cost \$103 million and is still not completed.⁸ A National Research Council committee that examined DOE’s project management skills recently concluded, “The fundamental deficiency is DOE’s organization and culture.”⁹

DOE’s fundamental organizational problem is that laboratory contractors and their field offices receive funding, program direction and oversight from several different headquarters offices, which sometimes have overlapping responsibilities. Creating a “clean” line of accountability within DOE’s complex structure has not yet been achieved.

The events in 1997 at the Brookhaven National Laboratory in New York illustrate the consequences of organizational confusion and accountability lapses. The Secretary of Energy at that time—Frederico Pena—fired the contractor operating the laboratory when he learned that the contractor had breached the community’s trust by failing to ensure it could operate safely. DOE’s own oversight report on Brookhaven concluded that the Department did not have a clear chain of command over environment, safety, and health matters and, as a result, laboratory performance suffered in the absence of DOE accountability. In another example, DOE gave the University of California an “excellent” score for managing safeguards and security at the Los Alamos National Laboratory for 1998, even though the number of security breaches had risen dramatically. Another DOE evaluation, for 1998, criticized the University for its handling of safeguards and security matters. DOE’s complex organization stems from the multiple levels of reporting that exist among contractors, field offices, and headquarters program offices. To improve accountability, DOE has tried several different reporting schemes over the past several years. For example, until recently DOE’s field units—operations offices—reported directly to a central office, under a structure that had been in place for several years. Thus, while the Los Alamos National Laboratory is primarily funded by Defense Programs, it reported to a field manager who, in turn, reported to a central field management office that then reported to an Under Secretary. To correct this meandering line of authority, operations offices now report directly to program offices. But this approach to reporting was tried under former Secretary Watkins and was eventually abandoned when field and laboratory staff became frustrated by having to report to both program and staff offices on the same issues. The former Secretary wanted

⁴DOE Action Plan for Improved Management of Brookhaven National Laboratory, DOE (July 1997).

⁵Department of Energy: Uncertain Progress in Implementing National Laboratory Reforms, (GAO/RCED-98-197, Sept. 10, 1998)

⁶The Department of Energy Multiprogram Laboratories: A Report of the Energy Research Advisory Board to the United States Department of Energy (Sept. 1982).

⁷Department of Energy: Opportunity to Improve Management of Major System Acquisitions, (GAO/RCED-97-17, Nov. 26 1996).

⁸Nuclear Waste: Process to Remove Radioactive Waste From Savannah River Tanks Fails to Work (GAO/RCED-99-69, Apr. 30, 1999).

⁹Improving Project Management In The Department of Energy, National Research Council, 1999.

more direct lines of reporting to allow focused attention on environment, safety and health matters.

Furthermore, DOE's reluctance to allow external oversight for nuclear safety and worker health and safety at its facilities perpetuates the Department's chronic lack of accountability. Virtually all other federal agencies are externally regulated for nuclear and worker safety. Similarly, despite a 5-year-old competition policy, DOE has never opened up for bidding its multi-billion dollar laboratory contracts with the University of California. As a result, DOE cannot know whether other contractors could perform better at lower cost than the University of California. By contrast, DOE has competed many other laboratory contracts.

Current Proposals for Change Are Incomplete and Will Not Address DOE's Major Problems

We believe that DOE's organizational weaknesses are a major reason for the Department's failure to develop long-term solutions to its recurring problems. To solve the national security problems revealed in recent allegations, several reorganization options have been proposed. One approach would create a separate agency within DOE, to be managed by a new Under Secretary for National Security. Another would create a semiautonomous agency whose director would report directly to the Secretary. Another would transfer DOE's nuclear weapons activities to the Department of Defense.

While each of these proposals clarifies some lines of authority in the national security area, they are a piecemeal approach to DOE's structural problems and ignore the broader organizational issues. Historically, DOE has made piecemeal changes in response to contemporary problems without undertaking a more fundamental assessment of its missions. For example, former Secretary Watkins redirected lines of reporting to correct environment, safety, and health deficiencies, and former Secretary O'Leary made changes to reflect DOE's expanding role in science and technology competitiveness issues. None of these efforts had long-term success. Reorganization efforts that ignore the broader picture could create new, unintended consequences.

To gain insight into DOE's structural issues, experts we consulted in a 1994 survey supported the view that, at a minimum, a serious reevaluation of DOE's basic missions is needed. We surveyed nearly 40 former DOE executives and experts on energy policy about how the Department's missions relate to current and future national priorities. Our respondents included a former President, four former Secretaries of Energy, former Deputy and Assistant Secretaries of Energy, and individuals with distinguished involvement in issues of national energy policy.

Overwhelmingly, those respondents emphasized that DOE should focus on its core missions. Many believed that DOE must re-focus its attention to such energy-related missions as energy policy, energy information, and research and development on energy supply. A majority favored removing many of the remaining missions from DOE to other agencies or entities. For example, many respondents suggested moving

- basic research to the National Science Foundation, the Commerce or Interior departments, other federal agencies, or a new public-private entity;
- some multiprogram national laboratories to other federal agencies (or sharing their missions with other agencies);
- the management and disposal of civilian nuclear waste to a new public-private organization, a new government agency, or the Environmental Protection Agency (EPA);
- nuclear weapons production and waste cleanup to the Department of Defense (DOD) or a new government agency and waste cleanup to the Environmental Protection Agency;
- environment, safety, and health activities to the Environmental Protection Agency or other federal entities;
- arms control and verification to DOD, the State Department, or a new government nuclear agency;
- activities furthering industrial competitiveness to the Commerce Department or a public-private organization; and
- science education to the National Science Foundation or another federal agency.

DOE is taking some steps to improve its management of both national security activities and its other missions. For example, DOE recently realigned several of its national security functions into new offices to eliminate overlap and to sharpen focus. To improve its laboratory management, a Laboratory Operations Board was created to provide policy direction on laboratory mission and management issues. DOE also identified four "business lines" for making strategic decisions, developed "roadmaps" for managing its major science and technology activities, and began a

long-range program to make its contracting practices more business-like and results-oriented. Although these changes are important, they all assume that existing missions are still valid in their present forms and that DOE is still the best place to manage them. Along with many of the experts we surveyed, we concluded that a more fundamental rethinking of missions is in order.

A Framework Exists for Evaluating DOE's Missions

Two fundamental questions are a good starting point for developing a framework to evaluate the future of DOE and its missions:

- Which missions should be eliminated because they are no longer valid governmental functions?
- For those missions that are governmental, what is the best organizational placement of the responsibilities?

Once agreement is reached on the appropriate governmental missions, a practical set of criteria could be used to evaluate the best organizational structure for each mission. These criteria—originally used by an advisory panel for evaluating alternative approaches to managing DOE's civilian nuclear waste program¹⁰—allow for rating each alternative structure on the basis of its ability to promote cost-effective practices, attract talented technical specialists, be flexible in responding to changing conditions, and be accountable to stakeholders. Using these criteria could help identify more effective ways to implement missions, particularly those that could be privatized or reconfigured under alternative governmental forms. Appendix I summarizes these criteria.

Our work and others' has revealed the complex balancing of considerations in re-evaluating missions. In general, deciding the best place to manage a specific mission involves assessing the advantages and disadvantages of each alternative institution for its potential to achieve that mission, produce integrated policy decisions, and improve efficiency. Potential efficiency gains (or losses) that might result from moving parts of DOE to other agencies need to be balanced against the policy reasons that first led to placing that mission in the Department.

For example, transferring the nuclear weapons complex to DOD, as is proposed by some, would require carefully considering many policy and management issues. Because of the declining strategic role of nuclear weapons, some experts argue that DOD might be better able to balance resource allocations among nuclear and other types of weapons if the weapons complex were completely under its control. Others argue, however, that the need to maintain civilian control over nuclear weapons outweighs any other advantages and that few gains in efficiency would be achieved by employing DOD rather than DOE supervisors. Some experts we consulted advocated creating a new federal agency for weapons production.

Similarly, moving the responsibility for cleaning up DOE's defense facilities to another agency or to a new institution, as proposed by some, requires close scrutiny. For example, a new agency concentrating its focus on cleanup exclusively would not have to allocate its resources among competing programs and could maximize research and development investments by achieving economies of scale in applying cleanup technology more broadly. On the other hand, separating cleanup responsibility from the agency that created the waste may limit incentives to reduce waste and to promote other environmentally sensitive approaches. In addition, considerable startup time and costs would accompany a new agency, at a time when the Congress is interested in limiting the size of government and controlling its costs.

DOE's task force on the future of the national laboratories (the Galvin Task Force) has suggested creating private or federal-private corporations to manage most or all of the laboratories.¹¹ Under this arrangement, nonprofit corporations would operate the laboratories under the direction of a board of trustees that would channel funding to various laboratories to meet the needs of both government and nongovernment entities. DOE would be a customer, rather than the direct manager, of the labs. The Galvin proposal raises important issues for the Congress to consider, such as how to (1) monitor and oversee the expenditure of public funds by privately managed and operated entities; (2) continue the laboratories' significant responsibilities for addressing environment, safety, and health problems at their facilities, some of which are governed by legal agreements between DOE, EPA, and the states; and (3) safeguard federal access to facilities so that national priorities,

¹⁰ *Managing Nuclear Waste—A Better Idea, Advisory Panel on Alternative Means of Financing and Managing Radioactive Waste Facilities* (Dec. 1984).

¹¹ The Secretary of Energy asked Robert Galvin, Chairman of Motorola Corporation, to chair a task force to analyze the national laboratories. Its report was titled *Alternative Futures for the Department of Energy National Laboratories*, Secretary of Energy Advisory Board, Task Force on Alternative Futures for the Department of Energy National Laboratories (Feb. 1995).

including national security missions, are met. Other alternatives for managing the national labs exist. Each has advantages and disadvantages, and each needs to be evaluated in light of the laboratories' capabilities for designing nuclear weapons and pursuing other missions of national and strategic importance. Furthermore, the government may still need facilities dedicated to national and defense missions, a possibility that would heavily influence any future organizational decisions.

Finally, another set of criteria, developed by the National Academy of Public Administration in another context, could be useful for determining whether DOE should remain a cabinet-level department.¹² These criteria, which are summarized in appendix II, pose such questions as the following: "Is there a sufficiently broad national purpose for the Department? Are cabinet-level planning, executive attention, and strategic focus necessary to achieve the Department's mission goals? Is cabinet-level status needed to address significant issues that otherwise would not be given proper attention?"

Although DOE has a strategic plan, it assumes the validity of the existing missions and their placement in the Department. But DOE alone cannot make these determinations. They require a cooperative effort among all stakeholders, with the Congress and the administration responsible for deciding which missions are needed and how best to implement them. The requirements of the Government Performance and Results Act reinforce this concept by providing a legislative vehicle for the Congress and agencies to use to improve the way government works. The act requires, among other things, strategic plans based on consultation with the Congress and other stakeholders. These discussions are an important opportunity for the Congress and the executive branch to jointly reassess and clarify the agencies' missions and desired outcomes.¹³

Our work has shown that to be effective, decisions about the structure and functions of the federal government should be made in a thorough manner, with careful attention to the effects of changes in one agency on the workings of other agencies.¹⁴ Specifically, reorganization demands a coordinated approach, within and across agency lines, supported by a solid consensus for change; it should seek to achieve specific, identifiable goals; attention must be paid to how the federal government exercises its role; and sustained oversight by the Congress is needed to ensure effective implementation.

Messrs. Chairmen, this concludes our statement. We would be happy to respond to any questions you or Members of the Subcommittees may have.

Contacts and Acknowledgements

For future contacts regarding this testimony, please call Victor Rezendes at (202) 512-3841. Individuals making key contributions to this testimony included Gary R. Boss, William Lanouette, and Melissa Francis.

APPENDIX I

CRITERIA FOR EVALUATING DOE'S MISSIONS

The following criteria, adapted from a former DOE advisory panel that examined the Department's civilian nuclear waste program, offers a useful framework for evaluating alternative ways to manage missions. These criteria were created to judge the potential value of several different organizational arrangements that included an independent federal commission, a mixed government-private corporation, and a private corporation.

Mission orientation and focus: Will the institution be able to focus on its mission(s) or will it be encumbered by other priorities? Which organizational structure will provide the greatest focus on its mission(s)?

Credibility: Will the organizational structure be credible, thus gaining public support for its action?

Stability and continuity: Will the institution be able to plan for its own future without undue concern for its survival?

Programmatic authority: Will the institution be free to exercise needed authority to accomplish its mission(s) without excessive oversight and control from external sources?

Accessibility: Will stakeholders (both federal and state overseers as well as the public) have easy access to senior management?

¹² *Evaluation of Proposals to Establish a Department of Veterans Affairs* (Mar. 1988).

¹³ *Managing for Results: Key Steps and Challenges in Implementing GPRA in Science Agencies* (GAO/T-GGD/RCED-96-214, July 10, 1996).

¹⁴ *Government Reorganization: Issues and Principles* (GAO/T-GGD/AIMD-95-166, May 17, 1995).

Responsiveness: Will the institution be structured to be responsive to all its stakeholders?

Internal flexibility: Will the institution be able to change its internal systems, organization, and style to adapt to changing conditions?

Political accountability: How accountable will the institution be to political sources, principally the Congress and the President?

Immunity from political interference: Will the institution be sufficiently free from excessive and destructive political forces?

Ability to stimulate cost-effectiveness: How well will the institution be able to encourage cost-effective solutions?

Technical excellence: Will the institution attract and retain highly competent people with the requisite skills needed to accomplish its mission?

Ease of transition: What will be the costs (both financial and psychological) of changing to a different institution?

APPENDIX II

CRITERIA FOR EVALUATING CABINET-LEVEL STATUS

The following criteria were developed by the National Academy of Public Administration as an aid to deciding whether a government organization should be elevated to be a cabinet department. However, they raise issues that are relevant in judging cabinet-level status in general.

1. Does the agency or set of programs serve a broad national goal or purpose not exclusively identified with a single class, occupation, discipline, region, or sector of society?

2. Are there significant issues in the subject area that (1) would be better assessed or met by elevating the agency to a department, and (2) are not now adequately recognized or addressed by the existing organization, the President, or the Congress?

3. Is there evidence of impending changes in the type and number of pressures on the institution that would be better addressed if it were made a department? Are such changes expected to continue into the future?

4. Would a department increase the visibility of, and thereby substantially strengthen the active political and public support for, actions and programs to enhance the existing agency's goals?

5. Is there evidence that becoming a department would provide better analysis, expression, and advocacy of the needs and programs that constitute the agency's responsibilities?

6. Is there evidence that elevation to a cabinet department would improve the accomplishment of the existing agency's goals?

7. Is a department required to better coordinate or consolidate programs and functions that are now scattered throughout other agencies in the executive branch of government?

8. Is there evidence that a department—with increased centralized political authority—would result in a more effective balance within the agency between integrated central strategic planning and resource allocation and the direct participation in management decisions by the line officers who are responsible for directing and managing the agency's programs?

9. Is there evidence of significant structural, management, or operational weaknesses in the existing organization that could be better corrected by elevation to a department?

10. Is there evidence that there are external barriers and impediments to timely decision-making and executive action that could be detrimental to improving the efficiency of the existing agency's programs? Would elevation to a department remove or mitigate these impediments?

11. Would elevation to a department help recruit and retain better qualified leadership within the existing agency?

12. Would elevation to a department promote more uniform achievement of broad, cross-cutting national policy goals?

13. Would elevation to a department strengthen the Cabinet and the Executive Office of the President as policy and management aids for the President?

14. Would elevation to a department have a beneficial or detrimental effect upon the oversight and accountability of the agency to the President and the Congress.

RELATED GAO PRODUCTS

Department of Energy: Key Factors Underlying Security Problems at DOE Facilities (GAO/T-RCED-99-159, Apr. 20, 1999)

Department of Energy: Uncertain Progress in Implementing National Laboratory Reforms (GAO/RCED-98-197, Sept. 10, 1998).

Department of Energy: Contract Reform Is Progressing but Full Implementation Will Take Years (GAO/RCED-97-18, Dec. 10, 1996).

Department of Energy: Opportunity to Improve Management of Major System Acquisitions (GAO/RCED-97-17, Nov. 26, 1996).

Department of Energy: A Framework For Restructuring DOE and Its Missions (GAO/RCED-95-197, Aug. 21, 1995).

Department of Energy: National Laboratories Need Clearer Missions and Better Management (GAO/RCED-95-10, Jan. 27, 1995).

Department of Energy: Challenges to Implementing Contract Reform (GAO/RCED-94-150, Mar. 24, 1994).

Mr. BARTON. You surprised me. I thought you were just getting warmed up.

We want to recognize now Major General George McFadden, United States Army, Retired, the former Director of Security for the Department of Energy. Your statement is in the record and we will give you 7 minutes to elaborate on it, sir.

**STATEMENT OF GEORGE L. McFADDEN, FORMER DIRECTOR
OF SECURITY, DEPARTMENT OF ENERGY**

Mr. McFADDEN. Mr. Chairman, I thank you very much for the opportunity to speak to the committee today. I certainly will hold my remarks as they concern security because that is my area of expertise.

The Office of Security Affairs was designed to solve some of the problems of the security within DOE during the 1980's. There was a Freeze Commission of experts on security that looked at all of those problems and came up with a large number of recommendations. Among them was to remove security from defense programs and to place it in an organization that reported directly to the Under Secretary.

This group that studied this, they studied for 18 months and their basis for making this type of an organizational change was the fact that they had determined that with this security organization within defense programs, the security was not receiving the priority that was required and was unable to compete for adequate resources. They also moved it because working in the defense programs, the security organization was not providing the other elements, the other assistant secretaries' departments, the security support that was required.

For a short time, about 1 year, security did, in fact, report to the Under Secretary of Energy. In 1993, Secretary O'Leary reorganized and she organized at that time the Office of Nonproliferation and National Security. She moved the security organization into that organization. Now, the Director of Security reported through the Director of Nonproliferation and National Security.

Unfortunately, the Directors of Nonproliferation and National Security were nonproliferation experts who knew little and cared little about security. The big interest at that time was the nonproliferation aspects of supporting the Russians and in getting them a security system, and it was a very laudable reason and it should have been. The problem was, it was now competing for resources with our domestic security, and as a result, shortfalls began to come about because of lack of necessary resources.

We have to make some changes and those changes that must be made will have to be changes in budget, organization, and attitude, and attitude is a big one and a difficult one to care for.

I know there are a lot of changes that have been both in Congress, in the Department itself, and the PFIAB on how to solve these problems. I would boil them down simply just so that I can speak to each area quickly. The first I looked at was the autonomous organization of DOE, the one of moving all nuclear things to the Defense Department, and then high-level reorganization within DOE.

The movement of making an autonomous organization within DOE, to me, reverts to the system that was used in the 1980's and in the past and that was in deep trouble and had been changed. So, to me, I look at that as a step backwards. Part of the problem is that many scientists see that security prevents them from the exchanges that they would like to freely make without any restrictions in the international scientific community and they also see security as a competitor for resources. So when security is in an organization similar to defense programs or an autonomous organization, they would then be actually competing with the labs and that is not fair competition.

I would say that the type of change that they are talking about here would not be a change that would help solve the security problem within DOE, and in the long term, I would see that it would make that problem worse.

The movement to defense is a complex, costly, and really above my pay grade to talk about, but what I see that that proposal would do, it would transfer a problem. Defense has a lot of security problems in their own operations and I am not sure that they would be very interested in taking it on. But, to me, I see it as a shuffle of responsibility, not a solution to the problem.

