

UNITED STATES OF AMERICA

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DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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OVERSIGHT OF COMPLEX, HIGH-HAZARD
NUCLEAR OPERATIONS

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TUESDAY

NOVEMBER 24, 2009

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The Board met in the DNFSB Hearing
Room at 625 Indiana Avenue, N.W., Suite 700,
Washington, DC 20004, at 9:00 a.m., John E.
Mansfield, Vice Chairman, presiding.

PRESENT:

JOHN E. MANSFIELD, Ph.D., Vice Chairman
JOSEPH F. BADER, Board Member
LARRY W. BROWN, Board Member
PETER S. WINOKUR, Ph.D., Board Member

STAFF PRESENT:

RICHARD A. AZZARO, General Counsel
TIMOTHY J. DWYER, Technical Director
BRIAN GROSNER, General Manager
RICHARD E. TONTODONATO, Deputy Technical
Director

ALSO PRESENT:

THE HONORABLE DANIEL B. PONEMAN, Ph.D.,
Deputy Secretary of Energy

BRIGADIER GENERAL GARRETT HARENCAK, USAF,
Principal Assistant Deputy Administrator
for Military Application, National Nuclear
Security Administration

THE HONORABLE INES R. TRIAY, Ph.D.,
Assistant Secretary of Energy, Office of
Environmental Management, Department of
Energy

GLENN S. PODONSKY, Chief Health, Safety and
Security Officer, Office of Health, Safety
and Security

JAMES J. McCONNELL, Director, Office of
Safety, National Nuclear Security
Administration

DAE Y. CHUNG, Principal Deputy Assistant
Secretary for Environmental Manager,
Department of Energy

STEVEN L. KRAHN, Ph.D., Deputy Assistant
Secretary for Safety and Security,
Department of Energy

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P-R-O-C-E-E-D-I-N-G-S

(9:00 a.m.)

VICE CHAIRMAN MANSFIELD: The hour of nine having occurred, I am Jack Mansfield, the Acting Chairman, Vice Chairman, of the Board. And I have a certain amount of boilerplate I have to run through fast, required by law.

I am the Vice Chairman of the Defense Nuclear Facilities Safety Board, and I will preside over the meeting and hearing. I would like to introduce the members of the Safety Board who are present today. To my left is Joseph Bader, to his left is Dr. Peter Winokur, and to my right is Larry Brown. We four currently constitute the Board.

The Board's General Counsel, Richard Azzaro, is seated over here. Next to him is the Board's General Manager, Brian Grosner. To my right is Timothy Dwyer, the Technical Director, and several members of our staff that are closely involved with oversight

1 of the Department of Energy's Defense Nuclear
2 Activities are also here and will serve as
3 resources, if needed.

4 Today's meeting and hearing were
5 publicly noticed in the Federal Register on
6 October 20. The meetings and hearings are
7 held open to the public in accordance with the
8 provision of the Government in the Sunshine
9 Act, to provide timely and accurate
10 information concerning the Board's public and
11 worker health and safety mission throughout
12 the Department of Energy's Nuclear -- Defense
13 Nuclear Complex.

14 The Board is recording this
15 proceeding through a verbatim transcript and
16 video recording, and a simultaneous webcast on
17 the Board's website.

18 As a part of the Board's e-
19 government initiative, all of the statements
20 and the video will be available on our
21 website, with the associated documents, public
22 notice, et cetera. It will also be available

1 in our -- for viewing in our Public Reading
2 Room on the seventh floor, and an archived
3 copy of the video recording will be available
4 through our website for at least 60 days.

5 In accordance with the Board's
6 practice, as stated in the Federal Register
7 notice, we will welcome comments from
8 interested parties of the public at the
9 conclusion of the testimony. A list of those
10 speakers who have contacted the Board to speak
11 is posted at the entrance of this auditorium,
12 and we have listed people in the order in
13 which they contacted us or signed up. I will
14 call these speakers in order at the end, after
15 the government witnesses have spoken, and ask
16 that speakers state their name and title at
17 the beginning of their presentation.

18 There is also a table outside with
19 a sign-up sheet for members of the public and
20 members of the government that didn't have a
21 chance to sign up before. Any members of the
22 public who wish to speak that are on that list

1 will be invited to testify after those who had
2 made prior arrangements.

3 I ask people to keep their
4 original statements to five minutes, and the
5 chair will give consideration -- ultimate
6 consideration to additional comments should
7 time permit.

8 The presentations of the public we
9 would request be limited to comments,
10 technical information, or data concerning the
11 subject of the meeting and this hearing. The
12 Board Members may question anybody -- any
13 Members that are making a presentation to the
14 extent deemed appropriate.

15 The record of this proceeding will
16 remain open until December 24, and I would
17 like to iterate that the Board reserves the
18 right to further schedule and otherwise
19 regulate the course of this meeting and
20 hearing to recess, reconvene, postpone, or
21 adjourn this meeting and hearing, and exercise
22 its authority under the Atomic Energy Act of

1 1954, as amended. There.

2 Okay. Today's meeting is the
3 first in a series of Board meetings on
4 oversight of high-hazard and complex nuclear
5 activities within DOE (Department of Energy).
6 We preceded these hearings with eight public
7 hearings in '03 and '04 that were prompted by
8 DOE's proposal to change the methods and
9 techniques and arrangements for government
10 oversight of high-hazard operation.

11 What concerned the Board then, and
12 continues to be today, is this, in the face of
13 the changes that will be possibly made or that
14 have been talked about: will modifications of
15 DOE's and NNSA's (National Nuclear Security
16 Administration) organizational structure and
17 practices, with increased emphasis on
18 productivity and scientific excellence,
19 improve or reduce the safety and increase or
20 decrease the risk of high-consequence, low-
21 probability nuclear accidents?

22 I have quoted the recommendation

1 just now, because we have observed some areas
2 where progress has been made surely, but there
3 is subsequent evidence of backsliding. A case
4 in point is the difficulty establishing and
5 keeping established the Central Technical
6 Authority (CTA), which built up and has been
7 the subject of a bit of backsliding.

8 The Board became -- first became
9 aware of the -- that the CTA and Chief of
10 Nuclear Safety, which were originally
11 established in your -- in the Office of the
12 Under Secretary, subsequent to our original
13 understanding, but now we understand that the
14 CDNS (Chief of Defense Nuclear Safety) and the
15 CNS (Chief of Nuclear Safety) were restored,
16 but the question is: will they be considered
17 part of the Under Secretary's offices or as
18 part of a staff?

19 Regarding the complex work
20 performed by DOE and NNSA, we know where the
21 responsibility is for public health and
22 safety. It is squarely on the government

1 officials in charge and, Mr. Secretary, it
2 starts with you, or it starts with your boss.
3 It starts with you as the Chief Operating
4 Officer.

5 The Chief Operating Officer, in
6 our view, should be the champion for safety
7 and should be the adjudicator of resource
8 issues when it comes -- when a collision
9 occurs between the interests of production, of
10 science, and of safety. And by safety I mean
11 of course not just public safety but worker
12 safety, as well.

13 So from the beginning of the
14 Board, in our first testimony before Congress,
15 the Chairman insisted that public health and
16 safety was included in the Board's mission,
17 although it wasn't explicitly listed as a duty
18 of the Board to oversee public -- to worker
19 safety in the legislation of the Board. That
20 has been accepted by every Congress since
21 then.

22 I won't speak again against -- of

1 the Rickover Rule, but you know it well. Any
2 delegation of responsibilities you choose to
3 do, you will retain the absolute
4 responsibility. It is never given away and it
5 is never ceded, and that is what we believe
6 makes it work.

7 We believe that DOE has made -- 20
8 years ago made an astounding and encouraging
9 and very effective beginning with SEN
10 (Secretary of Energy Notice) 35-91, which
11 linked DOE's approach and dedication to public
12 and worker safety to the -- those of the
13 Nuclear Regulatory Commission with the
14 requirements to not increase -- the goal --
15 not a requirement, the goal -- not to increase
16 the risk of the public beyond a reasonable
17 amount.

18 That goal is not a requirement,
19 but it drives requirements, and the Board has
20 always expected to see DOE set requirements
21 and fund them to achieve progress toward that
22 goal all the time, every budget. We believe

1 that they have to be -- that those -- that 35-
2 91 has to be reaffirmed by action, and that
3 the absence of action on the part of DOE is
4 the surest indication to the public that their
5 dedication to 35-91 is slacking.

6 The Department of Energy, as all
7 complex organizations, doesn't run itself.
8 And it is my opinion, I believe shared by the
9 Board, that the Chief Operating Officer is
10 required to pay intrusive attention to the
11 activities under him, continually questioning
12 and demanding answers for questions that have
13 been raised by his people, by the public, by
14 the Board.

15 The potential hazards associated
16 with nuclear operations require that the
17 government -- of course, the contractor, but
18 certainly the government, possess technical
19 competence to do the work: safety. If the
20 government doesn't have that competence, it
21 needs to find it. It needs to hire it or it
22 needs to purchase it.

1 The government can't be an honest
2 customer for hazardous operation unless it is
3 the technical equal of the contractors. That
4 technical competence continually exercised,
5 and exercised in a way that challenges the
6 contractors' decisions, has proven to be
7 absolutely necessary to prevent big, expensive
8 errors, which have happened in the past
9 because DOE didn't know enough to get mad at
10 the contractor and make him prove what he was
11 doing.

12 We see evidence of this -- I'm
13 sorry to say we see it all the time, but we do
14 see stronger and stronger protestations by
15 your people, the contractors, not doing a
16 complete job. Putting that kind of pressure
17 on the contractor, as we have seen in a number
18 of things, most recently at the Waste
19 Treatment Plant, can only be good. Neglecting
20 to put pressure on the contractor can only be
21 bad, and it has been that way for a long time.

22 DOE has established goals, as in

1 35-91, and the -- as I say, continually
2 funding the wherewithal to proceed toward
3 those goals is the important -- most important
4 aspect of your safety management program that
5 we -- look, it can't -- we don't believe it
6 can be ignored, and if it is ignored in the
7 budget, it is ignored by you as -- in our
8 view.

9 As a self-regulating agency, of
10 course, DOE is expected to publicly maintain
11 vigorous oversight and talk about it and to
12 take every opportunity you can to make it
13 clear that you are running the show and not
14 the contractors. If that doesn't happen, that
15 message gets out very fast, in our view.

16 The workers, the laboratories, who
17 tend to be confused about this anyway, get
18 even more confused when it doesn't appear that
19 they are going to be held to the standard of
20 plants, for instance, because they're a
21 laboratory.

22 Fifth, the -- your promotion of a

1 safety culture has improved greatly. It
2 always has to be examined. It always has to
3 be -- you always have to undergo -- submit
4 yourself to self-examination. Safety culture
5 can only be maintained by mentoring, by
6 examination, by qualification, by challenging,
7 and by demanding continual improvement on
8 measurable metrics.

9 I believe you have done a great
10 deal toward that, but that is the quickest
11 thing to go, in my mind. If you don't insist
12 from the top on active measures like mentoring
13 and qualification, people get the message very
14 quickly.

15 There are 22 commitments under the
16 Recommendation 2004-1 on oversight of complex
17 and high-hazard operations. All of them by
18 now should have been completed. Progress has
19 been made on -- some of them are completed,
20 and progress has been made on some of them.

21 Lately, we have seen no
22 discernible actions for the Department on some

1 of them, and we will raise that with your
2 subordinate commanders as they come up in the
3 other -- in the subsequent hearings, perhaps
4 four of them.

5 The commitments we are most
6 worried about are this: research and
7 development; DOE seems to be puzzled and
8 confused about what kind of research and
9 development is required for safety. They made
10 -- you have made some good steps on things
11 that we clearly didn't know about, like non-
12 destructive examination and things like that,
13 but there are other things where the
14 contractor knows more than you are -- you do,
15 or the contractor doesn't know anything at
16 all.

17 I'll give you some of the
18 examples. There is no credible model for
19 pulse jet mixing in non-Newtonian fluids and
20 how they will suspend solids. And no one --
21 but DOE has to be ready to spend money to
22 build a factory that may behave in a way -- in

1 a bad way. It may not behave the way you
2 want.