Now, the third, and that is to develop an organization within DOE. I think that Secretary Richardson has established the Office of Security Emergency Operations that reports directly to him. Now, that is a great first step in the organization and one that will certainly take care of many of the shortfalls. However, there are certain important aspects of organization that are not included in the Secretary's plan at the present time.

One of them that I think is very important is that intelligence and counterintelligence are not a part under security. Intelligence and counterintelligence are the most important aspect of security and they must be coordinated and should be basically in the same organization.

Also, the problem that they have with the budget. When the Freeze Commission made their report, they recommended that the cross-cut budget be eliminated and that a budget line be put in. This was never implemented and this has been and still is a part of the problem. My understanding is that the new organization in DOE will still work from a cross-cut-like budget and that there will not be major budget changes.

The other aspect that is not included in the new organization is part of the real serious problem that they have and that is in the field, in the sites, where security has been, due to the fact that they were limiting as much as possible the number of managers,

in many cases, security was moved under people like the Manager for Administration. They had no way whatsoever of being able to speak to the decisionmaker within their organization and to convince them that there were, in fact, very serious problems.

I support change. I think that every professional in security in the Department of Energy, and I would like to say, Mr. Chairman, that that workforce, and I have been working in government for 40-some years, and I would tell you that that workforce is a professional organization, probably one of the best security organizations in government today, and they will be very happy if what comes out of all this consideration is an improvement in the organization that will allow them to get their job done and provide the security that should be provided within the Department of Energy.

Thank you very much, Mr. Chairman.

[The prepared statement of George L. McFadden follows:]

PREPARED STATEMENT OF GEORGE L. MCFADDEN

Mr. Chairman, thank you for this opportunity to speak with the committees this morning about the proposed changes to the Department of Energy and especially the status of security in the Department. My relationship with the Department of Energy began in November of 1991 when Under Secretary Tuck hired me as Director of Security Affairs, and ended in February 1997 after five frustrating years. The Office of Security Affairs had been created as a result of a recommendation by the Freeze study, an eighteen month study of DOE Security by an independent group of security experts. The study recommended that security be removed from Defense Programs and established as a separate Office reporting directly to the Under Secretary. The rationale for this change was based on the fact that other Assistant Secretaries were concerned that their departments were not being adequately supported by the Security Office in Defense Programs, but more importantly was the concern that security had a low priority with the Defense Program Labs and therefore received minimal financial support. The Freeze Study also recommended that a security line be established in the budget to replace the crosscut budget, but this recommendation was never implemented and is a significant part of the current security problems.

In 1993 Secretary O'Leary created the Office of Nonproliferation and National Security and placed the Office of Security Affairs under that organization. This action removed the access security then enjoyed with senior management. All Directors of the Office of Nonproliferation and National Security were specialists in nonproliferation and had little knowledge or interest in security. We had created a situation where domestic security competed for resources with the US effort to improve Russian nuclear security, adding to the lack of concern or interest in maintaining our security infrastructure. Support to improve Russian nuclear security deserved high priority, but it should not have resulted in reduction of our domestic capabilities, especially when terrorist activities and threats had increased.

During this same period security staffs were reduced significantly in the headquarters and the Field and Area offices. The effort to reduce the number of managers resulted in field security offices reporting to other low level managers with little or no access to decision makers. The long term impact was a continued deterioration of security at the sites. The frustrated professional security managers had no voice and no ability to convince the senior managers that the threat was real.

The results of the actions listed briefly in opening paragraphs have led to serious security shortfalls that require immediate and significant changes. The changes must include budget, organization and attitude.

The following paragraphs will speak to three recommendations:

1. Establish a semi-autonomous Nuclear organization within DOE.
2. Move all things nuclear to Defense Department.
3. Establish a high level security department in DOE.

1. The first recommendation would reestablish the situation that caused the security problems of the 1980s. The Labs would prefer to spend resources on research and many scientists consider security requirements as preventing full International exchange of ideas. It would also require the establishment of a separate security organization for the rest of DOE. However, the most important deficiency is that secu-

urity would be a low priority competitor for scarce resources. This proposal would not improve the security of our nuclear material.

2. The second recommendation is a very complex and the most expensive solution. Why would the DOD want to be saddled with this problem? This makes more sense than recommendation 1, but not a solution to the security problems, only a shuffle of responsibilities.

3. The third recommendation should have happened long ago. Secretary Richardson seems to have taken the first step by establishing the Office of Security and Emergency Operations reporting directly to the Secretary. The key element that is not included in this plan is the inclusion in this security organization of Intelligence and Counter-Intelligence. The new organization should include these very important security elements despite predictable resistance from the Intelligence community. Hopefully the responsible committees of Congress will cooperate in allowing the budget changes that will be required, even though their staffs have not supported the proposal for a separate budget in the past.

Summary:

Any change in the Department of Energy structure that will correct the problems of the past will be received positively by the very professional but frustrated security workforce that often receives the blame for problems they recognized and reported but did not have the ear of the decision maker, or their pleas were ignored for political or budget reasons. The most viable of the three recommendations is number 3 or a variation that provides high level access to management, and budget authority that does not compete with more popular programs. Similar organizational changes are required at Field and Area Offices.

Mr. BARTON. Thank you, General.

I would now like to welcome Dr. William Happer, who is a professor of physics at Princeton University. He is former Director of the Office of Energy Research at the Department of Energy. It is good to have you before us again. We are glad that you made it. Your statement is in the record in its entirety and we recognize you for 7 minutes.

**STATEMENT OF WILLIAM HAPPER, PROFESSOR OF PHYSICS,
PRINCETON UNIVERSITY**

Mr. HAPPER. Thank you very much, Mr. Chairman and members of the committee. I appreciate this opportunity to share my thoughts with you.

I have been in DOE from the inside, so I know what it is like. I agree with the General that security is very important and has not been done very well.

I think it is very clear from what all of us have seen, and what I have seen personally, is that the current structure of DOE is not working very well. Nobody thinks they have enough funds to do their job. Security does not think they have enough funds. Personnel does not think they have enough funds. Everyone is looking to build up their staff, their FTEs, their SESs. So that is natural in a bureaucracy.

Someone has to take the responsibility of doing the balancing that is required to make that organization run, and we know it is not running very well now, so I think that it is worth trying the semi-autonomous organization within DOE that has been proposed by the Rudman Commission, some variant of that. I think keeping it within DOE is very important because there are strong synergisms with other things that DOE does, the science mission, for example, and weapons are something that involves very, very detailed science, and especially with no testing involved, that will become even more important. They have to be able to reach out to

the other parts of DOE and, in fact, to the rest of the world to get the sort of information that is required.

I listened very carefully to what General McFadden had to say about security and I certainly agree that the programs are reluctant to surrender any money for anything that is not advancing science or advancing whatever the weapons stewardship issue of the day happens to be. However, I think that you have to be careful about any organization within DOE letting it set its own agenda, its own staffing, its own budget.

We have securities within our own bodies. We have a nice system of white blood cells and antibodies, and if that is working right, we do okay. If it stops working, we die of disease. And if it starts working too well, we die of autoimmune diseases. We get Lou Gehrig's disease or something like that and our own immune system kills us. So there is always an optimum of every function in our own bodies and also in a bureaucracy, and so someone has to be charged with looking at the interactions of these different functions, of security, of mission, personnel, and making sure that that balance is properly distributed.

I think that an Under Secretary who is directly charged with that, who is the owner of that and who is accountable for that and has nothing else to worry about except for the defense programs, which is a very important part of DOE, would help to solve this. The issue is the sort of person that you put in, the scrutiny that he or she gets, and if they do not do it right, they should be replaced.

I would like to add one more thing, since I have had a chance to look at the science mission very carefully in DOE. I do not think that this organization would have any bad effect on science. The actual workers within defense programs and within the science labs know each other very well. They have always managed to work out ways to get work done that is essential either in the defense labs or in the science labs. I do not think that would change. I think that might even improve if there were cleaner lines of command in the defense programs area of DOE.

In summary, I do not think that we can go on the way that we have been going. I think that some kind of reorganization is required and I would be willing to try some version of the Rudman proposal. Thank you, Mr. Chairman.

[The prepared statement of William Happer follows:]

PREPARED STATEMENT OF WILLIAM HAPPER, PROFESSOR OF PHYSICS, PRINCETON UNIVERSITY

Thank you for this opportunity to testify on current proposals to restructure the DOE. I am a Professor of Physics at Princeton University and Chair of the University Research Board. I am also the Chairman of the Board and one of the founders of a high-tech startup company, Magnetic Imaging Technologies, Inc., which makes images of human lungs with laser-polarized gases. So I have experience with the business world outside of academia. I have had a long familiarity with the activities of DOE, as a practicing scientist, as a member of advisory committees for DOE Weapons Laboratories and Science Laboratories, and as the Director of the Office of Energy Research under Secretary of Energy James Watkins during the Bush administration.

The DOE has many missions, but none more important than nuclear stewardship, that is, ensuring the safety, security and reliability of the US nuclear stockpile. Connected with this mission are—or at least used to be—many others, the construction and operation of nuclear reactors for the production of special nuclear materials, the

enrichment of stable isotopes, the construction of scientific facilities to learn more about the fundamental scientific issues connected with nuclear weapons, and how to ensure the safety of those working with dangerous materials—radioactive, toxic or both. I could go on, but my point is that the DOE weapons program is so challenging that it needs the most capable technical, scientific and managerial talents available. As long as the United States maintains its own nuclear weapons and feels it necessary to cope with those of others, we must ensure that the part of DOE responsible for nuclear weapons functions as well as possible.

Regretfully, I must agree with various assessments, stretching back many years, that DOE's missions—including the nuclear weapons mission—are often poorly managed. The recent Rudman and IDA reports, the Galvin report of a few years ago, and many others have clearly spelled out what is wrong. The DOE has become a bureaucratic morass, with many paper-pushing, regulatory offices competing to build up their staffs of FTE's and SES billets, to take credit for successes of increasingly-harried, front-line scientists, engineers and technicians, and to avoid responsibility for anything that may go wrong. The recent revelations of Chinese espionage and the DOE reaction to it are but one example of how difficult it is for the DOE to cope with serious real and potential problems in the weapons program, and other DOE programs as well. So I support a reorganization of DOE along the lines suggested in the Rudman report. If a reorganized DOE with a more efficiently operating Nuclear Stewardship Agency (NSA) is a result of the Chinese espionage, at least we will have some benefit from the regrettable affair.

I have no illusions that a semiautonomous Nuclear Stewardship Agency within DOE will correct all of the problems we are struggling with, but I am sure that the current DOE structure will not work. I say this as a pragmatist and an experimental scientist. We have tried to make the current structure work for many years and it always fails. When one of my experiments does that again and again, I try something else. We have several reasons to be hopeful that a semiautonomous agency could work. The example of NSA within the Department of Defense (DoD) has often been cited as a successful, semiautonomous agency, and there are other precedents like DARPA in DoD or the Naval Reactor Program within DOE. I like the word "Agency," which comes from the Latin root "to do." An agent does something for you. Some in the current structure of DOE and its supervisors seem not to care if anything ever gets done. This is not acceptable for any worthwhile mission, but it is simply not tolerable for Nuclear Stewardship. Nuclear weapons, ours and those of our potential adversaries are real and very dangerous. They are too important not to take very seriously.

There is a wise old saying, sometimes ascribed to the Chinese, that "The best fertilizer for a farm is the feet of the owner." Someone has to own the mission of nuclear stewardship, or at the very least someone must be a dedicated Steward. To succeed, the Steward must have the means to manage. As best I understand the proposed the Agency for Nuclear Stewardship, it will give the Steward both ownership and the means to do the job.

You cannot be a good Steward of the Nuclear Weapons mission of DOE unless you control all of the key functions, manufacturing, security, research, safety, etc. There is never enough money or enough personnel to do everything that is needed, so the Steward will have to balance many competing needs: the security of plutonium facilities; human resources; environmental, safety and health requirements; research needed to ensure that aging nuclear weapons remain safe and effective; counterintelligence precautions—the list is extremely long and every issue is important. However, someone must make the decision on how to distribute finite resources to do the best possible job. With the current DOE structure, various offices can demand that this action or that be taken with no concern for the broader problem of how to optimize finite resources of funds and people. One unfunded mandate after another comes down from headquarters or the field office. It is not possible to fully respond to all of the mandates. So the poor front-line troops do the best they can, and a year later another GAO report comes out saying that this or that requirement was not met. There is substantial duplication, triplication or even quadruplication of roles in DOE, with the front-line DOE contractor, the DOE site office, the DOE field office and headquarters all contributing to some issues.

I have testified before that part of DOE's problem is that it has too many people at headquarters and in the field offices. I would hope that the ANS Steward would not be saddled with making work for every DOE employee currently on a payroll related to the ANS mission. But I am a realist, and if every employee remains, the system could probably still be made to work better with the sort of crisp management structure envisaged for the ANS. Almost all of the DOE civil servants I met during my time there were good and talented people, determined to do something

to earn their keep. It is a shame that so many of them are used for counter-productive activities.

Some would say letting the ANS Steward control most of the important oversight now assigned to various independent DOE offices would be letting the fox watch the hen house. I do not think this needs be the case, and in any event the current structure is not working. The proposed ANS Steward will have a clear list of responsibilities, and will have to report annually to the Secretary of Energy—and through the Secretary to the Congress and to the President—on how well these responsibilities have been fulfilled, and why the allocation of funds and people for safety, security, research programs, etc. is optimum. One could also enlist the aid of other federal agencies for periodic tests of how well the ANS is fulfilling its mandate. For example, another competent federal agency could be tasked to try to penetrate the computer security of the ANS.

Concerns have been raised about possible bad effects of ANS on DOE science. Indeed, one of the strengths of the DOE weapons laboratories has been the strong basic science done there and the close ties their scientists maintain to other DOE laboratories and to the rest of the scientific world. This has paid important dividends to our country and we do not want to lose these benefits in a restructuring of DOE. One of the benchmarks on which the Nuclear Steward will be judged should be the health of science in the Weapons Laboratories.

To help maintain ties of the laboratories to the entire scientific world, visits by foreign scientists to the weapons laboratories should continue, but we should redouble our efforts to be sure such visits do not result in the loss of classified information. Those of you who have visited weapons laboratories realize that non-classified scientific work is often done “outside the fence” where security issues are less urgent. The Steward should ensure that there is a graded system of visitor controls. It would be silly to follow the same procedures for a scientist coming to talk to colleagues about human genome sequencing as for one who may be interested in weapons-related topics. Visitor controls should be very stringent in the latter case, but relatively light in the former.

I do not think that the ANS need hinder the support by other parts of DOE, or by outside agencies, of science at the Weapons Laboratories. As a former Director of Office of Energy Research, I saw, at very close quarters, how work was funded by my office at the Weapons Laboratories, and how other federal agencies—for example, the National Institutes of Health, or DARPA—arranged to have work done. The creation of an ANS within DOE might actually help the interactions between the Science Laboratories and the Weapons Laboratories if it leads to better management within the ANS.

Mr. BARTON. Thank you, Dr. Happer.

We would now like to hear from Dr. Donald Kettl, who is professor of public affairs and political science at the University of Wisconsin-Madison. Your statement is in the record and you are recognized for 7 minutes.

STATEMENT OF DONALD F. KETTL, PROFESSOR OF PUBLIC AFFAIRS AND POLITICAL SCIENCE, UNIVERSITY OF WISCONSIN-MADISON

Mr. KETTL. Mr. Chairman, thank you very much. I appreciate the opportunity to appear here this morning and to share some of the work at the Brookings Institution, where I am a non-resident senior fellow, and at the University of Wisconsin, where we have been doing work on public management. I appear before you to try to talk about the question of how to make the Department of Energy into a high-performing organization for the 21st century, which is really the central issue that we face here today.

I want to try to take out of my testimony three basic points that I would like to emphasize. The first is the importance of making sure that as we try to fix the problem, we fix the right problem. With all of the turmoil and with all of the problems that are surrounding the Department of Energy right now, it is very easy to go after the wrong kinds of things. We have a serious national se-

curity problem, a security problem that is rooted in 50 years of Department of Energy culture, and what has happened is the Department of Energy's new missions are transforming in ways that conflict with this culture that have grown up over that last 50 years.

If you look to the future and ask what it is that the Department of Energy in the future is going to have to do, it will have to try to find ways of managing effectively the nuclear stockpile, of ensuring environmental cleanup, safe storage of nuclear materials, of engaging in scientific research, in short, in doing things that are in some ways substantially different from the things that originally caused the creation of the Department of Energy back 20 years ago and the Department of Energy's previous functions 50 years ago before that.

We have to understand that any kind of restructuring will take, at a minimum, 5 years or so to get itself established. If we look at what the Internal Revenue Service is now doing in the process of trying to reinvent itself, we see that now, 2 years in, we see just the beginnings of some of what it is that the IRS is seeking to do. We need to ask ourselves where we want the Department of Energy to be in 5 years and in 10 years, what we can do now to ensure that where it is is where it needs to be.

National security is an important part of that, but national security is not what DOE does. It must be how it does it, and it is very easy to confuse the two and in the process undercut the Department's ability to engage in important missions like scientific research and environmental cleanup.

If you look at the way the Nordstrom's Department Store operates, it drives home that point. Nordstrom's has the reputation of having the premier customer service in the department store industry, but Nordstrom's does not do customer service. Instead, it makes sure that customer service is how its employees do what they do. That is exactly the lesson that national security needs to play within a restructured Department of Energy. We need to make sure, in short, that we fix the right problem.

Second, we need to fix it so that it stays fixed. The sad state of previous reengineerings and restructurings in both the public and the private sector, based on pretty clear evidence, is that two-thirds of fundamental restructurings and reengineerings fail. Two-thirds of reengineerings fail. My assessment of the Department of Energy's situation, given some of the radical proposals that are being discussed and debated in the Congress right now, is that its odds are not even that good, that, in fact, unless we are extremely careful, that fundamental restructuring could very well succeed in taking a bad situation and making it worse.

If you look, in fact, at what is going on within NASA, which, if you remember the Challenger disaster, had a similar crisis that forced a similar rethinking of its role and mission, the IRS, which also faced a major crisis, the lessons that come very clearly from NASA and the IRS are that you restructure after you have changed the mindsets and the cultures of the employees, not before, and that restructuring done in advance, especially in a way that does not ensure promotion of the mission, often undercuts what it is that has to be done. If you look at the lessons from Chrysler and

Wal-Mart, which engaged in similar kinds of restructurings, the lessons again are the same.

At best, looking first toward restructuring ensures that what has to be done takes longer. At worst, the lessons, unfortunately, are that restructuring seen only as restructuring strengthens the hands of those who seek to block change.

If we are interested in fundamental reform in the Department of Energy, we need to reform the culture of the Department and especially the culture of the contractors. We need to do what we do in Washington to ensure that those changes actually take place, and the missing link in many of the restructuring proposals now circulating around Congress is understanding how the shuffling of the boxes at headquarters will, in fact, produce the changes in culture that in the end are required to produce the changes that we need. That link is missing, and, in fact, to restructure without paying careful attention to that runs the risk of making a bad situation much worse.

The third thing is that if we are interested in trying to create a high-performing organization for the future, we need to make sure we do so with clear accountability for performance. The one principle that we have in this country is that in the executive branch of government, the Secretary must be clearly in charge. Many of the restructuring proposals either weaken the role of the Secretary or take the Secretary out of the loop. Doing so runs the risk of further causing those forces that have blocked change to burrow more deeply into the DOE bureaucracy and, therefore, make it more difficult to try to engage in the kind of change we are talking about.

So the first thing that we must do is to make sure the Secretary is, in fact, clearly in charge. The Secretary has, in fact, already launched a series of reforms and to undercut those at this point would be dangerous.

The second thing we need to do here is to make sure that we are sure what it is that we want the Department of Energy to do. We need to have a clear mission and focus the Department of Energy's resources and structures on getting that mission accomplished. That mission is not only ensuring national security and not only maintaining the nuclear stockpile, but also, in fact, pursuing environmental cleanup and safe storage of materials.

There are those who have, from time to time, sought to try to abolish the Department of Energy, but, in fact, if you look at what it is the Department of Energy is responsible for doing, it is much easier to make a case for the Department of Energy's continued existence 50 to 75 years in the future than many other things that the government actually does.

And finally, if we are interested in trying to ensure that we have a high-performing organization, we must have a system that holds those accountable for results.

Those, I think, are the three principles. First, make sure we fix the right problem. Second, fix it so it stays fixed. And third, make sure that as we fix it, we hold people clearly accountable for results. Those are the steps, I think, most likely to make the Department of Energy into the high-performing organization of the future that, in fact, the country needs.

[The prepared statement of Donald F. Kettl follows:]

PREPARED STATEMENT OF DONALD F. KETTL, PROFESSOR OF PUBLIC AFFAIRS AND
POLITICAL SCIENCE, UNIVERSITY OF WISCONSIN-MADISON

Introduction

As Senator Warren Rudman's report, *Science at Its Best, Security at Its Worst* elegantly makes clear, the Department of Energy's vast laboratory and weapons-production complex suffers from serious problems. These problems threaten national security. As we reform the department, however, we ought to ensure that we actually solve the problem—and we must not cripple DOE's capacity to achieve its mission.

We are now debating the creation of a semi-autonomous Agency for Nuclear Stewardship. The Agency would be located inside the Department of Energy and under the direction of a new Under Secretary. There are also proposals to take DOE's nuclear functions completely out of the Department and put them into a new, independent agency or to transfer the functions to the Department of Defense.

How should we think through these options? DOE's problems clearly result in part from a dysfunctional organizational structure that is the legacy of previous reorganizations dating from the Manhattan Project. The Department would benefit from an organizational housecleaning. But any restructuring needs to meet six criteria:

- *The restructuring must enhance DOE's capacity to perform its mission.* DOE has a complex job to do. The structure must support the job to be done.
- *The restructuring must improve coordination within DOE—both between headquarters and the field, and among the diverse elements of DOE's mission.* We can design failure into the restructuring from the beginning: If we focus single-mindedly on restructuring headquarters without improving links with the field; or if we look only at DOE's nuclear weapons programs without coordinating them with the Department's other activities. The structure must support the much-needed coordination.
- *The restructuring must create clear lines of accountability for this mission.* DOE now has too many organizational layers between top officials and its field operations. The structure must be clear on who is in charge.
- *The restructuring must promote national security.* But national security is not what DOE does; it is *how* it does it. Real reform requires weaving a clear concern for national security into the very fabric of DOE's operations, not trying to make national security itself the mission.
- *The restructuring must help redefine DOE's culture.* The national security problem flows from a culture rooted deeply in the Department's structure. The new structure must help define and support a new culture that pursues effective results and ensures national security.
- *The restructuring must create a high-performing organization.* The structure must require DOE to set clear, high standards for performance. It should reward the Department's managers for a good job and impose tough penalties for failure.

The instinct to reorganize the Department of Energy to attack the national-security problem is surely understandable. DOE, in fact, needs restructuring. There is grave risk, however, that a restructuring that simply re-shuffles boxes at headquarters will fail to solve the real problems in the field. In the process we could well stir up so much dust that we would lose valuable time in pursuing more fundamental, more effective reforms.

We Ought to Make Sure We Solve the Right Problem

The national-security problems within the DOE complex have their roots in the Department's field operations. For decades, the national laboratories have produced cutting-edge research. The production facilities produced ever-more-effective weapons. Over time, however, these operations have bred an organizational culture that, in turn, has fed the national security problems we now seek to cure. Indeed, Senator Rudman's panel identified culture as "a factor that complicates, perhaps even undermines, the ability of the Department to consistently implement its security procedures" (p. 11).

DOE has a long history of reorganizing to improve its operations. Unless we aggressively reshape the underlying organizational culture, the reorganization proposal would simply fall into the same old trap. This is precisely the lesson of re-engineering and reinvention in the nation's most successful public organizations and private corporations.

The existing culture within DOE's field operations grows from fifty years of experience rooted in the Manhattan Project. To protect the nation's first nuclear bombs from enemy attack, strategists scattered research and production facilities through-

out the nation. To ensure that no one had critical information about the overall plan, the Project's managers focused workers independently on narrow projects. And to gear up the process quickly, the Project relied almost exclusively on government-owned, contractor-operated (GOCO) facilities.

With the end of the Cold War came two dramatic changes in DOE's operations: a desire for more-open scientific exchange in the national labs; and the need to clean up the by-products of a half-century's nuclear weapons production. DOE found itself with these new missions but also with an old, even dysfunctional structure. The result was double trouble: organizational structures that did not support new missions, and disparate organizations cobbled together from existing components. The result? Precisely the patterns we have already observed:

- National security problems born out of the self-governing autonomy of field (usually non-governmental) employees;
- Management problems in the waste storage and environmental remediation programs;
- Difficulty of top managers in gaining control of field operations.

The cause: Headquarters officials had great difficulty in transforming the half-century-old culture that once made the American nuclear-weapons program the keystone of the nation's defense but which now fits new missions poorly. The current spy scandal is the product of 50 years of decisions about DOE's structure and operations. Separating nuclear-related activities into a quasi-independent agency would further worsen the fit between the department's missions, its culture, and its structure.

This is the key problem. We ought to focus our efforts on solving it. The experience of the best public and private organizations teaches an important lesson: *Reorganization, in itself, never does the job.* Reengineering large organizations begins with top officials who redefine what they want the organization to look like; who then walk the talk; and who use the tools at their disposal to transform the organization. Restructuring can sometimes be an important tool. But it can never be the only—or even the principal—tool. To focus on reorganization as the first step is to court failure.

The core DOE problem is changing the culture of field operations. If we seek to solve problems simply by restructuring headquarters, we will fail to solve the problem and will only encourage the dysfunctional culture to continue.

We Need to Understand that DOE Does Have a Coordination Problem—But It's Vertical, Not Horizontal

The proposal for an agency for nuclear stewardship operates under an implicit assumption: There are problems with the nuclear weapons/national laboratories programs that can best be solved through horizontal coordination—pulling all related national-security functions together into one headquarters office and giving a single person responsibility for managing them.

DOE's fundamental problems, however, are *vertical*: ensuring that the department's vast network of private contractors and relatively autonomous research laboratories (acting from below) consistently follow national policy (set from above). In fact, according to GAO estimates, *contractors are responsible for about 90 percent of DOE's work.* The evidence suggests that the national-security problems grew out of the locally defined, professionally dominated culture of the research labs. This culture put emphasis on research-driven free exchange of information, at the cost of national security.

Concentrating all DOE activities in a new semi-autonomous agency has a double risk. It risks recreating DOE's problems and burying them at a lower level of the bureaucracy. And it risks focusing attention on national security to the exclusion of the Department's mission. DOE must guarantee the nation's nuclear secrets. But to do so effectively, top officials must weave high concern for national security into everything that DOE does, not simply restructure headquarters to make national security a higher priority.

Indeed, this is precisely the lesson that the *Challenger* disaster teaches. Following that tragedy, NASA did not make safety the central organizational scheme at headquarters. Rather, NASA officials made safety the #1 priority for everything that NASA did. It became the way that NASA conducted its business; it was not the business NASA was in.

DOE needs to solve the right problem. It needs to make national security the #1 priority for everything it does. The recent problems with the national laboratories reflect broad, recurring, and deeply rooted problems in the department's operations. DOE officials have struggled for years to encourage the contractors and the labs to act consistently with national policy, as reports over the years by the General Accounting Office have shown.

Restructuring national security operations at headquarters can be an important first step in making national security the Department's top priority. However, the missing link in the restructuring proposals is connection link between headquarters and the Department's field operations, and especially the link between DOE and its contractor network. The national security problem simply cannot be solved without building that link.

The protection of national security needs to be job #1 at DOE. But the only way to make that happen is to work at headquarters to change behavior in the field. The restructuring will fail if this does not happen—and none of the restructuring proposals have yet tackled that problem.

We Need to Understand that a Single-Minded Focus on National Security Could Weaken the Department's Environmental, Safety, and Health Protection Missions

Fifty years of nuclear weapons production has left behind an environmental legacy that will take decades to clean up. DOE has already had difficulty coordinating its environmental, safety, and health protection units with its production and research operations. National security is of unquestioned importance. But it is not the only goal that DOE must seek. That is especially true for those who live near contaminated and dangerous facilities in the DOE weapons complex.

Restructuring the DOE nuclear weapons complex at headquarters not only raises problems of linkage with the field. It also raises questions about how DOE will link the national-security-oriented missions with the environment, safety, and health protection missions. The restructuring proposals would create high walls—figuratively and symbolically—around the nuclear operations; the latter requires substantial communication among the components. That is especially true if DOE is to build the requisite trust and confidence in citizens and its partners in state and local governments.

DOE's most difficult problem is tackling new missions with old systems. Its new missions are fundamentally different from the old: conducting nuclear research in the post-cold-war world, at a time when exchange of scientific ideas has become much more important; and the shift from nuclear weapons production.

National security is absolutely central to DOE's mission. However, national security is not *what* DOE does—it is *how* it must do it.

For any organization, public or private, to be successful, its structure needs to support its mission. DOE's structure needs to be constructed to promote its core missions. The proposed restructuring does not define sharply or reckon with DOE's reinvented missions. It does not enhance DOE's capacity to achieve these missions. In fact, it simply recreates much of DOE's existing operations in a subunit, buries the units responsible for the success of the new missions, and fails to connect headquarters more effectively with the field. The proposals *lower*, not *raise*, the role of the units responsible for the department's 21st-century mission.

In fact, DOE's emerging role is the integration of national security with its enduring missions:

- environmental cleanup
- safe storage of nuclear materials
- maintenance of the nuclear arsenal
- scientific research

DOE needs to do so in a way that enhances the trust and confidence of citizens and its partners in state and local governments.

DOE's success requires breaking down the vertical silos built over 50 years of history. It requires replacing them with new, horizontal coordination. And it requires action in Washington to ensure that this coordination happens. The proposed independent agency, by reinventing vertical silos in Washington, would make it harder to ensure coordination between Washington and the field. Restructuring headquarters in the pursuit of one aim—no matter how important, like national security—would make it far more difficult to ensure that other mission-critical goals were accomplished as well.

Citizen groups around the country have already voiced grave concern about vesting the agency that created the radioactive waste with the responsibility for cleaning it up. For more than a decade, these groups have complained bitterly that the department has not treated the remediation issues seriously. The department faces daunting challenges for cleaning up the nuclear legacy—and for devising a plan for the safe long-term storage of radioactive wastes. DOE has already been criticized for paying insufficient attention to these critical cross-cutting issues.

These problems would be significant in a new quasi-independent agency within DOE. The problems would be greatly magnified if an agency were created outside DOE, for that would vastly multiply the problems of coordinating the nuclear functions with the closely related research, environment, health, and safety missions.

The various restructuring plans could bury responsibility for solving them even more deeply in the DOE bureaucracy—or push responsibility outside DOE and far away from closely related missions. This could weaken the coordination among the various components and make it far more difficult for DOE to manage its core functions—especially environmental, safety, and health protection, which require strong partnerships with communities around the nation.

We Need to Ensure that Restructuring Increases Accountability

The most fundamental principle of management is to define an organization's job clearly and then hold the organization's manager accountable for getting the job done. The restructuring plans are unclear about who will be responsible for what, and that could seriously confuse accountability for results.

The plan to create a new Under Secretary within DOE to manage nuclear operations is unclear about the division of responsibility for basic policy, security, counterintelligence, and other key functions. Some restructuring plans would place virtually all responsibility in the hands of the Under Secretary, without clear accountability to the Secretary.

The firmly established tradition in American public management, supported by a score of blue-ribbon commissions throughout the 20th century, vests clear responsibility in the cabinet Secretary. Putting an Under Secretary in a position of side-stepping the Secretary could only create uncertainty about accountability. Framing responsibilities in a way that makes it hard to tell who is responsible for what would surely make things even worse. Paul Light's thorough research shows quite clearly that increasing the layers within the bureaucracy multiplies the problems of management and accountability. The goal of any restructuring ought to be to streamline the DOE bureaucracy and dramatically reduce the number of layers from top to bottom.

GAO has found that DOE already suffers from serious accountability problems. As its January 1999 report on the department's performance and accountability concludes, "DOE's ineffective organizational structure blurs accountability, allowing problems to go undetected and remain uncorrected" (p. 7). The last thing DOE needs is a "reform" that makes this problem worse.

The proposal to create a separate, independent Agency would solve the accountability problem: the Agency's administrator would have clear responsibility for the nuclear complex. It would, however, vastly increase the problems of coordinating the nuclear operations with the research, health, safety, and environmental missions. It would thus gain added accountability at an unacceptable cost in effectiveness.

The proposals for a separate office are unclear about who is responsible for what. That risks muddying accountability for the very problems they seek to solve.

We Need to Find the Right Model to Guide DOE's Restructuring

Reformers have pointed to other federal agencies as models for DOE's restructuring. The models have ranged from the Bureau of Land Management and the National Weather Service. The idea is to create a quasi-independent unit with clear responsibilities yet with operating independence from their home departments.

These are poor models, however, for several reasons. First, their missions are fundamentally different. DOE deals with nuclear materials, which inherently carry higher risk than either land management or weather forecasting. Second, DOE relies almost completely on contractors to perform its work. The lessons of BLM or NWS do not apply to DOE.

A far better model is NASA. Its high-risk, technology-intensive, contractor-dependent operations are similar to DOE. To attack these problems, its managers have led one of the most aggressive reinventions throughout the federal government. In the wake of the *Challenger* disaster, NASA officials put safety at the core of everything that NASA does—it was not *what* NASA did; it was *how* NASA did it.

NASA, for example, now requires its field offices ensure that contractors meet ISO 9000 quality standards. NASA headquarters assesses the management processes of its field offices through ISO 9000-drive internal audits. It is now developing financial management and performance assessment systems to ensure accountability. Although the new systems are not yet all in place, they provide a guide about how a contractor-dependent, high-tech government agency can transform its operations.

In short, top NASA officials redefined the agency's culture and insisted that its workers—both government employees and contractors—make safety the watchword. In the process, NASA fundamentally redefined the relationship between its headquarters and its field operations, including the Jet Propulsion Laboratory (a government-owned/contractor-operated facility, like many of DOE's facilities).

NASA has shown that a performance-driven system can transform the culture of a contractor-dependent agency. Reformers should look there for counsel in restructuring DOE. They should be very careful about choosing the wrong models, which could lead to dangerous prescriptions.

Conclusion

The proposal for a quasi-independent Agency for nuclear stewardship focuses on precisely the right issue: improving national security in the nation's nuclear complex. However, it misdiagnoses the problem. It could well make the real problem worse. It fails to strengthen DOE's links to its field operations and misses the critical imperative to redefine DOE's culture. It fails to focus on improving DOE's capacity to pursue its 21st century missions.

DOE needs to work aggressively to improve its operations. DOE's restructuring ought to be comprehensive, but it ought to focus on improving the Department's capacity to accomplish its mission and to streamline its accountability.

We need to begin by ensuring that we identify the right problem—and devising a workable strategy to solve it.

Mr. BARTON. Thank you, Doctor.

We would now like to hear, last but not least, from Ms. Maureen Eldredge. She is the Program Director for the Alliance for Nuclear Accountability. Your statement is in the record in its entirety and we recognize you for 7 minutes.

**STATEMENT OF MAUREEN ELDREDGE, PROGRAM DIRECTOR,
ALLIANCE FOR NUCLEAR ACCOUNTABILITY**

Ms. ELDREDGE. Thank you, Mr. Chairman, members of the committee. I appreciate this opportunity.

The Alliance for Nuclear Accountability is a coalition of 29 national, regional, and local organizations around the country working on nuclear weapons issues. Many of our member groups are local and community-based organizations living next door to DOE facilities. We have a long history of monitoring the Department's activities and what we have seen over the decades is a continuing pattern of disregard for public and worker safety and environmental law, combined with the use of national security as a shield to prevent public access to health, environmental, and safety information.

The current wave of espionage scandals confirms what many believe, that the weapons program is adept at keeping secrets from the American people, if not from foreign espionage.

In the last 50 years, the U.S. nuclear weapons program has exposed workers to fatal doses of radiation, given others cancer, and used entire populations of the U.S. as human guinea pigs. It has compiled a staggering record of environmental abuses, some of which Mr. Dingell mentioned earlier.

The Federal Facilities Compliance Act authored by this committee was a watershed moment in which many of the activities of DOE were required to comply with Federal environmental law and given a timeframe to achieve compliance. The Department has, in part, become more accountable to the public and runs its operations in a somewhat more environmentally responsible manner precisely because of external oversight and public scrutiny.

We see this attempt to create a new semi-autonomous weapons program as a chilling return to the darker days of the past, when weapons work was done unchecked by environmental consequences, regulation, and public scrutiny. We have concerns about several key areas, including public and worker safety, environ-

mental protection, nonproliferation, and secrecy and public accountability.

We agree with much of what was in the Rudman report about mismanagement and the culture of arrogance at headquarters and the laboratories. This mismanagement is by no means limited to defense programs. That being said, we feel the current reform proposals are a case of the cure being worse than the disease. We are at a loss as to why the punishment for insubordination, arrogance, and an unwillingness to take direction from above is to make the weapons program its own semi-autonomous agency. It is akin to parents faced with a recalcitrant teenager renovating the basement, setting him up with a phone, TV, and a very large allowance. What is the message we are sending?

We are particularly concerned that the current proposals do not fully appreciate the highly hazardous nature of the work being done at many of these facilities. Just 2 weeks ago, there was another accident at the chemistry and metallurgical research building at the Los Alamos National Lab in New Mexico. This building is plagued by accidents, and just this past May was cited for continued safety violations. There have been accidents across the lab system, but the labs continue to resist effective oversight and enforcement of safety procedures and environmental compliance. In all of these repeated actions, there are consistent themes—failure to follow procedures and failure to comply with safety requirements.

DOE is mostly self-regulated. The Office of Environment, Safety, and Health, which reports directly to the Secretary of Energy, has oversight and enforcement authority. Both the House and Senate proposals would change that and subsume such functions under the new line or agency.

One of the worst things about the proposals for reform of DOE's defense programs is the inclusion of environment, safety, and health operations within the program line. This places the very people who do not like environment or safety regulations and who consider these activities of lowest priority in charge of running these same functions. The fox should not be given the key to the chicken coop.

We are particularly concerned about the impact on environmental protection and cleanup activities of various legislative proposals and the relationship between the new agency and the current environmental management program.

Currently, plutonium-contaminated waste generated by the labs is expected to go to the waste isolation pilot plant in New Mexico. That facility is run and paid for by the Office of Waste Management within environmental management. It is unclear under the new proposed structure is whose responsibility the management of plutonium waste would be and who would pay for it. Will the weapons programs be allowed to continue generating waste and contaminate facilities without budgeting for those costs in their mission budgets, or will entirely new waste management offices and mini-environmental management programs be developed within the new agency? The current proposals do not address these crucial issues.

In addition, there is the problem of excess fissile materials which is located at several environmental management sites. This raises

both management concerns and security problems. Current proposals put security under the weapons program alone, leaving fissile material at EM sites in a security vacuum. There are also questions of jurisdiction over the fissile material that have been declared excess to the stockpile. They are not considered waste. Are they part of EM? Are they part of defense programs?