3 I would imagine that DOE would see
4 that as a requirement for research on its own,
5 even though the contractor -- it would expect
6 the contractor to be able to do it. If he
7 can't, you've got to get him to do it or do --
8 or fund it yourself. In any case, you fund it
9 yourself, even if he doesn't.

10 But, you know, when you see
11 research failures, I believe that it is up to
12 you to push and make sure that they don't
13 happen. There is no credible theory and
14 experiments for what happens to pipes if
15 hydrogen explodes.

16 We are trying to find that now.
17 We are finding lots of mistakes that the
18 contractor made that he should never have, and
19 that we shouldn't have been the ones to find.
20 You know, the theory and practice, including
21 pilot plants for hydrogen in pipes and
22 vessels, are DOE's responsibility. If the

1 contractor didn't do them, I believe you have
2 to make them.

3 There is -- a third one is that
4 there is -- and this isn't just your fault, it
5 is the whole world -- there is no clear
6 understanding of the failure modes of SCADAs
7 (Supervisory Control and Data Acquisition) and
8 distributed control systems.

9 Everybody, including you, tolerate
10 as unavoidable the occurrence of unpredictable
11 mystery states where valves open and others
12 close and dampers open and power goes off, and
13 there are completely unexpected results from
14 what is really a causal process, not random.
15 It isn't cosmic rays; it is something that
16 somebody programmed in that you didn't know,
17 and they didn't know, and it -- there is no
18 way to convince me that it is not a safety
19 problem when that situation occurs.

20 Those are three areas where
21 nobody, I believe, is doing research, but I
22 certainly think that they are important for

1 safety.

2 And, finally, DOE committed to
3 develop quality assurance plans, as required.
4 This was declared complete. I think it's
5 good, but it is not very good. It is -- I
6 think that we are concerned with the fidelity
7 and implementation of the QA (quality
8 assurance) plans, and we will keep an eye on
9 that.

10 We will examine these topics in
11 greater detail, as I said, later on, and in
12 today's meeting I look forward to hearing your
13 responses now, your views. And after that I
14 will ask the members of the Board to either
15 make opening statements or ask you questions.

16 Mr. Secretary, the floor is yours.

17 MR. PONEMAN: Thank you, Mr.
18 Chairman, and thank you, distinguished members
19 of the Defense Nuclear Facilities Safety
20 Board. On behalf of Secretary Chu, I would
21 like to thank you for this opportunity to
22 speak today about the Department of Energy's

1 philosophy and approach to safety in general,
2 and to nuclear safety in particular.

3 I would like to begin by
4 recognizing the Board's essential role in
5 promoting safety at the Department's defense
6 nuclear facilities over the past 20 years.
7 Through its oversight of operations at these
8 facilities, evaluation of new nuclear facility
9 projects and review of proposed changes to our
10 nuclear safety requirements and guides, the
11 Board has provided the Department with
12 invaluable recommendations that have helped us
13 maintain and improve upon a strong nuclear
14 safety record.

15 We value your expertise and
16 insight, much of which you have just
17 displayed, and look forward to your continued
18 input as we fulfill our responsibility to
19 ensure safety at our defense nuclear
20 facilities.

21 In the invitation to this meeting,
22 you identified six topics that you wish to

1 discuss. Today I will focus on the first
2 topic -- expectations of the senior Department
3 of Energy leadership with respect to safety
4 philosophy and safety management approach.
5 General Harencak, Dr. Triay, and Mr. Podonsky
6 will address the other topics as they pertain
7 to their respective programs.

8 With respect to our safety
9 philosophy, let me state clearly that the
10 entire senior management team, starting with
11 Secretary Chu, is dedicated to maintaining
12 high standards for safety across the
13 enterprise. With respect to the Department's
14 defense nuclear facilities, the Secretary and
15 I are committed to ensuring the safety and
16 security of our workers, the public, and the
17 environment.

18 The Secretary and I established
19 goals for the Department and rely on our
20 program offices and site managers to manage
21 our operations safely and effectively, but you
22 are right, sir, that the accountability flows

1 up and down and rests with the Secretary and
2 me, and we accept that.

3 We expect our senior leadership
4 team to be responsible and accountable for
5 safety in the areas they oversee, and we hold
6 our line managers directly responsible for the
7 safety of our activities. We expect all line
8 managers to make sound technical decisions,
9 drawing on all available information,
10 including information and recommendations
11 provided by the Board.

12 The oversight of our complex,
13 high-hazard nuclear operations, a primary
14 subject of this meeting, shows how your
15 feedback has resulted in safety improvements
16 at the Department. At the end of the day, as
17 I stated earlier, Secretary Chu and I
18 recognize that we are accountable for safety
19 at our nuclear facilities and across the
20 Department. We take this responsibility very
21 seriously and expect every employee and
22 contractor to take his or her safety

1 responsibilities just as seriously.

2 The Department promotes a safety
3 culture to instill in every employee the
4 importance of safety at our nuclear
5 facilities. The safety culture encourages
6 setting and maintaining high standards,
7 identifying and resolving problems and
8 deficiencies, accepting criticism and
9 recommendations for improvement, and promoting
10 mutual respect and effective communication
11 between line managers and our staff offices.

12 The Board has asked if the
13 Department of Energy is committed to building
14 and strengthening our safety culture. The
15 answer is yes. I strongly believe that we
16 must continue to promote the safety culture
17 within the Department, and today I can assure
18 you that we will continue to do so. Effective
19 safety performance does not merely require
20 adopting the right systems and processes, it
21 also requires promotion of safety values and
22 beliefs and informing the behavior of the

1 people who manage and perform the work.

2 To improve our safety culture, the
3 Department will continue to focus on engaged
4 leadership and strong worker involvement. We
5 also need to educate our workers on safety
6 through programs such as the Voluntary
7 Protection Program (VPP) and the Human
8 Performance Initiative (HPI), and I can tell
9 you that in the numerous sites visits that I
10 have already made in my months in this
11 position, I have seen evidence of this in many
12 places across the complex.

13 It is our responsibility to
14 instill workers with understanding of their
15 missions, of the hazards associated with them,
16 and of our expectations for controlling these
17 hazards. It is also important to recognize
18 good work. Every single worker needs to be
19 accountable for safety, and we should reward
20 individuals, groups, and organizations that
21 meet our goals and expectations.

22 And in this connection, I would

1 like to note on my recent visit to Los Alamos
2 a number of the individuals at the complex
3 were recognized specifically for their
4 contributions to safety, both in specific
5 measures and the overall safety culture. We
6 actually handed out awards in this respect.

7 Where there are failures, our
8 system of oversight should teach both managers
9 and workers what they are doing wrong and how
10 to do it right, with a goal of fixing the
11 problem in a manner that minimizes the risk of
12 its recurrence. For a safety culture to be
13 effective, it needs to be -- it needs to
14 promote safe practices and recognize the
15 efforts of people and organizations that are
16 responsible, accountable, and successful.

17 This approach is more likely to
18 succeed than one that criticizes without
19 teaching or that adds new requirements where
20 proper implementation of existing requirements
21 will allow the Department to meet its safety
22 goals.

1 Our commitment to safety culture
2 builds upon long-standing departmental safety
3 policies such as SEN-35-91, Mr. Chairman, as
4 you referred to a bit earlier, the Nuclear
5 Safety Policy, as well as DOE Policy 450.4,
6 Safety Management Policy, and DOE P 441.1,
7 Department of Energy Radiological Health and
8 Safety Policy.

9 As we instill the importance of
10 safety in every worker, we also integrate
11 safety into every stage of our work from
12 planning to execution to control. The
13 Department continues to strive to improve
14 safety at our facilities through the use of
15 our integrated safety management system
16 approach. This approach treats safety as an
17 integral part of our work, not as an
18 afterthought, so that missions are
19 accomplished in a manner that protects workers
20 and communities.

21 We strongly support the
22 continuation of initiatives like integration

1 of safety into design -- another point that
2 you mentioned in your opening remarks which I
3 agree is critical -- to ensure that safety is
4 considered as early as possible in project
5 planning and development.

6 We will also continue to implement
7 the principles of nuclear safety that have
8 served the Department well, including
9 minimizing the inventory of hazardous
10 materials at our facilities, designing our
11 facilities in accordance with national
12 standards to minimize the potential for an
13 accident, utilizing highly reliable preventive
14 and mitigating safety controls, and ensuring
15 high levels of quality assurance in all our
16 activities.

17 The Department of Energy cannot
18 achieve its critical missions if we cannot
19 operate safely, and in this respect, sir, the
20 comments that you raised at the opening of
21 your remarks about whether we would view
22 productivity and scientific excellence as

1 something that would be advanced at the
2 expense of safety, I, frankly, view as a non-
3 sequitur, because safety is integral -- is
4 integral to our mission.

5 And if we are not delivering our
6 product safely, if we are not achieving
7 excellence safely, we are not achieving our
8 mission. So I actually think safety, having
9 been integral to the mission, cannot be put at
10 odds with the mission if we are thinking about
11 it properly.

12 We must achieve our missions. As
13 we face tremendous energy, security, and
14 climate challenges, the Department's work is
15 more important than ever. To help meet these
16 challenges, we are carrying out the missions
17 in the following areas: encouraging science
18 and discovery, building a clean, secure energy
19 future, promoting economic prosperity,
20 strengthening national security, and cleaning
21 up our environmental legacy, and lowering
22 greenhouse gas emissions.

1 Under our direction, the senior
2 leadership of the Department is developing new
3 management principles to ensure that the
4 Department is operating efficiently and
5 optimizing the use of our resources to more
6 effectively meet our needs. Let me assure you
7 and the Board that we are incorporating safety
8 into these new principles. We will only
9 succeed if we work in a manner that values
10 safety and protects our workers, the public,
11 and the environment.

12 These new principles will help us
13 more effectively manage our contractors and
14 projects. The changes will strengthen safety
15 and the safety culture at our defense nuclear
16 facilities. We also need to increase our
17 expectations of contractors when it comes to
18 nuclear safety, and, again, I think, sir, this
19 resonates with your opening remarks.

20 Safety requires every worker,
21 whether federal or contractor, to be vigilant.
22 We must have high expectations, while allowing

1 contractors to have flexibility to meet our
2 nuclear safety requirements more efficiently
3 and with measurable outcomes. In essence, we
4 are looking for more safety at less cost.

5 This is fully consistent with the
6 management approach to safety and the safety
7 culture that the integrated safety management
8 system aims to produce. Ultimately, the
9 responsibility for nuclear safety lies with
10 the Department and its leaders, and it is up
11 to us to oversee our contractors to ensure
12 both mission and safety goals are met and that
13 performance continually improves. We must
14 hold contractors accountable, and we must hold
15 ourselves accountable.

16 In addition, we need to provide
17 the appropriate level of safety oversight at
18 our nuclear defense facilities, both line
19 organization oversight and the independent
20 oversight provided by the Office of Health,
21 Safety, and Security (HSS). To streamline
22 this oversight and make it more effective, we

1 need to eliminate redundant, non-value-added
2 oversight of the same operations by multiple
3 organizations.

4 In this spirit, in August I
5 directed the Department to examine options for
6 improved regulation of worker safety. Our
7 goal was to look for improved ways to regulate
8 worker safety that would enhance productivity
9 and achievement of mission goals while
10 maintaining the highest standards of safe
11 operation at the Department's facilities.

12 The program offices will keep the
13 Department's leadership informed as they track
14 our mission and safety progress. The Central
15 Technical Authorities (CTAs), and their chief
16 of nuclear safety -- and Chief of Defense
17 Nuclear Safety (CDNS), will strive to ensure
18 that our line managers are working to enhance
19 our safety culture as part of implementing
20 their missions.

21 We expect the Office of Health,
22 Safety, and Security to assist the programs

1 and sites to promote safe operations and high
2 productivity. We will rely on HSS to provide
3 rigorous, independent nuclear safety
4 oversight, and to provide independent feedback
5 on how the Department's programs and sites are
6 implementing safety culture.

7 Finally, we look forward to
8 working with the Board and hearing your views.
9 We want your feedback so that we can have an
10 ongoing dialogue about safety at our defense
11 nuclear facilities. As you provide feedback,
12 we hope that you will recognize the positive
13 aspects of our safety programs as well as
14 provide insights into where we can improve.

15 The safety and security of our
16 defense nuclear facilities is vital to our
17 mission. We focus on this every day. We
18 remain vigilant and committed to protecting
19 our workers, protecting the public, the
20 environment, and the nation.

21 Thank you again for the
22 opportunity to speak with you today about

1 these important issues, and I look forward to
2 continuing our conversation today as well as
3 in the future.

4 Thank you.

5 VICE CHAIRMAN MANSFIELD: Thank
6 you, Mr. Secretary. That is just the start
7 that I expected from you, and that is -- it's
8 very good, very helpful.

9 I'll add one comment, and then I
10 will pass it on. Your predecessor, Secretary
11 McSlarrow, quoted Secretary Abraham in 2003 in
12 the following way: "I want to speak about
13 safety, because nothing is more important. If
14 we do this well, everything else will fall
15 into place. If we fail, nothing else we can
16 do to make up -- there is nothing else we can
17 do to make up for the failure."

18 This is a -- sort of like our
19 statement that safety breeds success, every
20 organization that has driven safety down to
21 the working level has ended up being more
22 productive. The history of PF-4 (plutonium

1 facility) at Los Alamos is a good example for
2 you to look at some time.

3 Now I would like to recognize Dr.
4 Winokur, the Chairman nominee of the Safety
5 Board, to ask some questions.

6 DR. WINOKUR: Thank you very much,
7 Mr. Vice Chairman. I was very appreciative of
8 all the comments you made about safety
9 culture, and as you are aware, the previous
10 Acting Deputy Secretary Kupfer issued a
11 memorandum in January of 2009 that suggested
12 taking integrated safety management to the
13 next level -- and integrated safety management
14 is the way we do work safely in the complex,
15 that taking it to the next level meant
16 establishing a safety culture, and based upon
17 your comments today, I would be right to
18 assume that you are in concert with that and
19 would agree with that.

20 MR. PONEMAN: I have not seen Mr.
21 Kupfer's specific remarks. I can tell you
22 that the ISM (Integrated Safety Management)

1 System is integral. We had a major conference
2 focused on the ISM System. I participated by
3 video conference. And so certainly the
4 sentiment of the importance of ISM and
5 deepening it throughout the DOE culture is a
6 sentiment that I share.

7 DR. WINOKUR: All right. And just
8 to add to that, there are activities, EFCOG
9 (Energy Facilities Contractors Operating
10 Group), and other activities within the
11 Department that are assessing safety culture
12 and attempting to improve it, and I sense that
13 you would be very supportive of that.

14 MR. PONEMAN: Oh, indeed, and this
15 is something we have encouraged, and the
16 review that I mentioned in my prepared
17 remarks, that we launched in August, we
18 specifically went out to organizations such as
19 EFCOG to make sure that their views were taken
20 into account, so that we would get the full
21 benefit of that kind of input.

22 DR. WINOKUR: Thank you. Now, Mr.

1 Secretary, you mentioned in your testimony
2 that -- about this August 7, 2009, memorandum
3 that basically launched a look at the options
4 for regulation of worker safety in the
5 complex.

6 MR. PONEMAN: Right.

7 DR. WINOKUR: And I know that work
8 has been done in that regard. Can you share
9 any of the findings of that study, any
10 potential recommendations you might be making
11 to the field, based upon that?

12 MR. PONEMAN: Well, we are still
13 in the process of that review, and so I don't
14 have anything conclusive. But what I can say
15 is that we asked for a thorough and integrated
16 look at how best to deal with worker safety,
17 which of course extends beyond nuclear worker
18 safety to worker safety writ large across the
19 complex, and as you well know, we have many,
20 many workers who don't have anything to do
21 with the nuclear mission.

22 And so there are a number of

1 generic options that were looked at and that
2 are continuing to be looked at. One group of
3 them is to basically see ways in which we can
4 improve our internal procedures, our internal
5 safety culture, our internal directives, and
6 achieve better results, both in terms of
7 productivity and in safety.

8 I will tell you that there is at
9 least a sense -- and I don't have massive
10 empirical data about this, but there is a
11 sense that there has been over the years an
12 accretion of directives, piled-on directives,
13 that have not always in the net produced -- a
14 net increase in safety, but indeed sometimes
15 an increased confusion and needed to take --
16 needed another look. So that was one set of
17 options that was looked at.

18 Another kind of option is whether
19 some third-party entity, other than within the
20 four corners of the Department of Energy
21 itself, could or should take on some of the
22 role, and it is well-known to all, you know,

1 what some of those entities across the U.S.
2 government might be, and so the question of
3 whether some external regulator should be
4 brought into the picture is also being looked
5 at.

6 I guess the last thing, just to
7 mention generically, because the study is not
8 done and we are still looking at things is,
9 there has also been -- there has been interest
10 expressed in looking at standards that are set
11 either by national or international groups
12 that are widely respected and accredited, you
13 know, ISO (International Organization for
14 Standardization), and so forth, that might
15 also bring some added safety benefit to bear
16 if they were used in some kind of measurable,
17 certifiable manner.

18 So those are the kinds of options
19 that are being looked at. We are not done
20 with the review. We have committed at the
21 Department that, before the Secretary makes
22 any decisions, we will consult with

1 stakeholders, which is the right and fitting
2 thing to do. And so, at such time as we shape
3 up the options to the point where we feel it
4 is ripe to bring in those parties to get their
5 views of some considered set of alternatives,
6 we will do that.

7 DR. WINOKUR: Thank you. I wanted
8 to just share some insights with you very
9 briefly about this study of options, and I
10 think there is a question here in the end,
11 too.

12 My understanding is that one of
13 the important drivers for this study of
14 options was the fact that DOE contractors felt
15 that the oversight, the bureaucracy, was too
16 burdensome, and that it was preventing them
17 from accomplishing their mission.

18 And along with that, we sometimes
19 hear that people feel the Department is too
20 risk-averse. Now, having worked in the labs
21 for 23 years, the Sandia National
22 Laboratories, I know that when we are dealing

1 with issues like scientists going to foreign
2 -- to international conferences, presenting
3 papers, or foreign visitors coming back to the
4 labs, things are very bureaucratic and it is
5 very frustrating.

6 But I am hopeful to draw a
7 distinction between that and nuclear safety
8 associated with nuclear operations. And it is
9 hard for me personally to understand how the
10 Department can be too risk-averse when it is
11 dealing with plutonium operations at Los
12 Alamos or chemical separation of enhanced
13 uranium at Y-12.

14 And along with that, I also
15 believe the directives that support the
16 nuclear operations, which we have established
17 over 50 years and are rooted in commercial
18 nuclear power and naval reactors, are also
19 very important.

20 So my concern in this whole
21 process is to make sure you don't throw the
22 baby out with the bathwater, that, if there is

1 oversight in the Department, that you are very
2 careful and very mindful, which you appear to
3 be, that nuclear operations are extremely
4 important and different than other areas that
5 the Department concerns itself with, which --
6 its science mission, for example, that are
7 very important.

8 Do you sense that distinction and
9 share some of my thoughts in that?

10 MR. PONEMAN: That is an excellent
11 -- I'm making a note so I don't forget. It's
12 an excellent question. Let me just make three
13 comments in response. Number one, nuclear is
14 different. There is no question about it.
15 The risks are unique and uniquely dangerous,
16 and they require a unique set of responses.

17 I don't think there is any
18 question about that, nor do I think that any
19 of the options that had been even considered
20 in this review that began in August that we
21 have been talking about have taken any
22 different premise.

1 Second, that having been said, the
2 Department is committed, in support of the
3 President and Secretary, to do certain things
4 that are defined as top-line missions -- and,
5 again, not only in the nuclear area, lowering
6 greenhouse gas emissions, creating
7 transformational scientific breakthroughs,
8 reducing nuclear dangers not only through the
9 maintenance of a safe, secure, and reliable
10 deterrent, but through a wide array of non-
11 proliferation activities.

12 And so one of the differences that
13 we see between the role of the Board, for
14 example, and our ourselves is the Department
15 has to remain focused on those top-line
16 missions. It is possible that if one were to
17 ignore those top-line missions and think only
18 about safety, that you could produce a, you
19 know, barnacled or an accretion of directives
20 that would not necessarily be net increasing
21 safety, but could be increasing cost,
22 confusion, red tape and so forth. And that

1 brings me to my third point.

2 I think what we are dealing with
3 here is what I have seen develop as something
4 of a false dichotomy, and it is this idea that
5 mission and safety are somehow at odds.

6 I had an interesting conversation
7 with a very now-senior manager, but somebody
8 who grew up operating hot cells, and he said,
9 I operated my hot cell safely, not just for
10 the sake of safety per se, but because if I
11 didn't operate it safely I wouldn't get my job
12 done in the mission space.

13 So one of the things I think,
14 frankly, we are trying to come to terms with
15 in building this kind of culture that we keep
16 talking about is really instilling, not just
17 in the feds, and not just in the contractors,
18 but in every individual the deep understanding
19 that safety is part of the mission. It is not
20 at odds with the mission.

21 And I think that is what we are
22 trying to do, and, therefore, for example,

1 when I arrived and hear these various
2 discussions about whether the program side or
3 the mission side is more dominant, I think the
4 important point is that every mission manager
5 has to own safety in terms of viewing it as
6 part of their core mission.

7 And I think every safety manager
8 has to view the mission as part of their core
9 responsibility, too. Only in that way will we
10 work together to deliver the results that the
11 President and the American people have every
12 right to expect at the level of safety that
13 the President and the American people have
14 every right to expect.

15 DR. WINOKUR: Thank you, Mr.
16 Secretary.

17 Thank you, Mr. Vice Chairman.

18 VICE CHAIRMAN MANSFIELD: Mr.
19 Bader.

20 MR. BADER: I think Peter has
21 asked most of my questions.

22 One that is left over -- I noted

1 that you were discussing seeking stakeholder
2 input on your proposed reanalysis of how you
3 plan to run the safety part of the Department.
4 I would like to ask if we are part of those
5 stakeholders in your mind.

6 MR. PONEMAN: You are, sir.

7 MR. BADER: Thank you. I have no
8 further questions at the moment.

9 I would like to make one
10 observation, and that is that we are here
11 today because there have been issues with the
12 implementation of 2004-1. And I would hope
13 that you would support the reinvigoration of
14 the effort by the Department to support 2004-
15 1's completion of the implementation plan.
16 And I think there will be good opportunity in
17 the near future to work with you on that.

18 Thank you for being here.

19 MR. PONEMAN: Thank you, sir.

20 MR. BADER: Mr. Vice Chairman.

21 VICE CHAIRMAN MANSFIELD: Mr.

22 Brown.

1 MR. BROWN: Thank you, Mr.
2 Secretary, for coming this morning -- I know
3 you are a very busy man -- and taking the time
4 out to meet with us.

5 If I could read a short statement,
6 because I think it is important, even in light
7 of what I would characterize as the
8 unequivocal support that you have stated for
9 safety and its importance to the complex, I
10 think it is important that you hear from me,
11 us, on where we stand, and to develop a mutual
12 understanding here.

13 After the Board issued
14 Recommendation 2004-1, it was followed up with
15 a tech report, Number 35 (TECH-35), that
16 provided background information and ideas for
17 implementing the recommendation. That report
18 summarizes academic research on organizations
19 involved in high-consequence operations, as
20 well as lessons learned from major accidents
21 and near misses.

22 What I think the Board is seeing

1 now is kind of a déjà vu. And prior to that
2 recommendation, we held eight hearings like
3 this, gathered testimony from a number of
4 individuals which led us to write that report.
5 At that time, it was the LO/CAS system, Line
6 Oversight/ Contractor Assurance System, that
7 was of concern, and the shift from what
8 appeared to be DOE's responsibility for the
9 safety of the complex to a contractor center.