The weapons program has an equally bad record of compliance with environmental laws as it does with worker safety requirements. Environmental compliance should not be relegated to a low-level office within weapons production missions.

Recent reports of espionage, leaks of material, and poor security at the labs has brought national focus on the problem of proliferation and expanding nuclear programs of other countries, but while the attention of Congress and the administration have been on improving security and counterintelligence, two things are happening to undermine these efforts. One is the ongoing nuclear weapons research and design program called Stockpile Stewardship, and the second is continued efforts to advance reprocessing technologies which contribute to worldwide nuclear risk.

Stockpile Stewardship, with its emphasis on joint research projects with other nations and collaborative unclassified research that walks right up to the classified boundary, fosters a wider dissemination of nuclear weapons information and knowledge.

Reprocessing and other dual-use technologies continue to be developed unchecked, often supported by the very same people who are pushing for DOE reform and security. Recently, the Office of Fissile Materials used money to fund joint work with Russia in the field of high-temperature gas reactors, yet the Cox Committee report raised concerns about this very technology as being a dual-use technology and benefiting the Russian nuclear weapons program. The reality of proliferation problems in many areas of DOE, not just the weapons program, as well as the inability of the weapons program to be an unbiased critic of its own activities requires maintaining a separate, independent nonproliferation office.

It is difficult in the current climate to talk about the need for openness. The tendency is to lock the door as tight as possible. However, we urge you to tread carefully in this area. Ironically, the weapons production program has been very good at keeping secrets, particularly secrets about health and environmental-related information, from the public. Often, local watchdog groups, public officials, and local reporters are the first line of defense in exposing problems at DOE sites. Public accountability is the best insurer of proper behavior. Closing the doors and retreating into a swatch of darkness will only make the labs more insular, less caring, and less responsible.

In conclusion, we urge the committee and Congress to take a closer look at the complications that may be created by a hasty move to change. Change without due consideration of the many ripple effects could do more harm than good. Thank you.

[The prepared statement of Maureen Eldredge follows:]

PREPARED STATEMENT OF MAUREEN ELDREDGE, PROGRAM DIRECTOR ALLIANCE FOR
NUCLEAR ACCOUNTABILITY

Chairman Barton, Chairman Calvert, and Members of the Committees, I appreciate this opportunity to appear before you today to discuss efforts to reorganize the Department of Energy's nuclear weapons work.

The Alliance for Nuclear Accountability is a coalition of 29 national, regional, and local organizations around the country, working on nuclear weapons issues. Many of our member groups are local, community-based organizations living next door to the Department of Energy's (DOE) nuclear weapons facilities. We have a long history of monitoring the Department's activities. While as a network we have been in existence for 12 years, some of our member groups have been at this business even longer. What brought all of our groups together was a shared realization that activities at the nuclear weapons facilities were harming our people, our environment, and contributing to the spread of nuclear weapons information and technology around the world.

What we've seen over the decades is a continuing pattern of disregard for public and worker safety and environmental law, combined with the use of "national security" as a shield to prevent public access to health, environmental, and safety information. The current wave of espionage scandals confirms what many believed—that the weapons program is adept at keeping secrets—from the American people.

In the past 50 years the US nuclear weapons program exposed workers to fatal doses of radiation, gave others cancer, used entire populations of the US as human guinea pigs, dumped radioactive waste into unlined trenches, poisoned streams and ground water, created miles of contaminated soil, and compiled a staggering record of environmental abuses. Thanks to work by citizen groups and by the Congress, often hand in hand with local media and local officials, the weapons program has slowly become more accountable to environmental regulation and health implications of weapons work are coming to light.

The Federal Facilities Compliance Act authored by the Commerce Committee was a watershed moment in which many of the activities of DOE were required to comply with Federal environmental law and given a time frame to achieve compliance. Various oversight hearings and actions have highlighted safety concerns throughout the complex, and there has been a continual stream of governmental and non-governmental reports on issues ranging from cleanup needs to nonproliferation and weapons development.

The Department has, in part, become more accountable to the public and runs its operations in a more environmentally responsible manner because of external oversight and public scrutiny. It is not perfect, it has a long way to go, and some sites are better than others. But it does, finally, have forces both within and outside of the Department working to make it adhere to worker safety requirements and environmental concerns.

We see this attempt to create a new, semi-autonomous weapons program, as a chilling return to the darker days of the past, when weapons work was done unchecked by environmental consequences, regulation, and public scrutiny. We have concerns about several key areas including public and worker safety, environmental protection, non-proliferation, and secrecy and public accountability, which I will go into detail below. We also have specific problems with both the House and Senate proposed reform efforts.

First, a general statement about the concept. No one would accuse us of being soft on DOE. In fact, we have been its most fervent critic, and we have often irked, annoyed, and infuriated the top management of the agency. We agree with much of what was in the President's Foreign Intelligence Advisory Board (PFIAB) report about the mismanagement and the culture of arrogance at headquarters and the laboratories. This mismanagement is by no means limited to the Defense Programs line within DOE. It is rampant throughout the Department. Indeed, one of the major problems at DOE is an entrenched bureaucracy with little incentive to change, and the ability to wait out any major reform efforts.

However, with that being said, we feel that the current reform proposals are a case of the cure being worse than the disease. We are at a loss as to why the punishment for insubordination, arrogance, and an unwillingness to take direction from above is to make the weapons program its own, semi-autonomous, agency. It is akin to parents, faced with a recalcitrant teenager, responding by renovating the basement and setting him up with a phone, TV, separate entrance and large allowance. What is the message here?

In reading the PFIAB report, references are made to examples of other agencies, such as the National Security Agency, the National Reconnaissance Office, and the National Oceanographic and Atmospheric Administration, that the PFIAB believes

operate better and more effectively by being semi-autonomous. We note, however, that none of these examples run high hazard facilities that generate radioactive waste and routinely deal with plutonium, the most lethal material in the world. DOE and the weapons program are unique in that regard and as such need a unique, well-crafted, and measured response.

PUBLIC AND WORKER SAFETY

We are particularly concerned that current proposals do not fully appreciate the highly hazardous nature of the work being done at many of these facilities. In fact, some have been quoted as believing that compliance with worker and public safety requirements is a hindrance to effective weapons work. This attitude, which is prevalent at the national weapons labs, is precisely the reason there have been such widespread and continuing problems with worker safety. Just last week there was another accident at the Chemistry and Metallurgy Research Building (CMR) at the Los Alamos National Lab (LANL), releasing radioactive fumes and contaminating a room. This echoes an accident at the same building in November of 1996, in which an oven exploded, sending a potentially lethal spray of shrapnel around the room. There have been many accidents, accidental releases of radiation, and exposures of workers that plague the work at the labs. Yet the labs continue to resist effective oversight and enforcement of safety procedures and environmental compliance.

To fully appreciate the complexities of worker and public safety at the weapons facilities, it must be understood that for most activities and materials, DOE is self-regulated. The full implications of this self-regulation are sometimes hard to perceive. All non-DOE nuclear facilities are regulated either by the Nuclear Regulatory Commission (NRC) or Occupational Safety and Health Administration, (OSHA) or both. But at DOE facilities, OSHA does not have jurisdiction or authority. The Environmental Protection Agency (EPA) has no authority over fissile materials and only regulates the DOE superfund sites that have other contamination. States have little, if any, jurisdiction. One DOE self-audit revealed 40,000 OSHA violations at the Los Alamos National Lab (LANL) alone.

The litany of accidents at the labs is endless. A few examples at Lawrence Livermore National Lab (LLNL) in California: March '99—a mislabeled container of waste was sent to a landfill without pre-treatment; April '98—a chemist receives burns to his head when an improperly stored acid mixture exploded; May-Dec. '97 over 25 plutonium criticality violations in Building 332, with reports detailing chronic violations of safety limits. At the Los Alamos lab in New Mexico: May '99—lab cited for continued safety problems in the Chemistry and Metallurgy Research (CMR) building (and in June of this year, had another accident in the building); June '98—illegal storage of gaseous chemicals; November '96—explosion in the CMR building. At the Sandia lab, also in New Mexico, operator failure caused an unplanned power surge and subsequent automatic shutdown of the lab's Annular Core Research reactor. The operators then compounded the error by immediately restarting the reactor and then destroying a portion of the log in an attempt to cover up the event.

In all of these repeated accidents there are consistent themes—failure to follow procedures and failure to comply with safety requirements. In one instance, the report of the criticality violations at LLNL includes the possibility that some of the violations were intentionally done to get the job completed faster.

Office of Environment, Safety, and Health

How does worker and public safety, as well as environmental compliance, get reported, evaluated, and enforced, within the DOE structure? The Office of Environment, Safety, and Health, (E,S&H) which reports directly to the Secretary of Energy, has oversight and enforcement authority. Both the House and Senate proposals would change that, and subsume such functions under the new line or agency. As it is, enforcement is often weak and the Office of E,S&H does not have enough teeth to be effective. However, it is at least independent and not intimately linked to the mission of Defense Programs. Moving environment, safety, and health oversight and enforcement functions into the line program, whose chief goal is to research and produce nuclear weapons, would result in a complete loss of protection for workers from any independent oversight. Management in the new organization would have, as its goal, completion of its primary mission at the lowest possible cost—worker and public safety, as well as environmental regulation, would be the bottom of the pecking order.

Should reform happen in this area? Indeed, the Office of Environment, Safety, and Health needs to be made stronger, have more enforcement authority, and a bigger budget. It needs to be a separate, independent office that has enforcement over all other parts of DOE. Contractor accountability must be strengthened and enforce-

ment against contractors whose actions are irresponsible, negligent, and occasionally unlawful, must be swift and effective. Congress should revisit the issue of whether any contractor, even a non-profit contractor, should be exempt from paying fines resulting from enforcement actions.

One of the worse things about the proposal for reform of DOE's Defense Programs operations is the inclusion of E,S&H operations within the program line. This places the very people who do not like environmental or safety regulations, who chaff against following safety procedures, and who consider these activities of the lowest priority, in charge of running these same environment, safety, and health operations. 50 years of experience has taught us that weapons production is incompatible with self-monitoring of environmental and safety practices. The fox should not be given the keys to the chicken coop.

ENVIRONMENTAL PROTECTION

We are particularly concerned about the impact on environmental protection and cleanup activities of the various legislative proposals. Most of the facilities in the DOE complex are in the cleanup program, on a track, albeit a lengthy one, for closure, cleanup, and return to full or partial civilian use. The labs and production sites, however, are going to continue to generate waste, risk contaminating the environment, and put workers and the public at risk for the foreseeable future. Structurally, there are several problems and many large question marks about the proposals for reforming the weapons program and its relationship to fissile material disposition, waste management, and restoration activities.

Senator Rudman stated that his committee did not look at the environmental management program in their review. The Environmental Management (EM) program is indeed complex and covers a wide variety of functions that one would not readily attribute to a cleanup program. The Senate proposal put forth by Senators Domenici, Kyl, and others, would put the new Agency for Nuclear Stewardship in charge of all programs and activities related to, among other things, non-proliferation and fissile materials disposition. It allows the Secretary of Energy to exempt certain environmental restoration and waste management responsibilities best carried about by other program lines from the new agency. The House versions, section 3165 of H.R. 1401, and H.R. 2032, give the newly elevated weapons program authority over environment, safety, and health functions. Both of these proposals raise questions about who is responsible for management and storage of fissile material currently under control of the EM program, and who will manage and pay for the costs of future generated waste.

Waste Management

Currently, plutonium-contaminated waste (transuranic, or TRU waste) generated by LANL is expected to go to the Waste Isolation Pilot Plant in New Mexico, a facility that is run and paid for by the Office of Waste Management within the EM program. A pilot charge-back program has begun within DOE, but under the new structures proposed, it is unclear how Defense Programs (or a renamed Agency for Nuclear Stewardship, ANS) would either manage its TRU waste, arrange for transport to WIPP, determine whose order, requirements or regulations it was obliged to follow, or budget for payment. Will the weapons program be allowed to continue to generate waste and contaminate facilities without budgeting for the waste management or cleanup in mission budgets? No private corporation allows a waste-generating portion of its company to pass these expenses on to the general accounts. In addition to the question of funding and budget is a question of operations. Will ongoing waste management responsibility continue to lie with the EM program, or will entire new waste management offices and mini-EM programs be developed within the new agency? The current proposals do not address these crucial issues, and the Senate proposal, which specifies that no other part of DOE shall have any authority over the new agency, sets up a situation where the ANS could generate waste with impunity. Even those of us with garbage service have to package our garbage appropriately.

Fissile Materials

The issue of excess fissile material, located at several EM sites, raises both management concerns and security problems. The current proposals have an independent security function within the weapons program that has security jurisdiction only over weapons program activities. This leaves fissile material at EM sites in a security vacuum. Such a structure would necessitate recreating a security structure under EM, to protect EM security risks. This proliferation of offices and management responsibilities is precisely the problem these reform efforts were trying to avoid. Security is a DOE-wide issue, not just a weapons program issue.

Additionally, there are questions of jurisdiction over fissile materials that have been declared excess to the stockpile. Currently these are managed and stored by the Environmental Management program, while the Office of Fissile Materials Disposition does the planning for the eventual disposition of the material. Under the Senate proposal, the Fissile Materials Disposition program would be included in the new Agency for Nuclear Stewardship, yet this program does not own any facilities, storage sites, or treatment capacity. The proposal to move fissile materials work into the new agency may well leave orphan plutonium around the sites, as EM no longer has jurisdiction and the new agency has no place to put the material.

Environmental Compliance

The weapons program has an equally bad record of compliance with environmental laws as it does with worker safety requirements. Often the attitude is that environmental protection doesn't matter or is not a high priority. Again, the Office of Environment, Safety, and Health is tasked with enforcement and oversight, as much of DOE's work does not fall under outside agency jurisdiction. The result of self-regulation is evident in the massive contamination throughout the complex. Weapons production and research work, which is not on a track to cleanup and closure, but will continue being a waste generator and a risk to the public, needs strong, clear, and forceful independent oversight. Environmental compliance should not be relegated to a low-level office with a weapons production mission.

NONPROLIFERATION AND SECURITY

Recent reports of espionage, leaked material, and poor security at the labs has brought national focus on the problem of nuclear proliferation and the expanding nuclear programs of other countries. The attention of Congress and the Administration has been on improving security and counterintelligence at the labs and ensuring US nuclear weapons secrets are safe. At the same time, two things are happening that undermine these efforts and make the barrier to nuclear weapons technology less like a wall and more like cheesecloth.

Research Programs

The ongoing nuclear weapons research and design program and continued efforts to advance reprocessing technologies both contribute to worldwide nuclear risks. The science-based stockpile stewardship program emphasizes research, particularly joint research with other nations, and presentations at public conferences, as a way of proving our continued scientific edge in the nuclear arena. From a human nature point of view this is completely understandable. Now that weapons tests are no longer the ultimate arbiter of success, weapons scientists, who have long labored in the dark of classified research and away from the praise and acknowledgement of their efforts by the rest of the research community, wish to be brought more into the public light. But this approach increases the availability of nuclear weapons information and dances on the edge of the classified boundary.

Joint research projects, particularly on the National Ignition Facility (NIF), a laser facility being built at LLNL, emphasize cooperative, open research with a variety of countries, and Britain recently announced it would be "investing" in the NIF. The National Ignition Facility bills itself as intended to further understanding of the inner complexities of a nuclear weapon explosion.

Joint research projects and a growing international community of weapons scientists is not a recent phenomenon. Collaboration between the U.S. and Soviet weapons labs pre-dates the end of the Cold War. More recently, in 1995, joint controlled-fusion experiments have been conducted at both the US. and Russian laboratories. A 1994 Washington Post article reported that in order to persuade Chinese military leaders to halt underground testing, the US offered to provide China with computers that could aid in nuclear explosion simulations.

It is also not a new phenomenon that the lab scientists dislike restrictions on their work and that the arrogance referred to by the PFIAB expresses itself as a belief that the labs are above the law. In a 1996 Bulletin of Atomic Scientist article, Kathleen Bailey, a senior fellow at the Center for Security and Technology Studies at the Lawrence Livermore National Laboratory wrote: "[W]hile it is often useful for laws to try to shape the behavior of mankind, there are some realms in which laws are destined to fail. That is why those responsible for the security of the United States, *regardless of the political perspective of the administration in power*, have repeatedly determined that the possession of nuclear weapons and a commitment to their potential use—as implied by deterrence—is in the best interests of Americans. International law or advisory opinions by the World Court are unlikely to change that. (emphasis added).

These types of attitudes emphasize that in order to ensure nonproliferation efforts have the authority they need, nonproliferation work cannot be part and parcel of a weapons agency, but needs an independent voice.

Dual-Use Technologies

It is ironic that while Congress is trying to seal the ark of nuclear weapons against theft, it is at the same time handing out the technological tools to weapons programs under the guise of waste management. The greatest stumbling block to would-be proliferants is access to fissile materials. Reprocessing, the procedure of separating plutonium or uranium from spent nuclear fuel, is undergoing a resurgence in this country, despite our purported policy against reprocessing, and our efforts to convince other nations to forgo it. We have pyroprocessing (electrometallurgical processing) at Argonne West in Idaho, and a new push for accelerator transmutation of waste (ATW) that uses pyroprocessing technology in part. Both of these processes have the advantage, to proliferators, of being smaller and harder to detect than traditional PUREX processes used at the Savannah River Site and Hanford. According to the National Academy of Sciences, while not intended for the production of fissile materials, both processes could be easily modified, to produce weapons grade material. Interestingly, the ATW system is being pushed by Senator Domenici, the same architect of DOE reform, who is concerned about making DOE more secure but seems to have little qualms about the impacts of dual-use technology.

There are other areas of concern as well. For example, the Office of Fissile Materials recently began using money to fund joint work with Russia in the field of High Temperature Gas Reactors. Yet the Cox Committee report raised concerns about that very technology as being dual-use and benefiting Russian nuclear weapons programs.

The reality of proliferation problems in many areas of DOE, as well as the inability of the weapons program to be unbiased critics of its own programs, requires maintaining a separate, independent, nonproliferation office. Folding nonproliferation into the new weapons agency, while it may appear to be a streamlining of programs, would result in an office that can't effectively report, critique, or analyze proliferation risks without biting the hand that feeds it. Additionally, nonproliferation is a Department-wide concern, particularly in the area of multi-use technologies that may be of use to aspiring nuclear-capable states. If it is buried in a weapons agency, nonproliferation analysis will not have the capacity to address all of the concerns in existence, nor will it get adequate attention.

SECURITY AND PUBLIC ACCOUNTABILITY

It is difficult, in the current climate, to talk about the need for openness. The tendency is to lock the door as tightly as possible, in the light of what may have been lost. However, we urge you to tread carefully in this area. Ironically, the weapons production program has been successful in some areas of secrecy—keeping crucial health and environment-related information from the public. In the pursuit of national security goals, environmental and safety standards were often left by the wayside, and secrecy was not always used for noble purposes.

As an example, let me tell you about how one of our member groups, the Fernald Residents for Environment, Safety, and Health got its start. The President, Lisa Crawford, lives near the Fernald site, known then as the Feed Materials Production Center, which processed uranium.

The local community didn't know exactly what went on there, and it was assumed to be a pet food producer—the site even painted its water tower in a fashion very similar to Purina's trademark checkerboard. Lisa only discovered the true function of the plant when she came home from work to find men in radiation protection suits climbing out of her well. The plant had contaminated all of the drinking water supply in the surrounding area with uranium. This galvanized the community, but only through protracted lawsuits and endless Freedom of Information Act requests, where they were able to know the truth.

The Department has changed since then, but it still remains difficult if not impossible to get data from certain sectors, specifically Defense Programs. We are not asking for the secrets to nuclear weapons design, we are asking for the truth about health and environmental impacts. Often local watchdog groups, public officials, and local reporters are the first line of defense in exposing problems at DOE sites. Public accountability is the best ensurer of proper behavior. Closing the doors and retreating into a swath of darkness will only make the labs more insular, less caring, and less responsible.

In conclusion we urge the Committees and Congress to take a closer look at the complications that may be created by a hasty move to change. Change without due

consideration of the many ripple effects could do more harm than good. In particular we urge the Committees to carefully considered key areas of worker and public safety, environmental protection, non-proliferation, and secrecy and public accountability.

Mr. BARTON. Thank you for that statement.

We will now start the questions. We will recognize the gentleman from California, the subcommittee chairman of the Energy and Environment Subcommittee of the Science Committee, Mr. Calvert, for 5 minutes.

Mr. CALVERT. Thank you, Mr. Chairman. This is for the entire panel. Listening to your testimony, it becomes clear that DOE is pretty dysfunctional and, apparently, very resistant to change. Why does it make sense to attempt to maintain any security and environment, safety, and health functions within the Department? Some have proposed the possibility of putting another agency, such as the FBI, in charge of DOE's security, nuclear regulation under the NRC, environment under the EPA, and worker safety under OSHA. What are your thoughts on that?

Mr. REZENDES. I can start. We have testified before this committee about the need for external regulation of DOE for many years. Still to today, DOE self-regulates for worker safety and there is no external regulation in terms of its nuclear piece. They have had three pilot projects a while back. In fact, I testified before the House Science Committee just last fall that we were detecting a change in direction in the Department of Energy as to where they were going with external regulation. But the then-acting Secretary said they were on the proper glide path and they were making good progress. We have seen a major change there.

I think my message at that time was that it is very difficult for any department, including the Department of Energy or anybody else, to give up authority and responsibility for their own operations, that it really has to be something external. It has to be something coming from Congress to impose on them. It is not something they are going to voluntarily agree to.

Mr. CALVERT. General?

Mr. MCFADDEN. I would like to speak to the security end of that, and I would say that, in the first place, that nuclear security and the type of security that is required in DOE with over 4,000 guards at the facilities, et cetera, is something that the FBI would have little or no expertise in running. The FBI would be great in improving the counterintelligence aspect of the DOE operation, but I do not see any role for an organization like that in taking over the physical security aspects.

Mr. CALVERT. Doctor?

Mr. HAPPER. I think that OSHA might be a good idea. From what I have seen of OSHA, they do a pretty good job. We have OSHA at our Princeton Plasma Physics lab, and as far as I can tell, everyone is satisfied with that, as far as you can be satisfied when you are criticized.

I think I agree with the General about the security, that there are unusual burdens for security at a nuclear facility. There is all this special nuclear material and the threats of terrorism, and so it is not the usual thing that the FBI faces.

As for the Nuclear Regulatory Commission, I think that that also could be looked at. It is not clear that they are just the right people, but they do have the background and there is a lot of duplication of regulations in DOE.

The fundamental problem, though, is it is jobs. If you do that, there are a lot of people suddenly who do not have anything to do who are accustomed to oversee and to regulate.

Mr. CALVERT. Apparently, a lot of them do not have a lot to do right now. Doctor?

Mr. KETTL. I think the answer, in part, depends on whether or not you want to try to do just one thing or try to take account of things like the environmental issues and other things in the Department that cross-cut. The fact that the Department is involved in so many cross-cutting issues makes it hard to make any one thing the central organizational framework.

If you do that, you run the risk of undermining the partnerships, for example, with State and local governments and with citizen groups, that are required to make the entire work of the Department hang together. So the risk of slicing and dicing and reorganizing runs the risk of replicating the problems elsewhere and not really solving some of the enduring issues within the Department.

Mr. CALVERT. Ms. Eldredge?

Ms. ELDREDGE. We have worked for a number of years on external regulation. It was a big issue probably 5 or 6 years ago and has faded away, unfortunately. The concept of externally regulating DOE is a very good one. There is always some question of who should do it. I think everyone supported OSHA regulation. OSHA said they wanted money in order to do it effectively, which is understandable.

But one of the DOE self-audits at the Los Alamos lab revealed 40,000 OSHA violations just at that one lab, and that is sort of ridiculous levels of safety problems and we would definitely support bringing in more external regulations. I think it would solve some of these problems.

The particular problem right now is that Environment, Safety and Health, although they are the oversight and enforcement body within DOE, they have very little power. They really have very little enforcement ability and they have very little ability to really make the labs or anyone else within DOE toe the line, and perhaps giving the power to someone outside of DOE would improve the situation.

Mr. CALVERT. Thank you, Mr. Chairman. My time has expired.

Mr. BARTON. We will almost certainly have another round of questions for those of us who stay through the second round.

I would recognized the distinguished ranking member of the Science and Environment Subcommittee of the Science Committee, Mr. Costello.

Mr. COSTELLO. Mr. Chairman, Congressman Klink must leave in a few minutes, so I would ask that he be recognized at this time.

Mr. BARTON. And what if we say no?

Mr. COSTELLO. Mr. Chairman, I would probably ask for a roll call vote.

Mr. BARTON. We will recognize Congressman Klink for 5 minutes, then.

Mr. KLINK. I thank the gentleman for his courtesy. I think it would probably go unanimously because people are glad to know that I would be leaving.

Mr. Rezendes, it is nice to have you here. I am sorry that you are not going to be appearing before us, and maybe you will be appearing before us in another life of some sort, but it has been a pleasure to have your insight on these matters.

Mr. REZENDES. Thank you.

Mr. KLINK. Let me start off by asking, in your testimony, you identified the problems, really, of decades of the DOE—I think I alluded to it in my opening statement—not holding the contractors accountable to what they wanted them to do. In your opinion, will any of the legislative suggestions that have been laid on the table so far give DOE more control and change the culture at the labs in regard to the contractors' accountability?

Mr. REZENDES. No. We do not see that. I think, in fact, this is really an excellent point. I think some organizational alignment and reporting facilitate holding people accountable. Obviously, the flatter, the fewer conflicting goals and objectives that people have, the better the organization is going to be.

But one of the fundamental problems we have seen over the decade is that even when problems arise, it is very difficult for DOE to hold people accountable and actually do something. Even in the security area today, we have not seen a lot of aggressive action against those being held responsible for what has occurred in the security issues.

Mr. KLINK. General McFadden, do you have a comment on that?

Mr. MCFADDEN. I think what you are saying is absolutely correct. There is nobody in charge of security at DOE and never has been because of the contractor system and the separate field operations. There is policy created at the headquarters. The carrying out of that policy, there are a lot of responsible people and the security people are able to go and measure and report when that policy is not carried out and when deficiencies are beginning, such as maintaining physical fences around sensitive facilities or updating the electric alarm systems that are required for physical security. Those things are of great concern ongoing and with the present organization, you are not going to solve it, but I believe it can be solved within DOE by giving this new "czar" the responsibility, power, and budget to accomplish that.

Mr. KLINK. Dr. Happer, what is your opinion?

Mr. HAPPER. Well, I think responsibility does have to come back to DOE and I believe that an Under Secretary responsible for all of the weapons work would be able to give the resources to security, the right resources.

Mr. KLINK. Let me just back up. In any of the legislative proposals you have seen, is there anything that gives DOE the kind of control that they need, of the proposals that you have seen on the table?

Mr. HAPPER. Yes. I think if you look at the Rudman proposal for a semi-autonomous agency, there is an Under Secretary, in one version, the original version, whose sole responsibility is to make sure that defense programs work and that all of the requirements are balanced. He is responsible for that. That is his job. He does

not have to worry about windmills. He does not have to worry about insulated buildings or automobile fuel efficiency. His only job is to make sure this very important mission is taken care of.

Mr. KLINK. Doctor, how do we change the culture at the labs, where they are focused also on security and safety and environment, along with creating the product that they are? How do we do that?

Mr. HAPPER. I think that education can be done in the labs. For example, in the last few months, there have been lab-wide meetings. There have been stand-downs, where people were educated on what is required in security, computer security. Many of them were very grateful for that. That was the first time they knew some of the issues. So that could be done, and that is done because, at least for the present, people are paying attention to that who have the muscle to make it happen. Of course, in 6 months, who knows what will be the crisis of the day. That will tend to dissipate unless you have someone whose responsibility it is to make sure that that is an ongoing priority of the contractors.

Mr. KLINK. Mr. Rezendes, we seem to be headed with both the Rudman proposal and the Senate proposal with recreating the old independent Atomic Energy Commission again. Is that your opinion?

Mr. REZENDES. Well, it has some similarities. I think we raised concerns going back to 1978 in terms of how the reporting of oversight and counterintelligence are within the Department of Energy. We have seen that that structure has created problems in the past.

But I want to comment on one other piece of this, which is resources and holding people accountable. I would not fall too much in the trap of resources. They get close to \$18 billion a year. This is a matter of priorities, not a matter of whether they have the money.

It seems two basic elements should exist in any organization. One is that you do not injure or kill your workers, and two, that you do not release secrets in terms of what you are doing. Then the rest becomes what you can gain from the R&D and various other kinds of activities.

But it is not a matter of resources but holding people accountable, and if you look at the current tracking system, the University of California at Los Alamos is exempted from Price Anderson, so they do not pay any fines and penalties, and the Department of Energy basically says, well, we do not need to. We are going to hold them accountable through the contract. And if you look at how the contract provisions are, security and various other health and safety pieces are really a small portion of the award fee that the University of California gets. So, again, you failed on two aspects, the contracting aspect and fines and penalties, so there is very little leverage the Department can actually utilize to hold these folks accountable.

Mr. KLINK. I was interested, Dr. Kettl, in your response, if I can go back to my previous question. How do you think—

Mr. BARTON. That will have to be the last question.

Mr. KLINK. It will be, and I thank you for your courtesy, Mr. Chairman.

What do you think in regard to what Dr. Happer said about changing the culture about the laboratories to make them focus more on security? Do you agree with what Dr. Happer said or do you think something more needs to be done?

Mr. KETTL. I think, certainly, something more needs to be done. Let me make two points on the structure. The first is that I see nothing in most of the reorganization proposals that would in any way necessarily lead to a change in culture among the contractors, and second, those things that need to be done to change the contractors' culture can be done in the absence of a major restructuring, and, in fact, a major restructuring may get in the way by scrambling the boxes, preoccupying everybody with changing the names.

NASA has got a very interesting history on this. They faced a similar kind of problem in their Jet Propulsion Laboratory and engaged in a major culture change among that government contractor through a system of substantial training and reemphasis on leadership orientations and more emphasis on performance, and then built from the bottom up to ensure that what they needed to get done got done. That provides, I think, a much better model. The important thing about that is that they did not do it by trying to scramble the boxes at headquarters to get the job done. They started where the problem was, solved the problem there, and built from that point on.

Mr. BARTON. I thank the gentleman for the questions. The Chair would recognize himself for 5 minutes.

Dr. REZENDES, how many investigations do you think you have participated in that have looked at things in the Department of Energy?

Mr. REZENDES. A year? I would say, probably in any given year, we probably have maybe 20, 30 different reports on the Department of Energy.

Mr. BARTON. I mean, in your career at GAO, how many—

Mr. REZENDES. It would be hundreds.

Mr. BARTON. Several hundred?

Mr. REZENDES. Hundreds. Hundreds.

Mr. BARTON. Have you ever participated in an investigation where you were pleasantly surprised at what you found at DOE?

Mr. REZENDES. Once.

Mr. BARTON. One time?

Mr. REZENDES. The Naval Reactor Program.

Mr. BARTON. So there is one shining star at DOE in terms of their management that you would give them, and the rest of it has been black marks. Do you think that there is any way that we can, however you sugar coat this, change things in DOE to effectively manage the weapons laboratories?

Mr. REZENDES. I think we are talking about culture change. I think we are talking about more fundamental changes rather than just organizational changes and reporting responsibilities. I think that can be an integral piece to it, but it is really holding the contractors accountable. I cannot tell you the number of times we have testified before this committee on the lack of oversight and accountability of DOE and its contractors. Ninety percent of its appropriation goes to the contractors the first day of the fiscal year.

Mr. BARTON. Let us talk about contractors. The M&O contractor at the weapons laboratory, the University of California, how long have they had that contract?

Mr. REZENDES. For over 50 consecutive years.

Mr. BARTON. Over 50 consecutive years?

Mr. REZENDES. Yes, sir.

Mr. BARTON. Has that contract ever been competitively bid?

Mr. REZENDES. No, sir, it has not.

Mr. BARTON. It never has been competitively bid, has it?

Mr. REZENDES. Contrary to DOE's own internal policies to compete every 5 years, and every 5 years when this contract comes up, there is a movement to say that they are going to recompute, but at the end, they never do and they just renegotiate.

Mr. BARTON. Would you say 50 years is enough time to get your management team in place?

Mr. REZENDES. I would say, having this contract competed once every 50 years would probably be a good thing. I want to emphasize here, we are not talking about replacing the University of California there. We are not saying, fire them.

Mr. BARTON. Well, I am.

Mr. REZENDES. I know.

Mr. BARTON. I am.

Mr. REZENDES. What I am saying is, at least once every half a century, bringing other competitors to the table to talk about what they could do to manage those facilities would be a good thing. I find it very difficult to believe that 54 years ago when we selected the University of California, that the government had such foresight that they would know that this would be the best contractor for life. It is hard to imagine.

Mr. BARTON. It is hard to imagine. I can see a Congressman staying in office for 54 years—but in that case, every 2 years, the voters have a right to make a change.

Mr. REZENDES. Correct.

Mr. BARTON. Every 2 years.

Mr. REZENDES. And the University of California could manage this for another 100 years, but having competition would be a good thing.

Mr. BARTON. Dr. Kettl, what are your comments about the way the University of California has managed their 54-year contract?

Mr. KETTL. I have to say, Mr. Chairman, I have not looked carefully at the way in which that contract itself has been operated, but I want to associate myself with Mr. Rezendes' comments. If there is anything that we know, it is that competition enhances the ability of people to perform. Having clear standards for performance, having some penalties for nonperformance, having careful oversight of the contract is the one thing that we know that makes these things work.

Mr. BARTON. General McFadden, you said you have served in various capacities for the government. Most of that time would be in the military, for over 40 years, is that correct?

Mr. MCFADDEN. That is correct, yes, sir.

Mr. BARTON. Does the name Alger Hiss ring a bell with you?

Mr. MCFADDEN. It does.

Mr. BARTON. What happened to Alger Hiss and why did it happen?

Mr. MCFADDEN. Well, it happened because it is my belief that we had a man who, in fact, had been compromised because of beliefs that he had that Communism was the wave of the future.

Mr. BARTON. But he sold weapons secrets to the Russians, I believe.

Mr. MCFADDEN. That is correct.

Mr. BARTON. And he was convicted, and it was a controversial trial, but he ultimately was executed, is that not correct?

Mr. MCFADDEN. No. No.

Mr. BARTON. That is not correct? It was the Rosenbergs. I am sorry.

Mr. MCFADDEN. Yes.

Mr. BARTON. Mr. Sawyer is an expert on this.

Mr. CALVERT. Careful, Mr. Chairman.

Mr. BARTON. The reason I bring that up is that I am not aware that—there may be, but I am not aware that in this latest episode where the Communist Chinese, according to the Cox report, have gotten over 50 years of advances in our weapons technology, that there is any type of an investigation that is going to lead to that type of a conviction. Are you aware of any investigations going on, or are we all just kind of saying, well, it was a bad thing, but that is the way it is?

Mr. MCFADDEN. Mr. Chairman, I am retired at the present time and all I know is what I read in the newspaper.

Mr. BARTON. That is a very diplomatic answer. General, what about the lab director? Now, we have an M&O contractor, but there is actually a lab director at these laboratories. Would they not be overall responsible for the security? I mean, should they not be held accountable, in spite of all the overlays, and Congresswoman Wilson has got an excellent point about there are so many overseers overseeing the work. But each laboratory has one director. Should that person not be responsible?

Mr. MCFADDEN. It would seem to me that that person definitely should be responsible for that lab security and for the actions of the scientists in that lab and how they carry out security, and especially when they are allowed to go to international symposiums, the restrictions that may be placed on them and what kind of information they can provide.

You are always going to have problems in that area because, as you well know, when you are well versed in a subject and you are talking to someone else who is very curious about it, that you are going to inadvertently expose information. That in itself is serious, but when it is done purposely, then there should be a chain that would determine that and where there would be punishment that would be eventually dealt out.

Mr. BARTON. My time is expired, so I will save some of my questions for the second round. The chair would recognize the gentleman from Texas, Mr. Hall, for 5 minutes.

Before I recognize Mr. Hall, my daughter and wife have just come into the hearing room, so we would welcome Janet and Kristen Barton. They are visiting from Texas and I am glad to

have them here. My daughter has a boyfriend, so I just want everybody to know that.

Mr. HALL. I certainly want to welcome the first lady.

I have listened to the testimony as much as I could and have read all of the testimony you submitted earlier, and thank you for doing that. There is an old pun about rearranging the chairs on the Titanic. It probably would have had the loss of lives anyway, and that is about all I hear when they talk about closing down the Department of Energy or transferring it to the Department of Commerce or whatever. I do not know that you save any money or that you get any more efficiency. I think it costs a lot of money to do that and I think you are going to have the same expenses after you have done it.

We are in a time when, I guess, we have curtailed. There is talk about the FBI taking over. Their powers have been reduced so much because the accused have so many rights today. We could not even mine Antigua's harbors. We did not know the Wall was going to come down. Recently, the generals were firing \$1.240 million missiles at a \$12,000 warehouse and giving them 3 days to get everything out of it. I just do not see that these changes, just for the sake of change or to do away with the Department of Energy, is going to solve anything.

Talking about creating an Agency for Nuclear Stewardship, what would that do to security? What have any of you identified that that would help?

Mr. MCFADDEN. If I could speak to that, I would say that my feeling is that it would probably do very little and could, in fact, hurt security, depending on how it was carried out and what responsibilities were given to the new organization.

Mr. HALL. Mr. Kettl, you talked about accountability and the Secretary being authoritative. We have a pretty authoritative Secretary now. I do not always agree with him, but he is pretty well authoritative and you know pretty much where he is. I am going to be with him this afternoon. What do I tell him that he has done wrong and what can he do right to correct it? How can he be more accountable?

Mr. KETTL. The basic issue, I think, here is understanding what the problem is, and the problem is trying to find a way to change 50 years' worth of culture that is rooted in 50 years of the relationships of the sorts that we have talked about this morning. His basic job is to try to make sure that those researchers, the scientists, the managers out there in the field do what it is they are supposed to do in the way they are supposed to do it, and what he would most have to do is make sure that gets done. That is a hard job—

Mr. HALL. That is easy to say, but how do you do it?

Mr. KETTL. The how, I think, has to do with a couple of things. First of all, the Secretary has at his disposal the Government Performance and Results Act, which sets out clear strategic plans in a way to try to hold people accountable. It has a way of linking that to the Departmental budget to make sure that what it is that has to happen gets happening.

Third is, I think, a clear focus and an articulation of the nature of the Department's mission, not so much now but where the De-

partment wants to be in 5 years, making sure that is clear, making sure that everybody knows the nature of the culture that people are expected to follow, having clear performance goals, performance expectations, and, ultimately, some form of penalty for people who do not behave. I think that collection of activities articulated clearly by the Secretary would go a long way toward, in fact, trying to move in the right direction.