10 If I could quote from the
11 introduction to that report: "DOE's latest
12 initiative gives more responsibility and
13 flexibility to DOE field offices and
14 contractors. The new approach is intended to
15 increase productivity, but could move nuclear
16 operations closer to a high-consequence
17 accident. The underlying concern is that the
18 pendulum may swing away from safety; decisions
19 on balancing productivity and safety will be
20 primarily in the hands of contractors,
21 independent DOE oversight will decrease, and
22 risk to the public and workers could increase.

1 This is clearly not an acceptable outcome."

2 End quote.

3 The concerns in that 57-page
4 report were the basis of Recommendation 2004-
5 1. And as you ponder changes now being
6 proposed to the management of safety and the
7 management of the complex, I recommend that
8 you read the Board's Tech Report 35.

9 And, frankly -- and I don't mean
10 this in a way that you should or -- but you
11 might consider, if you want a deck plate
12 perspective of what happens when production
13 and safety are out of balance, I would suggest
14 that you meet with the Rocky Flats workers
15 that experienced the fire in 1969, as I did
16 this past summer. They will give you an
17 earful, and it will change your perspective.

18 If I could follow that with one
19 question. When Recommendation 2004-1 was
20 written, the Board felt that nuclear safety
21 research had more or less fallen off of DOE's
22 priority list. At best, it was carried out at

1 the program level, was only being done when it
2 had a nexus with a specific project, and was
3 not integrated across the DOE complex between
4 the programs.

5 Generic subjects that applied
6 across DOE programs, like health physics, for
7 example, could not compete with the importance
8 of doing research on systems, buildings, et
9 cetera.

10 The implementation plan for
11 Recommendation 2004-1, which the Secretary
12 signed, assigns nuclear safety research to
13 Defense Programs as the integrator across DOE.
14 Do you think Defense Programs can effectively
15 integrate safety research across the DOE
16 complex between the under secretaries? It
17 just seems like it is pretty far down in the
18 programs.

19 MR. PONEMAN: Do you mean nuclear
20 safety research only in respect to the defense
21 complex, or beyond?

22 MR. BROWN: No, beyond.

1 Throughout the DOE.

2 MR. PONEMAN: Well, I will be able
3 to comment at the level of philosophy and
4 approach. I have not yet read that, but I
5 certainly will read the tech report and the
6 other documents referred to. One of the
7 things that has been very, very important to
8 Secretary Chu is, frankly, to break down the
9 stovepipes that have long existed, really,
10 since the creation of DOE.

11 We have -- now we are blessed with
12 three very capable under secretaries. We have
13 Dr. Kristina Johnson, Under Secretary for
14 Energy Programs; we have Dr. Steven Koonin,
15 Under Secretary for Science; and then of
16 course Administrator D'Agostino is dual-hatted
17 as Under Secretary for the NNSA complex.

18 We meet regularly. We have done a
19 great deal precisely with a view to breaking
20 down stovepipes between them. I can tell you
21 very recently indeed I have been working with
22 Administrator D'Agostino and Under Secretary

1 Johnson looking at some of the issues at
2 Savannah River in which both environmental
3 management as well as NNSA issues come into
4 play. Certainly, Dr. Koonin has ranged widely
5 across these portfolios.

6 So without knowing exactly who is
7 doing what bench-scale research, what I can
8 tell you is that a stovepiped or blindered
9 mentality to these issues that was uninformed
10 by the wider equities where, for example, the
11 nuclear energy -- on the civilian side,
12 responsibility obviously is vested in the
13 Under Secretary area headed by Dr. Johnson,
14 and the scientific expertise obviously is
15 vested in Dr. Koonin.

16 So I will say at the level of
17 philosophy, we would not take a stovepiped
18 approach to safety, just as we are not taking
19 a stovepiped approach to really any of the
20 other major issues that are facing the
21 Department.

22 MR. BROWN: Thank you. That's all

1 I have.

2 VICE CHAIRMAN MANSFIELD: One
3 comment that I would like to leave you with,
4 because I know you are going to have to leave
5 soon, is that you have to more or less outdo
6 C.P. Snow. I mean, you have -- we talked
7 about a safety culture. There is clearly a
8 security culture and a mission culture. They
9 are so different that they risk the poor
10 outcomes that C.P. Snow forecast for the
11 scientific and literary cultures.

12 Your security culture is based on
13 worst-case constructs that you need to deter
14 or prevent. Your safety culture is based on
15 a very relentless nature that can't be --
16 can't be deterred with both human and
17 inanimate issues to be addressed, some of
18 which can be managed, some never can.

19 And your mission culture is based
20 on a very relentless nature that is -- that is
21 full of mystery and surprises, and I think the
22 challenge is to have -- the challenge is that

1 functioning areas and practitioners in each of
2 those cultures need to understand the
3 similarities between the cultures, the -- you
4 know, the necessity for understanding the
5 imperatives.

6 The mission imperatives, as you
7 pointed out, are very, very clear. It would
8 be -- it is unfortunate that, you know, the
9 gates and guards don't respect the importance
10 of that imperative sometimes. You know, so
11 there's a collision between the security
12 culture and the mission culture -- examples of
13 that.

14 But this is not a new problem. It
15 is 75 years old now, and no one has come up
16 with a good solution, and yours is half again
17 as hard as anybody else's. So I appreciate
18 your approaching it with the vigor that you
19 do, and I am going to take you up on the fact
20 that we expect to be your stakeholders and to
21 cooperate right from the beginning of getting
22 involved in early operations.

1 The last thing -- the last issue I
2 would like to leave you with is one that I
3 suggested before, that when we get involved
4 early in the calculations and engineering
5 evaluations, scientific experiments, and
6 things like that, it begins to look to us a
7 lot like we are doing your business, and we
8 should never do that.

9 We don't believe that the nation
10 is served well if we are smarter than you are.
11 We are frustrated when we find that we can't
12 get questions answered, because the work
13 hasn't been done by your contractors. And as
14 a result, we seem very intrusive, and we seem
15 to be, to you, I'm sure, that we're sticking
16 our nose in all the time before the contractor
17 can get his job done.

18 I assure you that the -- we will
19 continue to work the only way we know how. We
20 are anything but unobtrusive. We cannot be.
21 We have to be involved very early, especially
22 very early in the design of facilities and of

1 processes.

2 If we don't, we run the risk of
3 making everybody mad, like we made all of the
4 stakeholders at Hanford mad, by insisting that
5 the seismic environment at Hanford was not
6 sufficiently considered during the design of
7 the waste treatment plant. We got blamed for
8 delaying it, right? We didn't delay it. I
9 mean, God did. I mean, the notion is that
10 there are certain things we can't move, and
11 that is a natural phenomenon.

12 And the result is that we appear
13 to be intrusive, and I guess -- I guess we
14 are. But we never, never want to be doing
15 your job, and I hope that that is a message
16 that you will -- you will take back and pass
17 on.

18 MR. PONEMAN: Well, thank you, Mr.
19 Chairman, and I would just make a couple of
20 comments in response to your comments, sir.
21 You are right to note that there are three
22 very different sets of considerations in terms

1 of program mission, security, and safety. And
2 they all need to be thought about in different
3 ways.

4 Now, if we wanted to be completely
5 safe, we wouldn't do any of this at all. We
6 would be completely safe, and we couldn't
7 defend the country, right? So -- to take it
8 to one extreme. Or, you know, if we were
9 wantonly disregarding safety, you know, we
10 would be making many people sick and polluting
11 the environment.

12 So the question always comes down
13 to an optimization, and that entails a
14 consideration of relative risks. And each of
15 these three areas have different kinds of
16 risks that are measured in different ways, and
17 I agree with you that is what makes this so
18 challenging. And if it weren't so
19 challenging, we wouldn't need this
20 distinguished board, and you wouldn't need a
21 Department of Energy, and somebody would just
22 go out and do it.

1 VICE CHAIRMAN MANSFIELD: And it
2 wouldn't be fun.

3 MR. PONEMAN: Right, and it is not
4 reality. So I think what we need to do is to
5 be thoughtful and analytical in measuring
6 these risks and in laying out the trade-offs,
7 and then it is then up to the Department's
8 senior leadership to make the decisions and
9 the line managers to decide how to draw those
10 lines that must be drawn. There is no free
11 lunch here. Somebody has got to make these
12 kinds of decisions. That is the first point.

13 It actually relates to your second
14 point, and I very much appreciate that you are
15 being very explicit on a point that has come
16 up implicitly earlier today, which is that the
17 role of this Board and the role of the
18 Department, while they are related to each
19 other, are discrete and they are different,
20 and this is an oversight board, and we are an
21 operational organization, and we are committed
22 to and we are responsible for delivering

1 mission results to the President and to the
2 American people.

3 We rely on this Board to help us
4 to do that safely. In this respect, I do not
5 reject -- to the contrary, I welcome -- the
6 early intervention, having already seen
7 consequences when one has to go back and
8 correct something post hoc. This is not
9 desirable for mission, it is not desirable for
10 cost, it is not desirable for effectiveness,
11 it is not desirable for efficiency.

12 And so I think if we are in our
13 respective roles each of us clear in terms of
14 what those roles are, and the oversight role
15 as opposed to the programmatic role on the one
16 hand, and also the benefits that can come from
17 obtaining the oversight advice at an early
18 enough stage in a project, that you can design
19 safety into the project as opposed to retrofit
20 it into the project --

21 VICE CHAIRMAN MANSFIELD: Yes.

22 MR. PONEMAN: -- I think in that

1 respect we will achieve what I think is the
2 desire of both of us, which is to deliver the
3 mission that the country expects in a manner
4 at the level of safety that the country
5 expects.

6 VICE CHAIRMAN MANSFIELD: Right.
7 Thank you. I completely agree. We have begun
8 to do that, after getting our knuckles rapped
9 by staffers, at least, on the Hill for not
10 getting involved early enough.

11 Our recent success in delivering
12 the CMRR (Chemical & Metallurgy Research
13 Replacement) certification to Congress is a
14 good measure of the success of early
15 involvement. It was painful and it was
16 expensive. I mean, it was -- for us it was
17 very expensive. I hope we can do it more --
18 with more felicity in the future.

19 MR. PONEMAN: Thank you.

20 VICE CHAIRMAN MANSFIELD: Joe.

21 Mr. Bader.

22 MR. BADER: I would like to make

1 one comment, and that is to suggest you look
2 at the way we are working on the NNSA side, on
3 the Uranium Processing Facility, and the way
4 we are working on the environmental management
5 side on IWTU (the Integrated Waste Treatment
6 Unit in Idaho) where we are trying to use both
7 of those as examples of how we both benefit
8 from early involvement, early identification
9 of issues, and early resolution.

10 And while nothing is perfect in
11 this world, both of those, in my estimation,
12 are going reasonably well, and can serve as
13 examples. To me, CMRR was a failure of that
14 kind of an effort, and we shouldn't have had
15 to have been involved in a certification, and
16 it was not good for either of us from a use-
17 of-resources point of view, but it worked.

18 VICE CHAIRMAN MANSFIELD: We never
19 want to be on your critical path, and we were
20 in that case, and that's very -- it's
21 disconcerting and expensive for both of us.

22 May I recognize the Technical

1 Director, Timothy Dwyer?

2 MR. DWYER: Sir, in your comments
3 you discussed it is better to teach where
4 failures are found than to criticize. And
5 also, you defined for the HSS office a role of
6 independent oversight and also to assist the
7 site offices. Aren't these heading in
8 opposite directions? Just to discuss how you
9 see the role of HSS. We are going to have
10 some further discussions with Mr. Podonsky
11 afterwards, but if you could provide a vision
12 of whether you see them as oversight or
13 assistance, that would be helpful.

14 MR. PONEMAN: As oversight or
15 what?

16 MR. DWYER: Assistance.

17 MR. PONEMAN: Yes. Well, there is
18 I think -- I don't think an inconsistency. I
19 think there is a duality in the sense that
20 there is a core competence inside HSS,
21 developed over many years, of people who have
22 a deep technical understanding of safety

1 issues, as well as infused in the culture of
2 that.