Mr. HALL. I am not just only asking about protection security-wise but environmental health, safety, cleanup at the weapons sites, and things like that. How can he be more accountable? Do they not have to have more authority if they are going to be authoritarian than we have given them?

Mr. KETTL. The dilemma is, in a nutshell, this, that everything that is necessary to make environmental cleanup work effectively requires close working relationships with State and local governments and with citizen groups who live around the areas that are affected. One could easily imagine a decision-forcing event that would have us here today talking about reforming the Department of Energy that would be focusing in precisely the opposite direction, some kind of accident in one of the facilities that would talk about the need for more openness.

We are here now talking about national security, and the Department's, indeed, the Nation's fundamental problem is finding a way of balancing those two, to ensure adequate stewardship of the nuclear stockpile while at the same time cleaning up the nuclear mortgage for the last 50 years in ways that inspire trust and confidence in citizens. It is finding a way to get the balance right that lies fundamentally at the core of the Department's issue, and that is why cutting the two apart, separating them, is so dangerous, because it allows us to engage in what in many ways is a fallacy of thinking that we can have it both ways simultaneously without building serious problems into the system, and that is precisely, I think, the thrust of Ms. Eldredge's testimony.

Ms. ELDREDGE. If I could speak to that, I think one of the problems is actually that the Secretary does not have a whole lot of power when it comes to the weapons program. The weapons program is extremely insular and has a lot of political power and the Secretary's ability to control its activities has been limited, particularly because Secretaries are in office for such a short period of time. The office that is in charge of doing enforcement on environment and safety regulations has very little clout within the Department. They do not have very many tools in their enforcement tool box, they have very limited budgets, and they are often ignored and have to plead their case at the secretarial level if they can get that opportunity.

Mr. HALL. Their hands are tied, in other words?

Ms. ELDREDGE. Correct.

Mr. HALL. How do we untie them? I think my time is up. It will take another hour—

Mr. KETTL. Mr. Hall, let me just answer that with one sentence. After the Challenger disaster, NASA had a very similar kind of problem and it was a problem of trying to find ways of ensuring that safety lay at the corner of everything that they did. What they did was they focused very clearly on making sure that they did

what they did in a safer way, working with their contractors to get it done. If we are looking for a model for reform, I think NASA, in many ways, is the place to go.

Mr. HALL. Their answer was to do nothing for 2½ years.

Mr. KETTL. But what they did is—

Mr. HALL. For fear of doing something wrong.

Mr. KETTL. What they did is they stopped very carefully and they asked, what is it that they want to do, how is it that they wanted to get it done, and how could they ensure that their relationship with the contractors would get them there, and that has been what they proceeded and their track record since has been stellar.

Mr. CALVERT [presiding]. Thank you. The gentlelady from New Mexico.

Mrs. WILSON. Thank you, Mr. Chairman. Dr. Kettl, you talk a lot about culture and about implementing basically what are quality management approaches in public institutions, at least the elements that you describe, the strategic planning time, the strategic planning of the budget, mission clarity, performance goals, and so on and so forth. What actions should Congress take in order to make sure that the Department of Energy implements that kind of a program?

Mr. KETTL. The single best thing that Congress can do is to ask the hard questions that ensure that the Secretary has no alternative but to ask those questions of the people who work for him. The Department is a very complicated operation in that 90 percent of what it does, it does through contractors, and the difficulty is ensuring from the top that the Secretary can find some source of leverage over those contractors. Those sources of leverage are complex and the difficulties of getting organizational change at the bottom in the end in organizations that are not part of the Federal Government, that do not involve Federal employees, are extraordinary.

NASA, as I suggested, had similar kinds of problems and the key is, and the most important thing that Congress do, is to focus on asking those hard questions so the Secretary, in turn, has to ensure that those contractors have to ask the questions of themselves.

The performance management system is the way to go, which clear leadership at the top setting clear and unmistakable goals about what it is that ought to be done, how it ought to get done, and ensuring that there are clear performance goals and consequences for poor performance. That, if the Secretary did it and it were enforced through the contracting system and insisted upon with strict oversight by Congress, is the most effective thing Congress can do to get this job done.

Mrs. WILSON. Thank you. I do not mean to be critical of any one individual, but one of the things that I talked about in my opening statement was the difference between managing and overseeing and that it is a lot easier to be an overseer than it is to be a manager and get things done. In light of that and in light of some of the strong positions taken today, I would like—and I did not find in the material given to us a complete resume on each of you, and so I would ask each of you to let me know and let the committee and everyone in the audience know how many years of experience

each of you has had in a management position, let us define this broadly, as the institutions including Los Alamos, Sandia, Livermore, Pantex, Oak Ridge, Y12, Savannah's tritium plant, Kansas City, Pinellas, which was probably open at a time when many of you were serving in government or whatever positions, or even the assistant directorate for defense programs at the Department of Energy.

Ms. Eldredge, how long have you spent at any of those institutions in a management position?

Ms. ELDREDGE. I have not worked at any of those institutions.

Mrs. WILSON. Dr. Kettl?

Mr. KETTL. I spent 2 years on a task force to advise the Secretary of Energy on issues of trust and confidence in the Department and have been working on management issues in government for 20 years. I have not worked at—

Mrs. WILSON. Have you ever managed at any of those institutions, Doctor?

Mr. KETTL. No, I have not.

Mrs. WILSON. Dr. Happer?

Mr. HAPPER. I was the Director of Energy Research under President Bush.

Mrs. WILSON. Have you managed in any of those institutions?

Mr. HAPPER. I certainly put contracts at those institutions and I tried to manage them.

Mrs. WILSON. General McFadden?

Mr. MCFADDEN. Five years as the Director of Security Affairs, but I have worked in that security field for many, many years, to include the National Security Agency, Defense Intelligence Agency, Army Security Agency during my tours as a combat arms officer in the United States Army.

Mrs. WILSON. Without diminishing anything you have done, sir, I will take that as a no. Mr. Rezendes?

Mr. REZENDES. I have not worked in any of those facilities.

Mrs. WILSON. Thank you, Mr. Chairman. No further questions.

Mr. CALVERT. I thank the gentlelady. The gentleman from Illinois.

Mr. COSTELLO. Mr. Chairman, thank you. Mr. Rezendes, let me ask you, in your testimony, you describe some very confusing reporting between the relationship from headquarters to the field offices to the operation offices and the labs, and I am wondering if Secretary Richardson has attempted to correct that problem, No. 1. No. 2, have you seen an improvement under Secretary Richardson attempting to resolve the problem? And No. 3 is, does the proposal to create an Agency for a Nuclear Stewardship, how do you see that addressing the relationship between headquarters, the field offices, and the operation offices in the lab?

Mr. REZENDES. Yes. The organizational structure has been confusing for many years. DOE has—I will give you a quick overview—has four business lines. They have program offices, which are the first crosswalk in terms of how they work in each of those business lines. They are carried out through field organizations, locations. The field organizations reported to contractors, which reported to operations offices, which reported to different levels in the organization other than the programming groups.

He has cleaned that up a bit. He has the operations officers, which have oversight responsibility for the facilities, reporting directly to the program office, which is the chief funder of that facility. So they cleaned some of that up.

We have seen that before, though. Secretary Watkins introduced a similar organizational structure during his tenure and his objective at that time was to address environmental health and safety issues, which were the major management problem of the day. Unfortunately, what happened was there was some confusion between the program offices, which had responsibilities for the facilities, and the staff offices, which had the environmental, health and safety oversight. So the facility was reporting, really, to two different places at the same time, even though they were reporting to their primary funder, which was the programming group, I will say defense programs or energy research, but the health and safety had conflicting and sometimes different priorities in terms of how their funds should be spent within the facility. So it was confusing there, also.

Mr. COSTELLO. But there has been significant progress?

Mr. REZENDES. Cleaning that up, correct.

Mr. COSTELLO. Let me also ask you, in your testimony, you talk about removing the cleanup responsibility from DOE could result in a decrease in the incentives to reduce waste and promote other environmental-friendly approaches. What do you think the consequences would be for cleanup if the responsibility for conducting them at the weapons facilities was shifted to an Agency for Nuclear Stewardship?

Mr. REZENDES. Whenever you shift responsibilities, you change not only the responsibility but you are also changing the management priorities and attention. If you want this new agency to be focused strictly on stockpile stewardship and weapons and research, by adding a cleanup piece to it, you will divert the management attention and its attention will be diffused and its prioritization and budget will also be diffused, as well. The clearer the goals, the clearer the objectives, the clearer the lines of responsibility and accountability, the easier it is to manage.

Mr. CALVERT. The gentleman's time has expired.

Mr. COSTELLO. Thank you, Mr. Chairman.

Mr. CALVERT. We will have a second round. The gentleman from Michigan.

Mr. EHLERS. Thank you, Mr. Chairman. In the interest of full disclosure that my colleague from New Mexico asked for, I should reveal that I am a graduate of the University of California and also confess that I have been a part-time manager of a number of different scientific and academic enterprises.

I would like to make a few comments and get some reactions. Dr. Kettl, I noticed your comment about the Secretary being in charge. That is very true, but that also illustrates the need for good Secretaries, and unfortunately, I do not think the Department has always had good Secretaries. Similar to the Commerce Department, it has often been a political buddy of the President because it has been regarded as a non-essential function, and I think both departments have suffered over their history by not having top-level individuals.

It is particularly important for the Department of Energy, because scientists and scientific research are very difficult to manage. It has often been compared to herding cats, but I think that makes it sound too easy. It is a very tricky business. But, at the same time, if it is done by the appropriate person, the rewards are boundless. Most scientists are willing to work 80 hours a week on their research if they have the proper motivation.

I worked at one time or another, at three of the national labs, one of which was a weapons lab, and this was in the late 1950's or early 1960's. The taxpayers really got their dollars' worth at that point. There was very little administration, either in the labs or in the DOE—at that time, it was the Atomic Energy Commission.

What I see now, especially looking at it from this perspective, is an incredible amount of administration. I find the same thing in the National Institute of Science and Technology. It used to be NBS, National Bureau of Standards. I have served on review panels there in my earlier life. A tremendous amount of time of the scientists was occupied with administrative work or trying to respond to administrative inquiries.

I think it is very important that as we worry about the security problem and we talk about reorganization, we recognize what the primary purpose of the laboratories is, and get an administrative system that works for that and get top administrators who can work effectively in that atmosphere and motivate the scientists.

I am appalled at suggestions of some of my colleagues that we have to put more money into security. I think that is a typical governmental response. If something is being done badly, give it more money so they can do more things badly. I think the problem is cultural and structural and we have to address it from that standpoint. The problem is not financial. The research effort tends to be shortchanged on money these days, but not the administrative end.

I think, in Dr. Happer's analogy, comparing it to the human body, we have to optimize the output for the amount of resources that we direct to it. We have to have a good self-functioning management system. We do not have it.

I would be interested in your comments, particularly Dr. Happer and Dr. Kettl, your comments to my observations. Am I on track or not on track, and if I am on track, how can we implement that?

Mr. KETTL. Mr. Ehlers, I think you are on track. I think you have made precisely the right point, which is, at the core, this is a cultural problem and it requires a cultural solution and the cultural solution comes and has to come first from leadership and structural efforts to support what it is that the mission is. These restructurings that get in the way of the mission could be clearly detrimental, and I think what we have to do is think carefully about what we want the Department to look like and be doing, say, 5 years from now, and make sure we make those actions now. I worry that what we are talking about doing in some of these proposals would, in fact, undermine our ability to do it.

One of the things we have done in the Federal Government in a very quiet but very effective way in the last 5 years or so is to put more responsibility for management in the Secretary, but especially in the Deputy Secretary. One of the very serious flaws in some of these proposals is cutting the Deputy Secretary out of the

management chain within the Department, of creating bypasses in this new separate unit out of the standard management practices within the Department, which would then make it harder to hold anybody accountable and to ensure the cross-fertilization of all of these efforts.

So I think that what we have to do is make sure we have clear accountability for this, and what Congress can do best is to ensure, first, that bad things do not happen, that we do not create new barriers to get in the way of what it is that we want to have accomplished, to ensure that this is not just a 6-month phenomenon, that our concern for national security as well as safety, environmental health, and the variety of other Department of Energy missions remain foremost and that we, in a sense, keep the heat on to ensure that what we want to have happen happens, because that is the easiest way, then, for the Secretary to transmit that mission and that message throughout the rest of the Department.

Mr. CALVERT. The gentleman's time has expired. Mr. Sawyer?

Mr. SAWYER. Thank you, Mr. Chairman. I would have enjoyed hearing that line of questioning go on further, not that I am going to yield the balance of my time back to Mr. Ehlers. I have to comment. I am just fascinated to hear the use of the human immune system and defending against common maladies and consumer services policies of Nordstrom's Department Stores and the discipline of recalcitrant teenagers. It sounds like we need a mommy at the Department of Energy.

General McFadden, you talked about a separate security agency within DOE. In fact, you said that it should have happened a long time ago. Would an agency of that sort or a structure of that sort contain all the safeguards and security and counterintelligence functions that are currently diffused throughout the Department in its many locations?

Mr. MCFADDEN. I think the one that was going to really solve the security problem throughout the Department would, yes. I think that the way that is proceeding now, Secretary Richardson has not included intelligence or counterintelligence and I believe that the reason that they were excluded may be that the PDD-61 that governs the reorganization earlier last year of those elements, he believed precluded making changes that would put them in that new organization. But one that had those would give someone the authority and responsibility for carrying it out throughout the Department.

Mr. SAWYER. Who should control the budget for such an operation? Should it be the Under Secretary?

Mr. MCFADDEN. The budget should be controlled by the individual that has that responsibility. That has never been. As you may be well aware, we have what is called a cross-cut budget, which is not a budget at the present time for security, to identify those expenditures.

Mr. SAWYER. And who should control security policy at each of the separate sites?

Mr. MCFADDEN. Security policies for the entire Department should be controlled by Safeguards and Security.

Mr. SAWYER. Let me get a reaction from others with regard to those inquiries. Does anybody else want to comment?

Mr. HAPPER. Let me comment, because if you go to Livermore, for example, or Los Alamos, you see all levels of security. You see heavily guarded, fenced plutonium facilities and you see other things like the Human Genome Project, which are completely open. For example, if you have a visitor coming to these labs, it does not make any sense that you apply the same rigorous background checks on someone coming to visit the human genome operations as someone who might be interested in things very classified.

So what worries me and what I have seen in the DOE is sort of a uniform policy on whatever the crisis of the day is, where common sense tells you that you should not be uniform, you should have some judgments. So the further removed the managers are from the actual front lines, the harder it is to make those judgments. So I think there have to be good people that you trust at each of the labs to do common sense security and do it religiously, but you should not second-guess them. They should report.

Mr. SAWYER. Not to a common policy, but perhaps to a common standard?

Mr. HAPPER. Yes, something like that.

Mr. SAWYER. Mr. Rezendes?

Mr. REZENDES. Yes. I think holding them accountable is really one of the key pieces here. For example, we saw a few years ago when counterintelligence was another issue and the Congress provided, I believe, an additional \$5 million to the Department to go to the facilities to improve counterintelligence. What we saw was down at the field level, basically, some of these facilities just substituted the money that they were previously spending and used the additional funding for counterintelligence.

It gets back to the Secretary having clear accountability, holding people responsible. I mean, here Congress was sending a clear message of what they wanted. They accepted the money, but it never got to what Congress directed it to.

Mr. SAWYER. Can those goals be accomplished when contract employees are responsible for those kinds of functions?

Mr. REZENDES. If you hold the contractor employees responsible. I think there are two levels of responsibility here. One is holding the contractor accountable for what they are supposed to do under the contract, and two—

Mr. SAWYER. I am not talking about just the contract. I am talking about the security function.

Mr. REZENDES. Right. I am talking about holding the Federal employees responsible that are overseeing the contract employees, making sure that they do what they do.

Mr. SAWYER. Are you all of one mind with regard to that question?

Mr. HAPPER. I think there is too much Federal oversight. Every time you turn around, there is some other Federal group coming at you for a review or an audit. If you did everything that every Federal employee told you to do as a contractor, you would have to shut down because it just does not add up. You do not have enough people and you do not have enough money to respond to all of these things.

Mr. SAWYER. General McFadden?

Mr. MCFADDEN. I believe that I agree with Dr. Happer, what he said a little earlier on the fact that you have to have a balance out there, but you do have to have a means for control of basic policy.

Now, it was mentioned earlier, the fact that we could not have a fixed cut for security everywhere and that this could be a problem, and that really is a misinterpretation of the system that is used with the design-basis threat, which says if you have nuclear weapons, this is the minimum that you must have. Then everything else has to be a balance of that. Some need more and some need less. If you have a completely unclassified operation, you may not even have a policeman at the gate.

Mr. SAWYER. Could you talk directly to the question of the role of contract employees in that kind of function?

Mr. MCFADDEN. Contractor employees are always going to be a part of the system, I think, regardless of how we do it, as long as 90 percent of the work of the Department is carried out by contractors.

Mr. SAWYER. Let me hear from the other end of the table on that series of questions.

Ms. ELDREDGE. I think one of the problems is the line between contract employees and Federal employees is very indistinct. It is hard to say who is the Federal employee and who is the contract employee at the lab sites. The labs, in some ways, have been running as a semi-autonomous agency all by themselves, without this legislation, and there is lots of talk of problems of too much Federal oversight, but I think one of the problems is perhaps not efficient Federal oversight and the wrong kind of overseers, because they have not really been able to keep the contractors in line and make them accountable, and part of that problem is the overly close relationship between the Federal employees and the contract employees.

Mr. SAWYER. Dr. Kettl, is this the way Nordstrom's would do it?

Mr. KETTL. You know, the Nordstrom case is interesting on this because what they do is they make sure that customer service is firmly implanted in the brain of every employee.

Mr. SAWYER. I understood your point. I did not mean to diminish it.

Mr. CALVERT. The gentleman's time is expired.

Mr. KETTL. And the important piece here in terms of national security is to make sure that that is imprinted in the minds of the employees, contractor or government official. It is government's responsibility to make sure that the contractors behave that way, and that, in many ways, is the nub of the problem.

Mr. BARTON. The gentleman's time is expired.

Mr. SAWYER. Mr. Chairman, thank you for your flexibility.

Mr. SAWYER. We will have a second round. The gentleman from Arizona.

Mr. SHADEGG. Mr. Chairman, let me begin by saying at least there is one element of consistency I do not believe any of you in your prepared remarks or in your remarks here today have applauded the Department of Energy's structural organization or their current efforts at security or compliance with safety or environmental fiscal years. So we at least seem to have come to agreement on that issue.

But I am intrigued with your comments on the conflicting proposals to correct the problem. Mr. Kettl, I kind of want to begin with you. You have cited the reform of the culture within DOE and DOE's contractors, and on that point, I agree with you.

But I want to explore with you the models you have cited and raise the question of whether or not those models are appropriate. I wrote down your comment. You said, Nordstrom does not do customer service, it trains its employees to make customer service a part of their job, and I think that is correct and I think that is a great model.

I guess my question, though, and I think this also goes to the NASA model—you cited the NASA model as another one where NASA had the Challenger catastrophe. I would argue to you and ask you to respond to this point. In Nordstrom's, every employee of Nordstrom's that I have ever met took pride in customer service. They understood that Nordstrom's was better at that and they understood that it was important for them to make customer service a priority and it was almost a badge of honor for them. So when they were told by management, "Make customer service priority," they understood that was a goal of the enterprise and they understood it was important for them to keep their job to achieve their goal.

At NASA, following the catastrophe, I doubt if you could have found a single employee of NASA or a contractor at NASA who would not have agreed that safety had to be No. 1. Certainly, NASA had to accomplish its mission, but it could not accomplish that mission if safety was not No. 1.

My argument to you, or the question I want to put to you is, I doubt if you can find agreement within either DOE's employees or agreement within DOE's contractors that nuclear security ought to be No. 1, and I guarantee you cannot find agreement within DOE's employees or its contractors that either safety or environmental compliance ought to be No. 1. If I am right about that and if you agree, does not that suggest either that there has to be an independent agency which can impose that mindset with some level of authority, or does it suggest that we have to move in the direction of what Mr. Rezendes suggests, which is a complete restructuring?

Mr. KETTLE. If you look at the behavior inside DOE, I would wager you probably could not find anybody who would agree it is a good thing for nuclear secrets to leak to a foreign nation. I think on that point, you can find a similar kind of agreement that has occurred within NASA.

Mr. SHADEGG. Well, let me interrupt you right there. I guess maybe I do not understand the labs as well as you do, but I have talked to some scientists from the labs, and for each of them, their program is the most important. Many of them, I think, they would not want to transfer nuclear technology to a foreign nation that was an enemy, the Communist Chinese, but they think their program, whatever it is, is the single most important function, and if as a result of achieving their goal some secrets leak out, I, quite frankly, think they have some belief that, look, that information is going to get found out by the other side already. They are developing the same stuff. This whole deal about security is overblown. Am I wrong about that?

Mr. KETTL. I have never seen a group of scientists who did not believe that what they were doing was the most important project in the world that they were working on. It is the kind of isolation, the kind of stovepipe within the Department of Energy that in many ways is its most serious problem. I think, in a nutshell, DOE's most serious problem is a series of semi-autonomous operations out there completely disconnected from headquarters and a headquarters that is encrusted with too many layers to make it difficult for the message to get through. So you have lots of debris at the top and isolated stovepipes at the bottom and the two never connect.

NASA, in fact, has gone out exactly this problem. The Jet Propulsion Laboratory had the same kind of problem. NASA scientists behaved in much the same way, where they believed their project was the single most important thing in the entire history of the universe. But what they succeeded in doing was talking to each other and understanding that there could be common ground between them, that achieving the organizational mission had some priority over their own individual project and that their project fit into the organizational mission and that they used that as a way to try to break down the stovepipes in between.

The difficulty with DOE is that if you visit the Nevada test site, which is clearly one of the, in terms of security, an important issue, in terms of long-term nuclear storage, an important issue, but in terms of partnerships with citizens, State, and local governments, an important issue, as well, if you try to separate out only security issues there, you run the risk of undermining what the Nevada test site as a mission has to accomplish.

Mr. SHADEGG. Is it not, then, Congress' job to decide with all these different missions, diffuse missions, that priority has to be placed on security, and is it not then Congress' job to figure out a structure which makes that the priority in the way that the management of Nordstrom's made customer service the priority?

Mr. KETTL. Absolutely. It is Congress' job to decide what the mission ought to be. What I worry about is in a previous life, I served on a task force for the Secretary of Energy, and I remember wandering through Rocky Flats where people were talking about hot dogs, prairie dogs that were wandering through plutonium waste and the fear was that they were radioactive in the process. The concern there was how you could clean up the site there and try to avoid in the process endangering people with contamination. That was the last crisis the Department had to solve, and as we discussed this morning, that became the No. 1 priority. I do not think that is going to go away, and we know, if nothing else, that is going to be with us for 75 years, trying to clean that up.

So we have the national security issue, which is not going to go away. We know that the nuclear cleanup is not going to go away. We know that long-term nuclear storage is a 10,000-year mission. What we have to do is find some way to balance all of these things out, and I do not think we have the luxury of picking just one.

Mr. CALVERT. The gentleman's time has expired.

Mr. SHADEGG. If I could just comment quickly, Mr. Happer, I certainly agree with you that someone has to own the issue of nuclear stewardship and I think you are right on that point. Mr. Rezendes,

if I get a second round, I would like to ask you about larger structural reform.

Mr. CALVERT. I thank the gentleman. The gentleman from Michigan.

Mr. DINGELL. Thank you, Mr. Chairman. Mr. Rezendes, in the light of your testimony and the examples that you have given, would insulating within a semi-autonomous agency answerable solely to the Secretary of Energy improve accountability, yes or no?

Mr. REZENDES. Within that, it would improve accountability.

Mr. DINGELL. It would? Now, would such a semi-autonomous agency make it easier or harder for States and citizens' groups to improve DOE's public health, worker safety, and environmental practices?

Mr. REZENDES. If the health and safety is within, it is probably going to make it harder.

Mr. DINGELL. It would be harder? Now, Mr. Rezendes, some in Congress and on today's panel believe that an independent weapons bureaucracy could be counted on to manage its own environmental health, safety, and compliance in a manner that protects workers and communities. Has GAO encountered any evidence over the past 30 years to indicate that this belief has any basis in fact?

Mr. REZENDES. Run that by me one more time.

Mr. DINGELL. Well, I have investigated them a bunch of times and I have never found a shred of evidence to support that view. I just mentioned, has GAO encountered any evidence over the past 30 years to indicate that an independent weapons bureaucracy could be counted on to manage its own environmental health, safety, and compliance in a manner that protects workers, communities, and the environment?

Mr. REZENDES. Again, not if they have the environmental, health, and safety aspects within the group. If there is external oversight, it could.

Mr. DINGELL. I remember the AEC well. There are not too many in this room who do. But it is my recollection that they had a very strong "public be damned" attitude. They would tell you nothing. They would do nothing except what they damned pleased. They have created a nuclear peril point at every one of their facilities and entrenched it with hazardous waste, and we have a prodigious mess to clean that up. It is going to cost us billions.

Now, is it not a fact, then, that the record is quite opposed to the view that we can count on them to protect communities, the environment, citizens, and to be responsive to their superiors?

Mr. REZENDES. We have been a long advocate, as you know, for external oversight and external regulation of the Department of Energy, and to the extent that that was in place, you could clean up some of these and have independent departments and have both.

Mr. DINGELL. Professor Kettl, does the proposal to create a semi-autonomous agency for nuclear security tasked with managing weapons plants and labs, overseeing its own environmental, health, and safety compliance, and equipped with its own general counsel, budget office, and intergovernmental liaison staff solve the security problems at DOE, yes or no?

Mr. KETTL. I have concern that it would do so and it runs the risk of replicating all the current problems inside a semi-department within the DOE.

Mr. DINGELL. And to suppress all information so that it would not escape from that black hole, is that not right?

Mr. KETTL. The goal is to try to ensure that other officials in the Department cannot stop it. I worry that your concerns are, in fact, valid.

Mr. DINGELL. All right. Now, does the proposal increase accountability at DOE, yes or no?

Mr. KETTL. No. I fear that what would happen is that information would be buried further inside the DOE bureaucracy.

Mr. DINGELL. Is it not a fact that the proposal does nothing to address the dysfunctional culture that now exists at DOE that both you and Senator Rudman have highlighted as a root cause of the security and management problems at DOE?

Mr. KETTL. That is correct. The missing link in these proposals is that there is no connection between the restructuring and a culture change that is retired.

Mr. DINGELL. I think you just made a very important point. A cultural change is needed, in good part because of the miseries that have been left behind by the incompetence and the arrogance of the AEC, is that not so?

Mr. KETTL. I believe that is correct. You can look over 50 years of history that lie at the root of the culture problems.

Mr. DINGELL. So we can then assume that this proposal would exacerbate rather than benefit DOE's management problems?

Mr. KETTL. I fear that is the case.

Mr. DINGELL. And it would perpetuate a "public be damned" attitude there, too, would it not?

Mr. KETTL. It runs the risk of undermining the efforts that are underway to try to improve the Department's culture.

Mr. DINGELL. Would it not be fair to say that DOE needs a comprehensive reform in order that the problems can be solved and that they will not be solved by simply converting defense programs into a semi-autonomous agency?

Mr. KETTL. That is correct, and any restructuring ought to be mission-driven.

Mr. DINGELL. Now, to the members of the panel, and you will have to understand I am under constraints of 5 minutes, let us address these questions. Could requiring DOE to compete its contracts for the Livermore and Los Alamos laboratories help improve accountability at those labs, yes or no? Mr. Rezendes?

Mr. REZENDES. I would say yes.

Mr. DINGELL. General?

Mr. MCFADDEN. Yes.

Mr. DINGELL. Sir?

Mr. HAPPER. No.

Mr. DINGELL. No? You do not think we ought to compete those contracts?

Mr. HAPPER. I think if you compete them, the first thing that will happen is UCal will drop out and you will lose a good fraction of the people that you need for your mission.

Mr. DINGELL. I have dealt with UCal before and I have found that they have cut a fat hog out there at those agencies and have raided the treasury, perhaps while you were at the Department, to have us fund their retirement program. Professor Kettl?

Mr. KETTL. You are speaking to a professor from the Big Ten, so I have certain views about that, but I think you are exactly right.

Mr. DINGELL. And, ma'am, what would you say?

Ms. ELDREDGE. Yes, recompetite it.

Mr. DINGELL. Now, next question. Should DOE be required to compete its contracts at the weapons labs? Mr. Rezendes?

Mr. REZENDES. Absolutely.

Mr. DINGELL. General?

Mr. MCFADDEN. Yes.

Mr. DINGELL. Mr. Happer?

Mr. HAPPER. No.

Mr. DINGELL. Doctor?

Mr. KETTL. Yes.

Mr. DINGELL. Ma'am?

Ms. ELDREDGE. Yes.

Mr. BARTON. You are saying compete, right, compete?

Mr. DINGELL. That is right, compete.

Mr. BARTON. C-o-m-p-e-t-e, not complete.

Mr. DINGELL. That is correct. I may have misspoken.

Mr. BARTON. All right, compete.

Mr. DINGELL. Compete. Let us start again.

Mr. REZENDES. That is what I was responding to.

Mr. MCFADDEN. I heard compete, yes.

Mr. HAPPER. Yes.

Mr. DINGELL. You agree? My word. Professor?

Mr. KETTL. Yes.

Ms. ELDREDGE. Competition is good.

Mr. DINGELL. Okay.

Mr. CALVERT. The gentleman's time has expired.

Mr. DINGELL. Could I just ask one more question? Should DOE be required to compete its contracts for all the laboratories?

Mr. REZENDES. Yes.

Mr. MCFADDEN. Yes.

Mr. HAPPER. No.

Mr. KETTL. Yes.

Ms. ELDREDGE. All the laboratories and all the facilities.

Mr. DINGELL. Thank you. Mr. Chairman, you are most gracious. I thank you for your courtesy.

Mr. CALVERT. I thank the gentleman.

I recognize myself for 5 minutes. Dr. Kettl, you mentioned Nordstrom's, and also Wal-Mart was brought up, Chrysler, I think, was brought up and the reengineering of that company, certainly NASA was brought up. In all of these examples, there was something in common, and that was a very strong personality in charge of the companies, a strong CEO. Dan Goldin certainly has been instrumental in restructuring NASA.

Mr. Rezendes, you brought up the one occurrence over the years that you had a happy experience with the——

Mr. REZENDES. Naval Reactors.

Mr. CALVERT. [continuing] And I would say that Admiral Rickover probably had a lot to do with that. I would suspect that Admiral Rickover's management chart was pretty simple. It started with him and probably ended with him. General Grove, I understand, had the same type of mentality with the Manhattan Project and managing the development of the atomic bomb.

I wanted to agree with my friend from Michigan's comments earlier that, really, the problem, I think, starts at the top. We have not really focused on putting a Secretary of Energy in and give them the responsibility to make the changes that are necessary, not only in the operation of the Department of Energy but every aspect of that Department.

With that, my question, Mr. Rezendes, you state that the DOE's fundamental organizational problem is the laboratory contractors and their field offices receive funding, program direction, oversight from several different headquarters offices, which sometimes have overlapping responsibilities. Creating a clean line of accountability with DOE's complex structure has not yet been achieved. Is there a legislative fix to creating such a clean line of accountability or would you think a better way to do this would be to get a Secretary in there that truly knows what they are doing as far as management and taking over an operation of that size?

Mr. REZENDES. I am even going to make a third option here. I really think you need to reassess the Department and its missions to reassess the Department and its missions. I mean, it basically evolved from the Manhattan Project and created in 1977 to address the energy crisis. Then in the 1980's, the majority of its budget went into production of nuclear weapons. Now, the majority of its budget is into environmental cleanup.

I testified with Secretary O'Leary when she was in office and she said that she introduced herself not as Secretary of the Department of Energy but as the Secretary of the Department of Science. My question is, they are reinventing themselves without Congressional approval or authorization, and if this is really now the Department of Science, what other pieces in the Federal Government ought to be brought in to make it an effective organization?

The other side of the coin is, what happened to all the missions Congress gave them when they were not the Department of Science, and I think that is part of the problem today. It has four broad missions and the question is, if the Department of Energy did not exist today, are these the four broad missions that need to be brought together to achieve some kind of national purpose, and I think Congress needs to sort that out in relation with the administration in terms of what are the real missions we want them to do? Are these governmental functions? If they are governmental functions, is this the right structure and the right location to carry these out?

Mr. CALVERT. Any comment from the other panelists?

Ms. ELDREDGE. I think it would be a big job to ask one person to come in and, on the force of their personality, get a grip on this agency. Not only does it do a lot of different things, but as the Rudman Commission report pointed out, it is under the jurisdiction of something like 18 Congressional committees, all who have certain funding priorities that they want to see continue. I think that the

fact that the bureaucracy at DOE has a great deal of entrenched power and a great deal of political power and that anyone coming in at the headquarters level has a very difficult time trying to enforce any kind of new structure or any kind of reforms on that bureaucracy.

So I do think it is going to be up to the Congress to think about a better way of doing business there. Unfortunately, I do not think it is a quick fix. I think it is a case of legislation that needs to be very carefully crafted.

Mr. CALVERT. Yielding back the balance of my time, I recognize the gentleman from Illinois.

Mr. COSTELLO. Dr. Happer, one of the first things that then-Energy Secretary Watkins did when he came into office was to establish independence, oversight, and he gave priority, in fact, to environmental, health, and safety performances. I am just wondering, why do you think that reverting back to an organizational structure that does not explicitly give priority to environmental, health and safety matters and instead gives free reign to nuclear weapons production personnel make sense?

Mr. HAPPER. I do not believe that. I believe that you need an organization in which environmental safety and health is one of many missions that have to be balanced, and when Admiral Watkins, who was my boss, was running the Department, he paid close personal attention to all of these issues and he addressed them day by day. That is almost super-human. There are very few Secretaries who could do that. So I think it is asking too much for a Secretary of Energy to do all of the obligations that Congress has put on him or her and at the same time do this extremely important mission of nuclear weapons, safeguarding our nuclear security.

Mr. COSTELLO. But if, in fact, we had an Agency for Nuclear Stewardship to oversee its own environmental health and safety performance, would that not basically amount to letting the fox watch the hen house?

Mr. HAPPER. I was interested in Mr. Rezendes saying that the one pleasant surprise he had was the Naval Reactors. That is the only organization in the Department of Energy now that is anything like what is being proposed. I never signed a single document that did not say, "This does not apply to Naval Reactors."

Mr. COSTELLO. I am not quite clear on your answer.

Mr. HAPPER. The answer is that Naval Reactors runs its own show and it actually runs quite well.

Mr. COSTELLO. General McFadden, you have mentioned that whatever reorganization the Department goes through, that we need to concentrate on organization, budget, and attitude. You commented on the organizational structure. We have heard a lot about attitude. What did you have in mind when you talked about budget?

Mr. MCFADDEN. What I had in mind when I talked about budget is to take the moneys that are being spent on security, and I am not saying that the problem is total amounts. The problem is that it is diffused, that sometimes you get a new parking lot when you should have had maintenance on a security fence using the same dollars. That is because that money is given out to the various organizations, then executed by the contractors, and until you get

your report at the end of the year and can go down these many lines to determine, was it spent or was it not, then you are a year behind and you try to get the fence fixed the next year, or whatever.

So I say that the solution that I believe is the only solution that is going to make this work in the long run is to take the \$850 million a year that is being spent on security in the Department of Energy and put that in a line item and have that line item the responsibility of the man that is in charge of security for the Department.

Mr. COSTELLO. Mr. Chairman, thank you.

Mr. BARTON [presiding]. We are not used to people yielding back time. Does Mr. Shadegg wish to go first? I am going to be here a while. If you have a luncheon engagement, I can recognize you now.

Mr. SHADEGG. That is fine with me, Mr. Chairman. You can go or I will go. If you are ready for me to go, I will go.

Mr. BARTON. Let me go. I thought you had a lunch engagement.

Mr. SHADEGG. No, I rearranged my lunch.

Mr. BARTON. Okay. The Chair would recognize himself, then, for 5 minutes. I want to just recapitulate Congressman Dingell's statement. With the exception of Dr. Happer, all four of you stated that you thought these contracts should be either competed or recompeted, is that true?

[All nodded yes.]

Mr. BARTON. A follow-up to that. I am of the opinion that an academic institution whose very interest is openness and collegial exchange is probably not the best type of contractor to manage a weapons laboratory. When we recompete these contracts, are you all willing to allow academic institutions to compete for the contract, or would you restrict them to non-academic institutions in terms of competition? Let me start right down the line.

Mr. REZENDES. I have no preference. Basically, we have looked. I think there are some benefits to having a non-profit in association with the university, but I think there are ample universities out there who would come forward and compete on these contracts.

Mr. BARTON. Okay. General?

Mr. MCFADDEN. I guess that I would have to come down on the side of having professional management companies or corporations taking over and then subcontracting the specific scientific work to the universities.

Mr. BARTON. I know, Dr. Happer, you said that you do not think they should be recompeted, but if we are going to recompete them, do you have any restrictions on who competes for the contracts?

Mr. HAPPER. No. I think you should let academic institutions be part of the competition.

Mr. BARTON. Dr. Kettl?

Mr. KETTL. I would agree.

Mr. BARTON. And Ms. Eldredge?

Ms. ELDRIDGE. We do not really have a position one way or another, but we do think that, regardless of who the manager is, non-profit or not, they should be subject to the same fines and penalties for violations as a for-profit company.

Mr. BARTON. That brings my next question, because if you are going to re-compete and you are going to allow academic institutions to compete, then should you hold them subject to the same set of conditions as the for-profits? I know, Mr. Rezendes, you said yes.

Mr. REZENDES. Yes, absolutely, and I think there is a way to do that. The University of California, while they are a nonprofit, we do pay them a management fee for running these facilities. For example, they get \$7 million a year for Los Alamos. I think, all together, there is something like close to \$14, \$20 million. I do not know what the exact number is here. They use that money, depending on how their performance is, to plow it back into research that they think is of priority. That is an important element in any research organization. If you deprive them of those research funds, you are creating a penalty. We can create fines and penalties to the extent of up to what the award fee or the management fee would be for those institutions.

Mr. BARTON. Does anybody want to comment? General?

Mr. MCFADDEN. I would only like to make one statement, and that is when we talk about the measure of performance determining what goes into that final payment, I think you are hard-pressed in most cases to find any meaningful references in those performance ratings to security performance. That has been a long-term problem.

Mr. BARTON. So we need to highlight the security aspect of it?

Mr. MCFADDEN. Yes.

Mr. BARTON. Does anyone else wish to comment on that?

Ms. ELDRIDGE. I think it is ridiculous that they can get an award benefit and not have to pay fines for failures. I think the University of California got 95 percent of their award in previous contracts and cycles, yet they had half-a-million or more in fines that they did not have to pay. That sort of structure just seems destined for failure.