3 And in some respect, they are a
4 resource to the entire Department, and in
5 providing that kind of resource it is
6 independent of and reports separately through
7 the channels up to the Deputy Secretary at the
8 same time. And this is something that I think
9 we are working on actively now in line with
10 the philosophy that we have been talking about
11 these last few minutes.

12 HSS is an indispensable and
13 integral partner of mission, and as we are
14 trying to develop these systems in the context
15 of this review that we began in August -- and,
16 by the way, this is not -- as I said a few
17 minutes ago, not purely in the nuclear area
18 but across -- right across the complex and
19 conventional worker safety that is, you know,
20 just known throughout the complex in dealing
21 with hazardous or potentially hazardous
22 situations.

1 Then, they are part of the overall
2 integrated organization reporting up through
3 the under secretaries to the Secretary. So
4 there is a duality to it, and I would note in
5 addition that since HSS are on the federal
6 side of the equation, in terms of the
7 leadership of HSS, that some of the
8 independence that they display is an
9 independence in terms of dealing with the
10 broad array of contractor activities across
11 the complex as well.

12 So, and I appreciate the question
13 in pointing out that duality, but, in fact, I
14 think that it works together, and, by the way,
15 we believe in a layering of these sorts of
16 responsibilities. So the independent
17 oversight that we obtained comes in one form,
18 which is also wedded to mission in the form of
19 HSS. It comes in a different form from this
20 Board. It comes in a different form still in
21 the form of the Inspector Government.

22 And so of the various sorts of

1 external oversight that we have, if you will,
2 some are more external than others. While HSS
3 has this -- if you will this sort of dual
4 role, that is not the situation with this
5 Board or with the IG (Inspector General), and,
6 therefore, I feel we can obtain the full
7 benefit of external detached oversight without
8 concern of a potential conflict of interest,
9 which I think is the premise underlying your
10 broader question.

11 MR. DWYER: Well, part of the
12 question has to do with, do you actually view
13 HSS as providing oversight or just purely
14 assistance? Just to be very explicit.

15 MR. PONEMAN: I think they are
16 overseeing the safety component of our
17 mission, but they are also providing support
18 for the mission.

19 MR. DWYER: Thank you, sir.

20 DR. WINOKUR: Well, I would just
21 add to that, Mr. Secretary, that I think you
22 are aware of the fact there was a GAO

1 (Government Accountability Office) report, and
2 there is some congressional language in terms
3 of the independent oversight that HSS
4 provides. It is extremely important, because
5 it is really your only independent oversight
6 that you are providing.

7 We have seen that there may be a
8 new vision for exactly how that oversight is
9 being applied, but getting back to our
10 previous conversation, our understanding right
11 now is that when it comes to nuclear-related
12 matters, that the traditional independent type
13 of oversight that HSS has provided in the past
14 will continue.

15 And there may be some assist
16 models looked at for other functions, but that
17 in the arena that the Board has purview on we
18 would expect it to continue much the same as
19 it has in the past.

20 VICE CHAIRMAN MANSFIELD: It is
21 what we have called in the past transaction-
22 based oversight.

1 MR. PONEMAN: I know that we are
2 deeply involved in the response to the GAO
3 report, and we will be continuing to work on
4 that. And I think some of my colleagues will
5 be prepared to discuss it in greater detail in
6 your session today.

7 VICE CHAIRMAN MANSFIELD: Very
8 good, and if there are no more comments from
9 the Board, Mr. Secretary, I want to thank you
10 personally for making -- digging a hole in
11 your schedule to spend some time with us.

12 MR. PONEMAN: No, it's -- I want
13 to thank this Board for its service to date,
14 and for the service that it is still going to
15 render for the nation, and on behalf of the
16 Secretary to just express our gratitude as
17 well as our firm commitment to work closely
18 and collaboratively with this Board.

19 VICE CHAIRMAN MANSFIELD: Thank
20 you. We will now recess for five minutes and
21 reconvene at 10 after 10.

22 (Whereupon, the above-entitled

1 matter went off the record at
2 10:05 a.m. and resumed at 10:11
3 a.m.)

4 VICE CHAIRMAN MANSFIELD: Thank
5 you all for convening again. We can now
6 proceed to the next part of our public hearing
7 this morning. I am just looking for my Table
8 of Contents to see who is next.

9 I am going to invite Secretary
10 Triay to --

11 MR. BADER: No.

12 VICE CHAIRMAN MANSFIELD: No?

13 DR. WINOKUR: We are going to make
14 comments.

15 VICE CHAIRMAN MANSFIELD: Oh, yes,
16 I'm sorry. Comments. Fine. Okay, okay.

17 So I will recognize you, Peter.
18 Dr. Winokur.

19 DR. WINOKUR: Thank you. The
20 Board Members are going to make comments now,
21 prior to your testimony.

22 Thank you, Dr. Mansfield. I would

1 like to thank the Deputy Secretary for his
2 remarks, as well as his colleagues from DOE
3 and NNSA who will be testifying here today.

4 To reiterate, Board Recommendation
5 2004-1, Oversight of Complex, High-Hazard
6 Nuclear Operations, was issued by the Board in
7 response to DOE proposals in 2004 to change
8 the methods it was using for contract
9 management and nuclear safety oversight at
10 defense nuclear facilities.

11 More specifically, the Board was
12 concerned about DOE's and NNSA's desire to
13 shift responsibility for safety oversight from
14 headquarters and field offices to contractors'
15 self-assessment programs. We are having these
16 same discussions today.

17 The Department is reexamining
18 options for regulation of worker safety at its
19 defense nuclear facilities. But regardless of
20 what oversight model is adopted, DOE and NNSA
21 line management's responsibility for safety
22 cannot be diminished or delegated.

1 Independent oversight, which is
2 another focus of today's hearing, is a key
3 element in a system of checks and balances
4 that is fundamental to effective safety
5 oversight. When properly conducted,
6 independent oversight, from which the early
7 identification and resolution of problems,
8 while they still have minimal safety
9 consequences. By its very nature independent
10 oversight provides an appropriate balance
11 between mission and safety and helps mitigate
12 DOE's inherent conflict of interest that
13 arises from its self-regulation.

14 The question that needs to be
15 asked is: how can we not afford robust,
16 independent oversight? Finding problems early
17 in a design or preventing a serious accident
18 costs pennies on the dollar when compared to
19 doing a retrofit or performing an accident
20 investigation. And even more importantly
21 every worker deserves the right to go home
22 safely at the end of the work day.

1 In our commitment to prevent a low
2 probability, high consequence accident in the
3 nuclear weapons complex, we need all of the
4 arrows in our quiver, and vigorous independent
5 oversight has a sharp point.

6 The efficacy of independent
7 oversight falls squarely on the people doing
8 it. They need to have a high degree of
9 technical competence. They need to have the
10 questioning attitude that will allow them to
11 fully understand the system or situation they
12 are assessing, and they need to have the moral
13 courage to identify problems to senior leaders
14 who are often many paygrades higher in the
15 organization.

16 An investment in independent
17 oversight is an investment in human
18 intelligence, ingenuity, and moral fiber. I
19 encourage DOE to invest wisely.

20 I look forward to the continued
21 testimony today on DOE's oversight of complex,
22 high-hazard nuclear operations with particular

1 regard to views on the implementation of
2 contractor assurance models, the appropriate
3 balance between mission and safety, and DOE
4 and NNSA senior management ownership of and
5 commitment to safety at its defense nuclear
6 facilities.

7 Mr. Bader now has an opening
8 statement.

9 MR. BADER: Thank you, Dr.
10 Winokur.

11 I spoke at the Integrated Safety
12 Management conference in Knoxville this August
13 and highlighted two major issues in the
14 nuclear community; and I was talking not just
15 about the weapons complex, but also about the
16 commercial nuclear business: the shortage of
17 strong leadership, and the tendency of the
18 community to reinvent old problems previously
19 solved.

20 This hearing and our situation
21 with response to -- or with respect to 2004-1
22 highlights examples of both situations with

1 regard to the complex. We have examples of
2 both headquarters and line management in DOE
3 working together on actions to identify and
4 resolve issues while balancing mission and
5 safety and failures to adequately do so.

6 This is being played out against a
7 backdrop of a questioning of the effectiveness
8 and necessity of the entire safety structure
9 by DOE senior management. In this series of
10 hearings, starting with today, we the Board
11 will focus on what actions are being taken by
12 DOE headquarters, NNSA, EM (Environmental
13 Management), to reinvigorate their response to
14 2004-1, and to maintain adequate oversight
15 over that response.

16 The time for endless analysis,
17 backtracking, and questioning of already
18 committed but unfulfilled parts of the 2004-1
19 implementation plan is over.

20 That is the end of my statement.

21 Mr. Brown?

22 MR. BROWN: Thank you, Mr. Bader.

1 And welcome, everyone, this
2 morning. I, too, am concerned with the issues
3 that have been raised by my colleagues here.
4 But in the interest of time, I am not going to
5 repeat them. Instead, I want to focus on what
6 I think is one of the important aspects of
7 2004-1 that has not been mentioned.

8 I would like to provide a few
9 thoughts on continuous improvement as regards
10 nuclear safety. What it boils down to -- and
11 my pun is intentional -- is the Second Law of
12 Thermodynamics. Any closed system will
13 experience an increase in entropy unless work
14 is put into it. The defense nuclear complex
15 is a closed, complex system of human beings,
16 facilities, machines, and nuclear material.

17 To maintain safety in this closed
18 system, it must be constantly reinforced, or,
19 like the Second Law of Thermodynamics
20 suggests, safety will degrade. It is my
21 experience that if you are not actively
22 seeking improvement, then you are falling

1 backwards.

2 Work done in research and
3 development creates a basis for continuous
4 improvement and is one of the metrics for
5 measuring whether continuous improvement is
6 being realized. Nuclear safety research and
7 development will be the topic of focus for a
8 future public meeting and hearing, so it will
9 be discussed in greater detail at a future
10 day. However, I would like to hear from our
11 speakers today their perspectives on
12 continuous improvement as the means, including
13 safety research, that they intend to use to
14 effect continuous improvement.

15 Thank you, Mr. Chairman.

16 VICE CHAIRMAN MANSFIELD: Thank
17 you, Mr. Brown.

18 We will proceed now to hear from
19 the line managers within the Department of
20 Energy, beginning with Brigadier General
21 Harencak, the Principal Assistant Deputy
22 Administrator for Military Applications,

1 historically an enormously important part of
2 the -- of DOE's work with hazardous material,
3 nuclear material, and nuclear weapons.

4 General Harencak.

5 GEN. HARENCAK: Well, thank you.

6 Thank you, gentlemen. I am honored to be here
7 this morning with you and to share our
8 philosophy in NA-10 on the many, many
9 important issues you brought up already this
10 morning.

11 I am new to this enterprise,
12 relatively new, since March. But I assure you
13 I am not new to the concept of commitment to
14 safety. I have spent my entire adult life in
15 America's Air Force, where I have seen
16 repeatedly the consequences of not a strong
17 focus on safety.

18 Let me be very clear about this.
19 I am here in at NNSA. My colleagues and I in
20 Defense Programs work to accomplish the
21 mission. Period, dot. You will not see a
22 slide in NNSA Defense Programs. You will not

1 see a poster in any of my commands in the
2 United States Air Force that says, "Safety is
3 paramount." It is not paramount. Mission
4 accomplish is paramount.

5 We exist to accomplish the mission
6 for our nation of national security. However
7 -- however, that mission cannot be
8 accomplished unless safety principles are
9 adhered to, safety is integrated in all
10 aspects of the mission. It is not -- there is
11 not two chapters of a book, one mission
12 accomplishment, the other safety. They are
13 one. And our guiding philosophy in Defense
14 Programs is that there is no light of day
15 between doing things safely and accomplishing
16 our mission.

17 That is made very clear to all of
18 our line managers at all of our sites each and
19 every day. My commanders' intent to them is
20 clear: accomplish the mission while
21 protecting the public, our workers, and the
22 environment, at all times. That is a very

1 clear and definitive statement we make not
2 only in memos or in e-mails or in talks, but
3 we live it. We live it each and every day.

4 Now, our overall safety approach
5 is that it must be integrated in all phases --
6 all phases of work planning, execution,
7 control. We want to make absolutely sure that
8 it is not ever considered a "check the box"
9 activity. If a checklist demands X,Y,Z be
10 done, we must make sure at all times that X,Y
11 and Z is done. It is just not verbally said
12 and then checked off.

13 And I have a third safety
14 philosophy that we in Defense Programs
15 constantly push, and that is a commitment to
16 continuous improvement. Let me be very clear.
17 I am absolutely certain, I am 100 percent
18 certain, that we don't have it 100 percent
19 right. That is the only thing I am 100
20 percent certain about is that out there we are
21 not perfect, and we are doing things that
22 perhaps we should be doing better.

1 If at any time anyone in our
2 complex, in Defense Programs, believes or
3 makes the statement to me that we have this
4 100 percent right, I am immediately suspect
5 and will probably shoot them in the head.
6 Okay? We cannot -- we cannot have that
7 attitude.

8 That should not, however, be
9 considered a flaw. That should never be
10 considered a problem of concern. In fact, I
11 would hope most people see that as an enduring
12 strength, because we are constantly looking at
13 better, safer ways to accomplish the mission,
14 protect the public, our workers, and the
15 environment.

16 And how do we do that? Well, our
17 organizational safety roles and
18 responsibilities, I just want to spend a few
19 moments and to tell you of our personal
20 commitment of how we work. At NA-10
21 headquarters, okay, those of us working in the
22 Forrestal Building, what do we see as our

1 safety roles and responsibilities?

2 Number one -- number one, an
3 enterprise-wide focus. We have a vast complex
4 out there, lots of diverse sites, all working
5 on one team, all working for one goal of
6 course, but doing vastly different things. A
7 thousand things a day, totally different in
8 form and in function.

9 We have to maintain an enterprise-
10 wise focus where we balance priorities at the
11 enterprise level. We do not have unlimited
12 budgets. You know that, as well as we do. We
13 are painfully aware of our budget problems in
14 NA-10. But we need to ensure that resources
15 are adequate across our entire complex, to
16 effectively address safety, programmatic, and
17 operational considerations.

18 We realize that we could have the
19 world's greatest safety record at Site X. But
20 if Site Y hurts a worker, damages the
21 environment, does not protect the public, then
22 our safety record is then dismal, regardless

1 of how we are doing at every other site.

2 So we have got to ensure that all
3 resources are adequate, and that we oversee
4 the effectiveness of all of our site offices
5 to push our one enduring vision of a
6 commitment to continuous improvement and
7 overall absolute safety. We also need to be
8 keenly aware here in Washington, D.C., of our
9 contractor's performance at all times.

10 In our site offices, we demand
11 that our site offices balance site-specific
12 priorities. All sites are different, but --
13 and we recognize that. At the end of the day,
14 an injured worker, it doesn't matter, though,
15 whether they are injured at a non-nuclear site
16 or at a site that is working with special
17 materials, that worker is still injured. We
18 still have created a problem.

19 So what we have to ensure is that
20 while we maintain an enterprise-wide focus
21 specific sites are fundamentally focused on
22 those unique -- unique concerns in safety that

1 they are -- and that they prioritize and they
2 adjust accordingly under our guidance.

3 And we expect and demand that our
4 site offices oversee contractor operations,
5 with teamwork in mind but also a critical and
6 completely impartial view of how our
7 contractors are working.

8 Our contractors are next. We
9 demand of our contractors and continually
10 oversee our contractors to make sure they
11 develop and implement site and facility
12 safety-specific programs and systems, execute
13 the operations within requirements,
14 essentially do the work, and implement a
15 robust assurance system.

16 And by that we mean processes and
17 activities designed to identify all of the
18 deficiencies and all of the opportunities for
19 improvement to complete corrective actions,
20 and, most importantly, going back to my
21 earlier that nothing is ever perfect, and that
22 we don't have it 100 percent right, to share

1 the lessons learned effectively across all
2 their aspects of operations, and then with
3 other contractors and our other sites.

4 Lastly, let's talk about our
5 workers. We absolutely are committed to the
6 simple fact that we all know is true that
7 regardless of advanced degrees, vast
8 experience in programs, at the end of the day,
9 at the tip of the spear, there is a worker,
10 there is a loyal employee, there is a
11 dedicated American that is going to do the
12 actual work.

13 Regardless of what we decide,
14 regardless of our grand plans here, all the
15 work, at the end of the day it comes down to
16 the worker doing what is right, making sure
17 that we involve that worker and get that
18 worker's feedback. What we develop -- the
19 fantastic plans and absolute -- pat ourselves
20 on the back, how great job, we have worked
21 with your Board to come up with something at
22 the end of the day, it is up to that worker to

1 actually do it.

2 So we try to make every effort,
3 and I think we have been very successful at
4 it, to involve the individual workers that are
5 going to do the thousands of operations each
6 day at every site, in there and get their
7 feedback and get their ideas and get their
8 buy-in, to make sure that we do things safest.

9 Finally, and this is very
10 important when it comes to worker, we stress
11 the absolute significance of a stop work
12 authority for all workers. This is key.

13 Now, as I go to our sites, and we
14 do our all-hands, and we talk, and tell them
15 how important they are, I sometimes ask, "Does
16 everybody know who the safety officer is
17 here?" And sometimes they always point to,
18 you know, Mr. So-and-So or that, and I go,
19 "Wrong. You're the safety officer."

20 We're all the safety officers.
21 Everybody is deputized with the Safety Merit
22 Badge. Okay? We are all in this together,

1 and everybody not only should have the
2 authority, I think they have the moral
3 imperative, they have the absolute
4 responsibility regardless of their rank,
5 regardless of their salary, to make those
6 decisions that protect the public, protect
7 their fellow workers, and protect our
8 environment and our entire complex.

9 So we stress that, and those are
10 the organizational safety roles and
11 responsibilities. And let me talk briefly of
12 our enduring commitment to integrated safety
13 management. As I said, it is the cornerstone
14 of every safety program that is implemented by
15 NNSA and Defense Programs and its contractors.

16 Now, I am not going to go over the
17 ISM principles and core functions. Obviously,
18 many of you probably wrote them. So I don't
19 need to go on there. But I do want to assure
20 you that we make every effort to rely on those
21 functions and principles that ensure safety is
22 integrated into all aspects of operations.

1 You know, we realize we are going
2 to make mistakes. As an aviator in the United
3 States Air Force, I have made every mistake
4 known to manned flight. Okay? Fortunately,
5 none of those mistakes have been fatal,
6 obviously. But it has allowed -- it has
7 allowed me to realize that mistakes will be
8 made. Mistakes will be made.

9 The key, of course, is to make
10 sure we pass along, those of us who have made
11 it to more experienced -- I won't to use the
12 word "old," but more experienced members of
13 the Safety Board, more experienced, our
14 colleagues who are working at Forrestal, who
15 started out, who worked their way through the
16 enterprise, we have to make sure that we are
17 communicating to those who are following us,
18 those mistakes we have made, how we corrected
19 those mistakes, and hopefully, hopefully
20 ensure that we don't make the same mistake
21 twice.

22 That is our commitment to the

1 principles of reliance. It is to make sure
2 that as we make mistakes -- and we will --
3 hopefully fewer and fewer as we go along, but
4 we make sure that we go out to our -- to all
5 of our workers, to all of our sites, and we
6 make sure that we will make new mistakes, not
7 the same mistakes, because those, in my view,
8 in the view of my colleagues in NA-10, are
9 inexcusable and there is no reason to do that,
10 if we are using integrated safety management
11 principles effectively.

12 So continuous improvement in our
13 recent focus areas for this continuous
14 improvement, to make sure -- to make sure that
15 we are learning from mistakes, to make sure
16 that we continue a process of continuous
17 improvement. We are strengthening our safety
18 culture at our sites by emphasizing contractor
19 responsibility and accountability, holding our
20 contractors accountable to make sure those
21 workers are actually giving feedback, we are
22 taking their feedback, and we are making sure

1 that each and every day we strengthen that
2 culture.

3 Encouraging initiatives like the
4 Human Reliability and Human Performance
5 Improvement Initiatives, initiating the
6 development of enterprise-wide performance
7 measures for safety -- those are not -- some
8 people are skeptical that how -- how can you
9 measure it?

10 I personally believe that you will
11 never improve something unless you measure it.
12 You just -- you just can't take -- especially
13 in our business, you just can't take gut
14 feelings and go, "Well, I think the guys are
15 doing great. I think the gals are doing
16 great." No, I mean, we must develop. They
17 are not perfect. Our metrics for it are not
18 perfect.

19 There are sometimes great bar
20 charts. There are great pie charts you make.
21 But we continually ask ourselves: "Is that
22 really -- is that really a good metric for

1 what we're doing?" That's a clear case of
2 something I am absolutely sure we don't have
3 100 percent right, but we are committed to
4 continually finding ways to measure -- measure
5 performance safeties -- performance measures
6 of safety, supporting integrated safety
7 management champions and events like the ISM
8 conferences, to facilitate sharing of lessons
9 learned throughout the enterprise.

10 Now, everybody thinks their unit
11 is the best. Everybody thinks everybody is
12 doing right, but it is keenly important,
13 especially in our enterprise, that we
14 communicate effectively, we do what we call in
15 the United States Air Force, "good, clear,
16 weapons school debriefs," meaning regardless
17 of the rank of the pilot, the other pilot
18 could say, "You really screwed that up today."
19 And when the debrief is over, he goes out and
20 calls the man "General" again, but in the
21 meantime, during the briefing, he is very
22 clear, very clear, about what we did wrong.

1 We are trying to develop that, and
2 I think we are very successful of developing
3 those weapons school type debriefs between our
4 sites. Only through that can we avoid, again,
5 the possibility of making the same mistake at
6 a different site.

7 We also want to strengthen the
8 effectiveness of the federal workforce,
9 specifically by focusing upon nuclear safety
10 performances improvements at the headquarters
11 and the site offices. A lot of that are
12 biennial reviews, self-assessments. Again, we
13 certainly look for ways to improve that. We
14 know we don't have that 100 percent right, but
15 we do believe we are making very good progress
16 in that. And, of course, you have been very
17 helpful to us in pointing out ways that we can
18 improve upon that.

19 Improving our technical training
20 qualification program implementation for the
21 federal workforce, ensuring senior managers
22 have the training to carry out their critical

1 safety functions -- the Nuclear Executive
2 Leadership Training Course, for example.
3 Absolutely, absolutely required in our view,
4 and there is absolutely no reason for any of
5 our senior managers not to get that training.

6 Training is good, especially in
7 our business. It is tough to pull people away
8 from their day jobs to make it happen, but we
9 have made a complete commitment to doing that,
10 to making sure that all of our senior managers
11 have the most current, most accurate as we
12 know, training to help them in integrated
13 safety management improvements.

14 And, of course, implementing
15 established technical communities of practice
16 between the headquarters and site offices.
17 That I think has been a very successful
18 aspect, but we are going to continue -- we are
19 going to continue to press communities of
20 practice that further integrate -- make sure
21 there is absolutely no seams between what is
22 going on at one site and the other site and

1 specifically at all of the sites and our
2 headquarters.

3 So, gentlemen, I look forward to
4 your questions. And, of course, my true
5 experts are sitting right behind me, and will
6 be happy to answer your questions.

7 Let me state that, you know, I see
8 your role as complete partners with us to make
9 this happen. You understand we have to get
10 the mission done. You understand that. You
11 also have a very clear mission to help us
12 accomplish that mission as safely as possible.

13 Will we always agree? No. In
14 fact, if we are always agreeing, I would be
15 very, very worried. Okay. We cannot have, in
16 this -- in this business, I think it would be
17 a serious mistake to have group-think. Okay?
18 We need to have your independent thoughts.