Mr. BARTON. This question is an open-ended question, but it is in some ways the heart of what this hearing is all about. Let us assume for a second that we are not going to maintain the weapons laboratories within the DOE, that we are not going to do this. It is not going to be semi-autonomous. It is not going to report directly. We are going to take them out of the Department of Energy.

I want each of you to tell me where you would put the weapons laboratory, if it is not going to be within DOE, and more broadly, to go to what Mr. Rezendes has talked about and which I support, if we were to dismantle the Department of Energy, where would you put the various components of the Department of Energy? We will start with you, Mr. Rezendes, and go on down the line.

Mr. REZENDES. Sure. I think Bob Galvin, who headed Motorola, chaired a task force the Secretary looking at exactly what to do with the laboratories and I think he had a very good suggestion, which was have them as stand-alone, sort of like a Mitre Corporation, where they would do Department of Energy work but the Department of Energy would be a client just as other people and would compete for some of the resources that were there. I think that is a good model to take a serious look at.

I think in terms of some of the other places how the Department could be moved, this was one of the subjects of what we asked this expert panel that we brought together. Just about everything that the Department of Energy does today could fit someplace else, without question. The real issue is, what does that do to the gaining agencies' management attention and budget priorities? I think you have to take a close look at that.

For example, if you move the cleanup program to EPA, the cleanup program at DOE is \$230 billion over the next 30 years. That will dwarf the Superfund program and the management attention there totally different than what they have today. Similarly, moving the cleanup to, let us say, or some of these facilities to DOD, you are going to change the management attention and priorities. If you want the Department of Defense to be a clean military operation, giving them a factory operation is going to also change their priorities, and that may not be something—well, let me put it this way. It is something you want to take a heavy look at and get both sides before you make that move.

Mr. BARTON. I want to understand. On the weapons laboratories, you are advocating making them independent, stand-alone entities, I assume that would report directly to the President, is that what you are advocating?

Mr. REZENDES. They would be, under the Galvin recommendation, they would be sort of a government entity, a government corporation, sort of.

Mr. BARTON. But they would be independent and report directly to the President?

Mr. REZENDES. I think the way he had it, he had a board of directors appointed by the President that would run the facilities.

Mr. BARTON. Okay. General McFadden? As soon as they answer, then I will yield to Mr. Sawyer.

Mr. MCFADDEN. Just very quickly, I guess I would object to the basis of the question in that I have never felt that it made much sense to remove those labs from the control of the Department, because from a security point of view, then you just create various other places where you are going to have security problems and you are not going to have the expertise that will be available to go to those diffused and work in those diffused areas, that will have the knowledge of the type of security that is required for nuclear materials.

Mr. BARTON. You can object to the question, but I still want you to answer it. So assume it is not going to be within the Department of Energy. Where would you put them?

Mr. MCFADDEN. I guess I would go for Defense.

Mr. BARTON. Put them in the Department of Defense?

Mr. MCFADDEN. Yes.

Mr. BARTON. Okay. Dr. Happer?

Mr. HAPPER. Well, certainly, when you speak of the labs, I take it you mean the whole complex, the labs—

Mr. BARTON. I am specifically on the weapons laboratories, but, obviously, they do some non-military research.

Mr. HAPPER. Right. Right. I agree that the only other logical place to put them, and I think there would be big problems, would be the Department of Defense.

Mr. BARTON. You would not be willing to create an independent agency that reports directly to the President?

Mr. HAPPER. Well, I am not sure the President has time to look at all of these little independent agencies, even when it is as important as this.

Mr. BARTON. We have the United States Trade Representative who reports directly to the President. They are not cabinet agencies, but they are independent and they may have a board, but they are their own entity, and if we had the proper oversight, which I think Mr. Rezendes has spoken of very eloquently, then you would get that.

See, I just do not believe DOE can manage anything, and that may be just my opinion, but every time I have done an investigation of the Department of Energy, it comes out looking worse than before we started the investigation, in spite of your efforts when you were head of the office—

Mr. HAPPER. We tried hard.

Mr. BARTON. I know you did, sir. It is just a job that good people cannot get a grasp on sometimes.

Mr. HAPPER. Yes.

Mr. BARTON. Dr. Kettl?

Mr. KETTL. I guess I can imagine other places to put it, including an independent agency in the Department of Defense. I guess what I am concerned about is how you would do that without replicating the virus that you are trying to kill, that some of this is hard-wired into the nature of the missions and the conflicting expectations in the Department and the risk is that if you take it and move it someplace else, you carry with it all the problems you are trying to root out. You make it more difficult to deal, as the General pointed out, with things like national security, and compound that with the fact that you may increase the problem of oversight and make more difficult all the partnerships that you need to build.

Mr. BARTON. Give me an answer. We have lots of people who can give us the problem, and you have done a very good job of that. Do you have an opinion? If we let you pick where to put it, where would you put it?

Mr. KETTL. If I were to put it someplace, I would probably create it as an independent agency, but I would resist doing that to begin with.

Mr. BARTON. So your preference, then, would be to keep it within DOE?

Mr. KETTL. Yes.

Mr. BARTON. Okay. Ms. Eldredge?

Ms. ELDREDGE. It is a very difficult question and one we have been wrestling with as an organization for a number of years. The primary issue of concern to us is, regardless of where any of the pieces of DOE went, that there is oversight by external agencies. If you can set up a structure where the relevant regulatory bodies actually have some authority and control over activities, then I think the question of where becomes slightly less important, at least on some of the environment and safety issues.

Regarding structure, some people have talked about the Department of Defense and there have been pros and cons on that. Other people have talked about recreating an entire new agency that

pulls some of the pieces from the current DOE, not just the weapons laboratories but some of the other functions, as well, because trying to move basically production facilities and operations, such as currently in DOE, into some of the existing agencies does not seem to fit that well.

Mr. BARTON. I know none of you want to answer this question, and it is not a good answer, but you have not answered it, either. Everyone has tried to dodge the question. Would you keep it within DOE, and if you cannot keep it within DOE, where would you put it?

Ms. ELDREDGE. I would change DOE.

Mr. BARTON. You would change DOE? That is impossible. So do you want an independent agency, do you want to put it in the Department of Defense, or do you want to put it in the National Security Agency? There are a number out there.

Ms. ELDREDGE. None of the above.

Mr. BARTON. None of the above? Okay. My time is expired. I recognize the gentleman from Ohio, Mr. Sawyer.

Mr. SAWYER. Thank you, Mr. Chairman. Let me return to Mr. Rezendes' answer. Am I correct that I heard you say you thought that it ought to be an independent entity, perhaps governed by an independent board of directors?

Mr. REZENDES. That was the Galvin Commission.

Mr. SAWYER. Yes. You advocated it, though.

Mr. REZENDES. I do not have a position, but I think it is—

Mr. SAWYER. I guess that is true. You do not have a position, but I am just fascinated by that model. It sounds so much like the Postal Service. I do not have anything against the Postal Service—in fact, I admire the Postal Service, but I am just not sure that that is the model that—

Mr. BARTON. Really, the truth is, Congressman, nobody knows exactly what to do, and that is—

Mr. SAWYER. Yes. I think that is absolutely true, and one of the great difficulties that we face is that as we face an agency as it exists, simply breaking it up and moving it about to different places creates its own universe of problems. Trying to come to grips with those, I think, is particularly difficult.

I look at the way that a new agency would have its own set of security and environmental and safety operations, to say nothing of its logistical operations, its own legal structure, its own communications structure, its structure to deal with State and Federal Governments, local governments. The rest of DOE has these functions. If we just talk about setting up an entity within the DOE to have handle all of those functions, I am assuming that that is both duplicative and potentially conflict-laden and also multiplies costs, at least on the logistical side. Would you all agree with that?

Mr. REZENDES. Well, I mean, even if it were effective, it is only dealing with 35 percent of DOE's budget. Defense programs is only about a little over a third of their \$18 billion a year. So you have still left two-thirds of the Department—

Mr. SAWYER. I can barely hear you.

Mr. REZENDES. I am saying, defense programs is a little over a third of the Department's budget, so even if it were a great idea

and were very effective, you are still not dealing with two-thirds of the operation of the Department of Energy.

Mr. SAWYER. That is exactly my point, and it would cause substantial difficulty in that regard. Would it not also be difficult to have consistent policies across the agency? If we had a cleanup situation at one of the sites, who would speak for the agency in the circumstances that you envision? It would probably go to the President. It usually does in the end. If it is enough of a catastrophe, it would. Ms. Eldredge, do you have any thoughts about that?

Ms. ELDREDGE. If it was a new agency with just the laboratories? I am not sure I understood your question.

Mr. SAWYER. It involves several different models, the one where we function within the agency, whether there is a new agency. It is a set of problems to create a universe of their own. It is the problem that someone said, I guess it was Dr. Kettl, stealing from Dr. Happer's analogy where he said that we would be replicating the virus that we are trying to kill. I thought that that had substantial wisdom to it.

Ms. ELDREDGE. I think one of the problems when people are talking, with any new agency whose primary mission is weapons production and weapons research, it is not going to want to spend its resources on cleanup activities or safety and health or perhaps even security functions. I mean, that is the problem we had in the past. Admiral Watkins stated in his testimony in 1989, I believe, that the weapons production people thought weapons production was incompatible with environment and safety compliance and he aimed to change that, and his change was to pull those functions out of the weapons production line.

Now we are looking 10 years later at reversing that and expecting somehow that that makes a more accountable system. It did not make an accountable system 10 years ago. The culture has not changed appreciably in that time. I do not think it will make a more accountable system now.

Mr. SAWYER. Let me follow up on that. I was particularly interested in your observation that the proposed legislation for a new agency would leave nobody in charge of all of the plutonium sitting around the nonproduction sites and does not give the production sites any place to dispose of theirs. Do you have any sense of how any of these models might deal with that specific problem?

Ms. ELDREDGE. The Senate model is particularly problematic in terms of their restructuring proposal, which pulls the Office of Fissile Materials into this new Agency for Nuclear Stewardship, in that that office, while it makes the planning and analysis for what to do with our excess fissile materials, does not actually own any facilities or storage places for that material. Those facilities and production activities are all owned, so to speak, by the environmental management line.

So the Senate proposal essentially pulled the paper pushers over into their new agency but left all the material in with environmental management and the relationship between those two functions is not defined in any way and who has regulatory authority and who has ultimate responsibility for that storage.

Mr. SAWYER. Should I take it that you do not think the multi-State consortia would be able to solve this problem?

Ms. ELDREDGE. Not exactly.

Mr. SAWYER. Do others want to comment?

Mr. KETTL. I just want to agree with what Ms. Eldredge said, that the difficulty is that not only would the responsibility for, in a sense, the stewardship and the storage be separated, the safety and health responsibilities are unclear, but worse, are submerged even more deeply down with a firewall created between that and the rest of the Department, which, going back to your original question in ensuring coordination of Departmental policies, would surely make that situation much worse.

Mr. SAWYER. Others?

Mr. HAPPER. I would just like to comment that things have changed. We are not making nuclear weapons. We are gradually dismantling nuclear weapons, so it is not like it was in the 1970's and the 1980's where we were making them as fast as we could.

Mr. SAWYER. No, but it sets up a whole different series of weapons-grade materials problems that have to be dealt with.

Mr. HAPPER. That is correct, but they are of a different nature so that we are not producing huge amounts of solvents and wastes and the sort of things that were associated with weapons production. So there are problems, but they are different problems.

Mr. SAWYER. Thank you. Thank you, Mr. Chairman.

Mr. BARTON. The last questions are of the gentleman from Arizona, Mr. Shadegg.

Mr. SHADEGG. Thank you, Mr. Chairman. As I review your testimony, it appears to me that three of you are largely convinced that the creation of a semi-autonomous agency to look at security would not solve the problem. Mr. McFadden testified to that point, Dr. Kettl has so testified, and Ms. Eldredge says we should not reward them by granting them semi-autonomous status.

But you can see clearly that the frustration on our part is, what is it, then, that Congress can do? The creation of a semi-autonomous agency to focus on this at least lets us feel we have done something, and I think the chairman indicated our frustration with the Department and with the complete lack in Congress of any confidence that DOE can handle this problem well internally.

I would like to ask the three of you what specific recommendations you would then make. If the creation of a semi-autonomous agency focused on security and health and environmental compliance is not the right way to go, what specific things can Congress do, No. 1, and as a part of your answer to that question, do you agree with Mr. Rezendes' proposal that anything should consider a reassessment of all of the Department's missions? General McFadden, let us begin with you.

Mr. MCFADDEN. I guess I am restating the fact on the budget, and one of the reasons that the changes from a cross-cut to a line-item budget was never made was that many of the staff on several committees up here resisted such a change being made in the Department. I believe that now is the time for Congress to look seriously at having that kind of a change made within the Department of Energy so that not only can Congress get a better look before the money is spent as to what, in fact, is in the security and what

are the shortfalls that are known for security are not being given priority to be taken care of, and I would say that, as far as I am concerned, that is the key thing that Congress could do.

Mr. SHADEGG. Dr. Kettl?

Mr. KETTL. Let me, just by way of prelude, just for a second, quickly go over some of the restructurings that have happened in the Department over time. First, organized according to weapons production. Second, organized, then, according to energy 20 years ago, then reorganized to try to promote environment. Now, a discussion to try to reorganize for national security. There is a risk that the more layers we build on top of all this, the worse it all gets, and at some point, the structure simply gets in the way.

Mr. SHADEGG. I think that is Mr. Rezendes' point.

Mr. KETTL. I think what we need to do, if the question is what can Congress most effectively do, let me suggest three things. The first is, as I suggested earlier, the Government Performance and Results Act provides an opportunity for rethinking the nature of the Department's mission. If we are having a conversation with the Department about what it is that it thinks it is doing, to make sure that what the Department thinks it is doing is what you think the Department ought to be doing.

Coupled with that is the performance-driven piece of it, as well, of ensuring that what it is the Department thinks it is doing, it is held strictly accountable in oversight, so that there are performance measures that link directly to the strategic plans and overall to the mission. We have got to go back and rethink what it is that we want so that we make sure that as we are doing what we are doing now, we do not undercut the Department's ability to do what 5 and 10 years from now it needs to do.

The second thing, as the General has pointed out, is linking this notion of mission and performance directly to the budget and making sure that there is a clear linkage between the resources, the mission, and the performance.

Finally, as we have discussed today, focusing on leadership. Despite the discussions about structure, this is in the end a people problem. It has to do with the culture and the labs. It has to do with the leadership at the top. Chrysler got turned around, in part, because of the personal force of Lee Iacocca and his ability to be able to reach down to the operations on the floor and the contractors that Chrysler depended on to get the job done.

It is at its core leadership and a people problem, and if Congress focused on those three things, it could go a long way toward trying to solve this problem.

Mr. SHADEGG. Ms. Eldredge, you said it would be tough to rely on an individual to achieve that goal. You must, nonetheless, believe that we have to try.

Ms. ELDREDGE. Oh, certainly, and it would be great to have someone like that in charge and given the ability to actually do the job. I think two things Congress needs to look at. One is that these issues cut across the complex. They are not just at the weapons program or in the laboratories. Issues of security exist in several different aspects of DOE. They exist at the defense programs. They exist in environmental management with the fissile materials.

They also exist in nuclear energy with some of their reprocessing proposals and some of the proliferation risks from those proposals.

One of the problems with a semi-autonomous agency as being proposed now is it attempts to take just one piece, assume all the problems are in that piece, and set it aside without looking at the cross-cutting problems throughout the Department.

I guess, second, in regards to environment, safety, and health, I would ask Congress to revisit the question of external regulation. It came up in this committee 5 years ago. There was an external advisory board that made recommendations to the Secretary of Energy. Just recently, Secretary Richardson has said that they do not want to do external regulation and we think that was a mistake and we would like Congress to go back and look at that again.

Mr. SHADEGG. With the Chair's indulgence, I would like to ask one additional question.

Mr. BARTON. So ordered.

Mr. SHADEGG. Dr. Happer, you seem to be the one individual who believes that the semi-autonomous agency could be the correct structure to solve this problem, which would give at least us in the Congress the ability to say, see there, we did something. Now, it may not accomplish anything, as Dr. Kettl points out. I guess I would like to give you a chance to explain why you think that proposal is a workable one and could achieve the goal without causing a problem within the agency.

Mr. HAPPER. I already mentioned that the Naval Reactors Program runs very well and it is organized in that way. The other point is that it is very difficult for a single man or woman to manage the Department of Energy. It is so diverse and there are so many conflicting things you are trying to do. So having someone appointed at a somewhat lower level but still reporting to the Secretary would free them to focus on this very difficult problem of nuclear stewardship.

Also, I think it would lower the sort of political visibility of the person so that you could get someone who would more likely be technically competent, managerially competent, and without the political requirements to be a Secretary of Energy. Those are important, too.

So these are some of the reasons that convince me that we have to try something. I do not think it is possible—I agree with the people who said I do not think it is possible to reform DOE. It is too hard. People have tried and failed.

Mr. SHADEGG. I thank the Chair for its indulgence.

Mr. BARTON. Thank you. We recognize Congressman Calvert for a closing statement.

Mr. CALVERT. I want to thank the chairman. This has been a very interesting hearing and I would hope that we could have other joint hearings in the future.

Just to kind of wrap this up, wherever we go with this, whether we dismantle DOE or create a separate independent department or restructure the existing Department, I guess we all agree we do not want unintended consequences to take place and that the science that these national treasures produce is not damaged.

I have to put in a plug for the University of California. Certainly, there have been some management problems, but I would say that

the University of California has been an integral part of the introduction of the atomic bomb and certainly the hydrogen bomb, whether you like that or not. It has certainly been involved very much in the history of the nuclear program.

We need to look at these management problems and, at the same time, recognize that I think that some of the finest physicists in the world come out of the UC system and both are still there and are exported throughout the world, certainly one member from this committee, Mr. Ehlers.

With that, I thank the panel and look forward to, hopefully, fixing the problems at DOE, whatever solution we may take. Thank you.

Mr. BARTON. I want to thank you, Chairman Calvert.

We announced this as the first of a possible or potential series of hearings on this issue. I have signed a letter, and I think perhaps Congressman Calvert and Mr. Sensenbrenner, Mr. Bliley, Mr. Dingell, and several others, asking the Speaker not to move a reform package in the DOD authorization conference that is underway with the Senate so we can have the time to look at this in a little more detail.

I said at the opening that I am going to try to get the Energy and Commerce Committee to have a reorganization bill for the Department of Energy by the August recess. That is a very energetic time table. I am not sure we are going to meet it, but we are going to begin to think about it and put some language together. I would encourage our panel, if you have got suggestions, to put those in writing and get them to us because I think this is the time and I think these two committees are the two relevant committees to really comprehensively look at restructuring the entire Department, and within that, the weapons laboratories.

Dr. Kettl, in your analogy to Nordstrom's that seems to have resonated with many of the members, what is the goal of our weapons laboratory? I think their mission is to make sure the United States of America has the very best weapons in the world that maintain the security of the United States of America. With all due respect, many of these other missions that the weapons laboratories have been given, whether they are environmental or private sector research, they may help, but that is not their main mission. So we need to refocus on that.

I want to thank this panel for your willingness to come voluntarily, your willingness to speak openly in somewhat contrary to some of your past positions, at least when you were within the administration. It helps us a great deal to determine what to do.

I will be working with Congressman Calvert and Mr. Bliley and Mr. Sensenbrenner. It is very possible, and I would say perhaps even probable, that we may have another hearing before we break on a joint basis.

Again, thank you, and this hearing is adjourned.

[Whereupon, at 12:58 p.m., the subcommittees were adjourned.]