19 We need to -- where there is
20 agreement, that's great, fine, but then let's
21 move on and find those areas where we could
22 have a vigorous and -- a vigorous discussion

1 of pros and cons, where we could talk
2 priorities, where we could come hopefully to
3 make each other's job accomplished, but also
4 you help to make us better.

5 So I don't particularly see any
6 particular problems with us having -- having
7 discussions. We have had a couple since I've
8 been here in March, and I looked forward to
9 them in the past. In fact, as I said, I would
10 be very concerned if we were always in
11 agreement. That means that we are not,
12 obviously, continuously improving.

13 So with that, I, again, thank you.
14 Thank you for your service. I thank you for
15 your commitment to our enterprise and to all
16 we do in NNSA that at the end of the day we
17 exist for one reason, and that is to defend
18 America. And your part of that is certainly
19 appreciated by all of us at our enterprise.

20 So, thank you, and if you have any
21 questions --

22 VICE CHAIRMAN MANSFIELD: Thank

1 you, General Harencak. One or two comments
2 and questions. The biennial reviews by your
3 Chief Technical Authority, are those
4 progressing as well as you thought? And are
5 they becoming as valuable as we hoped they
6 would?

7 GEN. HARENCAK: I think so. You
8 know, I -- and I -- please jump in if you have
9 -- obviously, our gentlemen here have a lot
10 more experience on that, but certainly I found
11 -- I think they are a very useful, useful
12 task, if you will, and I know I personally get
13 a lot out of them. I think that they are a
14 needed and certainly well-read review, so I do
15 -- Jim, do you have any comments on that?

16 VICE CHAIRMAN MANSFIELD: Yes,
17 please. Mr. McConnell.

18 MR. McCONNELL: My name is Jim
19 McConnell. I am the Director of the Office of
20 Safety for NA-10. I think one of the best
21 examples of the benefit and the impact of the
22 biennial reviews is that a couple of years ago

1 for the first time in a very long time in my
2 history they actually did a biennial review of
3 the program office, the headquarters office,
4 and its role in safety, which in turn was one
5 of the key documents that was -- defined the
6 reorganization of NA-10 that has just recently
7 occurred and resulted in the creation of NA-17
8 and this new office of mine, the Office of
9 Safety.

10 So there is an example of a self-
11 assessment that found some pretty critical
12 issues that drove Administrator D'Agostino to
13 approve a reorganization of the headquarters
14 for lots of reasons, but one of those reasons
15 was to improve safety and create both Gerry
16 Talbot's office, NA-17, and my specific Office
17 of Safety. And they continue to be that
18 beneficial and that impactful.

19 VICE CHAIRMAN MANSFIELD: Also,
20 you have -- we note that you have -- Defense
21 Programs established a working group to share
22 lessons and best practices. Do you believe

1 that is working effectively?

2 GEN. HARENCAK: Oh, absolutely.

3 And as I said in my statement, you know, that
4 is a key pillar to what we are doing as far as
5 continuous improvement. I mean, I don't see
6 how -- how you can continually improve unless
7 you share the lessons from the mistakes you
8 have made in the future, as I talked about.

9 So that has been a tremendous
10 success, and we are going to continue to build
11 on that success. You know, we are going to
12 make sure that this gets even more engaged in
13 our day-to-day operations.

14 VICE CHAIRMAN MANSFIELD: I would
15 expect that that forum would be a good place
16 to uncover differences in approach to safety
17 basis and controls, for instance. Is that one
18 of the things you do during these working
19 groups, present -- does Los Alamos, for
20 instance, present how they went about putting
21 together a compliant safety basis and the
22 assumptions they had to make and things like

1 that? Is that open for discussion between
2 other sites, so that you can learn with --
3 learn from each other?

4 MR. McCONNELL: The working groups
5 we have so far are -- generally don't get --
6 at least they are not chartered at that level
7 of specificity. Obviously, those kinds of
8 issues are free to come up when people either
9 have identified a problem and they are looking
10 for their peers to help them with, or have
11 come across a solution that they are
12 particularly interested in making sure that
13 they share, push out to the rest of their
14 peers.

15 EFCOG, for example, is another --
16 you are well aware of them. They have defined
17 groups that work at that level with specific
18 charters of communicating analytical technique
19 level lessons learned across our M&O
20 (Management & Operating) contractors, where
21 that analysis is really primarily conducted.

22 An example of our working groups

1 would be something like the Human Performance
2 Improvement Working Group that the General
3 talked about, where we are trying to figure
4 out how to share lessons learned and to
5 integrate the benefits of human performance
6 improvement in all of our site offices and
7 contractors, because we have a couple of sites
8 -- Pantex and Savannah River -- that are
9 notably successful and pretty far out in front
10 of the rest, and so we have a real good
11 opportunity to help people skip some steps in
12 the chain of getting those types of things in
13 place.

14 VICE CHAIRMAN MANSFIELD: I raise
15 the issue because we see cultural differences
16 between sites in the way they approach some of
17 these problems. And it would seem to me that
18 it would be -- it would help to work those out
19 by exposing how you did the problem, and how
20 safety bases are developed at each site.

21 I agree -- we all agree -- that
22 35-91 is a goal, but along the lines of the

1 Second Law of Thermodynamics, the work toward
2 the goal, tending toward the goal, should be
3 visible and accountable all the time.

4 And so they -- you know, it is a
5 bad year when we don't see some measurable
6 change in the -- in, for instance, the risk to
7 the public, the ratio of the mitigated risk to
8 the design basis risk, you know, that sort of
9 thing. There is -- we clearly look for these
10 things, and if we don't see them, that is
11 something that worries us a great deal.

12 Backsliding is the easiest and most inevitable
13 process in safety, I believe.

14 On the issue of quantitative
15 measures, we are -- we are all impressed. The
16 entire -- the entire technical community in
17 the country is impressed by the way and the
18 detail which DOE collects and organizes its --
19 and analyzes its occurrence reports, you know,
20 the way that they are searchable and things
21 like that.

22 But I continue to worry that we

1 don't have a way to keep track of the non-
2 reportables, and the sites tend to fight to
3 keep things non-reportable, and only when they
4 fail to do that do we see them in ORPS
5 (Occurrence Reporting and Processing System).

6 I think you are missing a lot in
7 collecting and analyzing events that don't
8 rise to the proportion -- to the level of an
9 ORPS report. That would be measurable
10 progress toward the goal, I believe, and would
11 convince you that you are making progress.

12 So the -- you comment, for
13 instance, that although you can't reach the
14 goal there are qualitative achievements that
15 you have made for significant controls, fire
16 systems, et cetera, et cetera. The measures
17 -- these measures in aggregate -- I am quoting
18 here, "These measures in aggregate provide a
19 qualitative assurance that the goals
20 established in 35-91 are met." Well, they are
21 obviously not -- you know, they are a goal.
22 They are never met. They are something to aim

1 at.

2 They are a measure of your
3 progress toward, rather than away from, that
4 goal. But that means that -- I read that to
5 mean that the whole set of controls that you
6 put in place to make sure you have -- you are
7 confident in a qualitative fashion, that you
8 are satisfying the requirements of approaching
9 the level of protection of the public that you
10 committed to from 35-91, that whole set of
11 controls is important.

12 And you can't let those controls
13 fail to be available, and that I expect -- and
14 I am seeing it, but I expect to see that you
15 would identify those issues and get them into
16 the program, so that you can remedy them. For
17 instance, you know, fire protection -- seismic
18 qualification of a fire -- of a ventilation
19 system at PF-4 or fire protection, things like
20 that.

21 If you ignore those problems, you
22 know, or put them off, so that nothing

1 measurable can happen for 10 years, I don't
2 believe that you are satisfying the
3 requirement of tending toward that goal of 35-
4 91, and you are sliding backwards.

5 That's all I have to say. Thanks.

6 DR. WINOKUR: General, I want to
7 thank you for your service, and I certainly
8 acknowledge the incredibly important mission
9 that NNSA performs, and I always like to say
10 that I think safety is very much on the
11 critical path of that mission.

12 But the Deputy Secretary of Energy
13 spoke quite a bit about building a safety
14 culture, which is something I am interested
15 in, and an important part of building a safety
16 culture is what leaders say and what leaders
17 do, kind of what I call the talk and the walk.
18 And so I have one question for each one of
19 those for you.

20 When I visited Pantex last week, I
21 saw several signs acknowledging their great
22 safety record, and they do have a good safety

1 record. But the biggest sign I saw was the
2 NNSA mantra of "getting the job done." And
3 you have alluded to that, you have talked
4 about that.

5 As a senior manager of NNSA, do
6 you think it sends the right message to the
7 workers? Is that a balanced message to the
8 workers to say, "Get the job done"? Does that
9 provide enough motivation to make sure they
10 are clear about the fact that it is not just
11 production or mission, but that there is an
12 important safety component?

13 GEN. HARENCAK: Well, if we have
14 done those -- it's a great question, it really
15 is. And I think any -- any leader has to
16 always wrestle with that -- that specific
17 question. Where I come down on it, I think it
18 is -- if you have done -- if you have prepared
19 the battlefield correctly, and I believe we
20 have, to stress that safety is inherent in
21 everything we do, we make sure we go through
22 those ISM principles, that that lays the

1 absolute foundation to allow you to say,
2 "Okay. Now we are going to get this."

3 With that safety background, with
4 that culture, that we believe we have -- we
5 have instituted that we are never there, we're
6 are never to the goal where everybody is on
7 board all the time, seven days a week, 365
8 days, and the recognition that it is always a
9 work in progress, if you have prepared the
10 battlefield correctly, it allows you, then, to
11 do the -- get the job done. And I am -- you
12 know, I am very comfortable with that.

13 Everybody knows, as I said, if we
14 inoculated every worker to know that they
15 could stop at any given time, they have the
16 authority and the responsibility to do so,
17 that we have those continuous improvements, I
18 don't think there is any -- any friction at
19 all between those two, because hopefully our
20 complex realizes that they are not going to
21 get anything done if we close them down due to
22 safety. And I believe they know that.

1 So, you know, I think it does send
2 -- it does send the right message that we are
3 going to get the job done, and we are going to
4 do it safely. And at the end of the day, you
5 know, I always stick my flag in the ground and
6 say, "Hey, this is about us accomplishing a
7 mission."

8 And if -- really, if all we were
9 concerned about is complete safety, where we
10 never -- we never do a dismantlement, we never
11 launch an airplane, you know, we never sail a
12 ship, anything like that. So I think we have
13 done the groundwork. I think we have prepared
14 the battlefield to the point where our
15 workforce understands their absolute
16 compliance with safety issues is -- is the
17 vehicle that allows them to accomplish the
18 mission.

19 So we are to the point where they
20 -- we could put -- get the job done, and every
21 day they walk in they go, "That's -- I'm going
22 to get that job done today. I'm going to

1 contribute." But, of course, I'm not going to
2 do that unless I adhere to all of our safety
3 principles.

4 DR. WINOKUR: Well, you know,
5 certainly one of the guiding principles of ISM
6 is balancing that mission and safety. My
7 concern is the workers, who at times I believe
8 will feel that the production pressures are so
9 much that they will forget those -- that
10 training and those guiding safety principles.

11 I do believe, and I understand we
12 have a disagreement here, that the safety
13 message from NNSA could be improved in that
14 regard, and that I kind of like "getting the
15 job done safely," but -- but, I mean, you
16 understand where I'm going with that.

17 GEN. HARENCAK: Oh, absolutely.
18 And I have -- you know, I don't argue that
19 that is a -- something that I think should
20 always -- should always concern any senior
21 manager.

22 DR. WINOKUR: And let me ask a

1 question about the walk, which is -- you know,
2 in your written testimony you say, "NNSA
3 monitors the balance between mission and
4 safety against available resources." But when
5 I travel to NNSA sites, I often find that
6 critical upgrades like fire suppression
7 systems or containment ventilation systems
8 aren't being upgraded or aren't being put in
9 place because of a lack of resources.

10 And so what I'm asking you as the
11 senior leader at headquarters is: how do you
12 ensure the appropriate balance of resources is
13 applied to safety projects and mission
14 projects? And I think you used the word that
15 you have an enterprise-wide approach to
16 things, but my concern is that when I put all
17 the mission and safety projects in one bag, I
18 have a sense that your contractors are going
19 to pull out those mission projects much more
20 frequently than they are going to pull out
21 those safety projects, because they want to
22 get the job done and that's what their

1 incentives are. That's what you pay them for.

2 GEN. HARENCAK: Exactly.

3 DR. WINOKUR: So how do you -- how
4 do you at headquarters strive to find the
5 right balance there?

6 GEN. HARENCAK: Well, that's the
7 \$64,000 question. I mean, that's why we --
8 you know, we get -- in my view, that's why I
9 get paid to make ultimately those decisions
10 based on, you know, the great counsel of our
11 colleagues with their vast experience.

12 At the end of the day, we have to
13 make those -- we have to make those calls.
14 Our budget -- you know, in Defense Programs I
15 have lost 20 percent of my buying power in the
16 last five years, \$100 million right off the
17 top. We are a seriously underfunded
18 enterprise. It's as simple as that. I tell
19 people in Congress that. I tell people we --
20 I am giving you my best military advice.
21 Okay?

22 I don't have a long history in the

1 labs. I don't have a long history in this --
2 in this thing. I have come from --
3 essentially as an outsider, and I looked, and,
4 like I said, we are literally underfunded. We
5 are accepting risks that with more fundings we
6 wouldn't have to accept. That's a fact of
7 life.

8 So my -- my job, what we are paid
9 for, is to, in the resources we have, to
10 accomplish the mission safely. So I -- nary
11 a day goes by where we don't have to make
12 those types of decisions, specifically where
13 we have to take an operational risk
14 management, where we can -- where we can -- do
15 have the ability to put money and resources
16 into something we will always choose to lower
17 the risk and lower our exposure to potential
18 problems.

19 But at the end of the day, you
20 know, I just don't -- we have to every day
21 make those enterprise-wise decisions go -- you
22 know, something -- something will not get

1 funded, because we fund something else. That
2 is -- you know, that's where we rely on your
3 expertise and rely on our expertise to help us
4 at headquarters make those decisions.

5 But I do not disagree with you at
6 all, Doctor. You know, I think that that is
7 a very real possibility, that at some point we
8 could choose poorly. But we are committed to
9 not choosing poorly. So, and we will
10 certainly need your help on that.

11 DR. WINOKUR: Thank you, General.

12 VICE CHAIRMAN MANSFIELD: Could I
13 make one follow-on --

14 GEN. HARENCAK: Sure.

15 VICE CHAIRMAN MANSFIELD: -- one
16 follow-on to that line of inquiry? There are
17 cases when -- an example, the fire system
18 lead-ins at Pantex -- where, in my opinion,
19 you are in danger of having something fail and
20 not be able to satisfy the requirements of
21 your safety basis. And so you would -- as I
22 understand it, you would have to stop. You

1 know, you are no longer authorized to carry on
2 -- to complete your mission.

3 So there are safety issues that
4 are, you know, right on the edge that -- that
5 in my mind have to be considered above the
6 line until proven otherwise, because they can
7 stop you dead. That's all.

8 Mr. Bader.

9 MR. BADER: General, you made the
10 comment in your testimony that you never
11 improve something unless you measure it. And
12 with DOE and NNSA being self-regulating, could
13 you tell me how you measure your compliance
14 with safety? And is it an independent
15 function in your mind?

16 GEN. HARENCAK: Oh, I think so. I
17 -- you know, and we can probably debate this,
18 but I think there is a lot of organizations
19 out there that do not have an independent
20 safety -- for example, the United States Air
21 Force, internal to every unit is their own
22 safety, where it is required that internally

1 we work -- our inspectors come and evaluate us
2 on mission accomplishment.

3 We evaluate ourselves, and with
4 some outside help, but for the most part we
5 evaluate ourselves when it comes to safety.
6 So I don't think we are unique in that. I do
7 believe that this organization, in my years of
8 government service here, I -- I don't think
9 there is a -- I have not been associated with
10 an organization that does this particular
11 aspect better than NNSA and Defense Programs
12 does.

13 Can we improve? Absolutely. Are
14 there probably better ways to do it out there?
15 But I have been very impressed since I have
16 been here in March of how well we
17 independently assess our abilities to
18 accomplish the mission safely.

19 So if the crux of the question is,
20 you know, should somebody else come in and
21 approve -- look at it, you know, that's not
22 for me -- for me to honestly decide. As the

1 structure stands now, we maintain that
2 function internal to us, and I think we have
3 been very successful. Of course, you know,
4 you play a big part in that, so it is not
5 completely where we don't have any independent
6 oversight. I certainly think that you guys
7 provide that.

8 MR. BADER: Do you see your
9 oversight being provided by headquarters or by
10 the line at the sites?

11 GEN. HARENCAK: Well, I would say
12 --

13 MR. BADER: Or a mix?

14 GEN. HARENCAK: Well, it is
15 probably a mix. I mean, that is probably the
16 best way to do it. I don't think -- I
17 certainly think we at headquarters maintain
18 the command -- the commander's intent and the
19 command at the end of the day. We make the
20 tough calls. But it is more of a teamwork
21 between the sites and us.

22 MR. McCONNELL: Just to combine

1 sort of the last two questions. Our site
2 offices are the primary responsibility for
3 direct oversight of the contractor. We have,
4 through the Chief of Defense Nuclear Safety,
5 the biennial reviews we have talked about.

6 The biennial reviews are an
7 evaluation of how well the site office is
8 performing, and I won't put words into my
9 colleagues' mouths, but we acknowledge and we
10 focus very carefully on identifying whether or
11 not the issues that are identified in these
12 collaborative biennial reviews -- my office,
13 the CDNS, other site offices, come together
14 and it's -- a distinction is made if there is
15 an issue found that has been already
16 identified by the site office.

17 That is validation that the site
18 office is performing. Everybody has problems,
19 as the General indicated. If the site office
20 identified it and is working on it, then we
21 validate that they are performing.

22 The problem is in that rare

1 instance or the small number where the
2 biennial review finds something that is news
3 to the site office, because that is a gap in
4 their knowledge. That is an issue at the site
5 office.

6 The same thing is done, as I
7 talked about, when the CDNS comes in to talk
8 and does an evaluation of NA-10 at
9 headquarters level. If our self-assessment
10 was deficient, in that there was a problem
11 that we didn't know about, that is a much
12 worse situation than if they just validate
13 that the things they find wrong with us that
14 we have already -- there is issues we need to
15 deal with.

16 As far as the higher level
17 metrics, Frank Russo, the ES&H (Environment,
18 Safety & Health) advisor, maintains the -- for
19 the Administrator the metrics for worker
20 safety which are somewhat a little more
21 tractable, a little easier to get your handle
22 on worker safety metrics than high

1 consequence, low probability accident
2 indicators.

3 But his quarterly reviews include
4 a roll-up of significant occurrences. They
5 also talk -- we also talk about significant
6 near misses, Mr. Chairman, as you indicated.
7 And then, on the nuclear safety side, since we
8 don't -- we are working, but we don't have
9 perfect metrics yet, we rely a little bit more
10 on the collective insights of the senior
11 people involved in our oversight system to
12 provide an overall, you know, health checkup
13 quarterly to the Administrator and to the
14 other senior leaders on how we are doing as
15 far as indicators that might point to high
16 consequence, low probability events, since we
17 don't want to rely on a metric that would be
18 -- that would be useful. But to rely on a
19 metric in that regard might be misleading.

20 MR. DWYER: Dr. Mansfield, if I
21 could -- just for a point of clarification.
22 So you are contending that the oversight

1 provided by the CDNS biennial reviews is your
2 oversight?

3 MR. McCONNELL: Well, the CDNS
4 provides independent oversight of nuclear
5 safety from the perspective of a site office.
6 Oversight is a very broad and generic term, I
7 mean, so I don't want to say any one element
8 of our oversight program is the oversight.

9 MR. DWYER: Okay. And our
10 understanding is that that office has been
11 directed to shift to assist visits instead of
12 audit visits, if you will? There will be no
13 findings, is that correct?

14 MR. McCONNELL: I can't comment on
15 that. There are certainly different
16 approaches to biennial reviews that are being
17 considered. But as far as I know, we haven't
18 decided to change the fundamental approach to
19 a biennial review, at least not at this time.

20 MR. DWYER: And, General, I
21 understood you to say that as far as external
22 oversight, in your opinion, the Board is your

1 external oversight, no other?

2 GEN. HARENCAK: No. No. I think
3 you play a part, obviously, but, no, I
4 wouldn't say you are our -- you are the only
5 oversight.

6 MR. DWYER: Okay. So are there
7 other external oversight agents that you would
8 cite?

9 GEN. HARENCAK: Yes. Mr.
10 Podonsky's organization.

11 MR. DWYER: Okay.

12 MR. BADER: That was going to be
13 my next question was what the role of Mr.
14 Podonsky's oversight function was and your
15 thoughts.

16 GEN. HARENCAK: Well, you know, it
17 is critical, and I am sure you are going to
18 hear from Mr. Podonsky. As I will say based
19 on -- again, as somebody who has not had a
20 vast experience in DOE, I can tell you I think
21 we have -- we have a very robust program. I
22 am -- I am very, very comfortable. I sleep

1 well at night knowing the competence and the
2 extensive nature of Mr. Podonsky's programs.

3 And one of the things that I know
4 about it is why I am so confident of his
5 ability, of his organizations, is people at
6 all the sites complain about it. And that, to
7 me, is a clear example of why I believe we
8 have it right. Probably not 100 percent
9 right, going back to my early things, but I
10 think we have certainly got it a lot more
11 right than we don't.

12 VICE CHAIRMAN MANSFIELD: We get
13 the same reaction.

14 (Laughter.)

15 MR. BADER: I think that's all.
16 I'll pass.

17 VICE CHAIRMAN MANSFIELD: Mr.
18 Brown.

19 MR. BROWN: Yes. First, let me
20 thank you, General, for your service to our
21 country. And I particularly appreciate,
22 although you have -- I don't think you have

1 explicitly said it, but you provided I think
2 answers for the record on the lines of inquiry
3 that we -- that the staff had put together.
4 And I have been reading through those, and I
5 appreciate them, because they are very
6 helpful.

7 If I could just ask a couple of
8 questions about those. In your answer on the
9 overarching nuclear safety strategy, among
10 others you say, "Enforcing nuclear safety
11 requirements, as set forth in departmental
12 regulations and directives," and then
13 determining the appropriate balance between
14 mission and safety.

15 You say, "Our nuclear safety
16 requirements define the acceptable safety
17 envelope." We certainly agree with that.

18 My question, though, is like the
19 Deputy Secretary said this morning, he has
20 these voluminous regulations, orders, guides,
21 that he thinks can be cut back and reduced.
22 I don't know if I have paraphrased him

1 correctly, but that is what I got out of it.

2 And so when they reduce those
3 orders/safety guides, does your envelope for
4 safety then expand? Or if the -- if the
5 contractor is then shifted to the primary
6 responsibility for a subset of those
7 requirements, does your safety envelope change
8 with that? Or how is that going to work as we
9 change the safety requirements that DOE
10 imposes?

11 GEN. HARENCAK: Well, I would hope
12 -- I would hope that what it does is it
13 focuses activities. You know, I don't believe
14 that we are going to -- it is going to shrink
15 or expand our envelope. I think our -- what
16 we hope -- and I will not speak for the Deputy
17 Secretary, but if -- speaking for myself, we
18 do have -- well, you know, large -- you know,
19 you -- what is the average, you know, the
20 largest lot of regulations?

21 Okay. That's fine. That is not
22 unique to this governmental department. Okay.

1 But as we relook at those, I hope we reduce
2 them in such a manner that allows for greater
3 clarity for our people to follow. I think one
4 of the problems in crafting the safety
5 problem, safety concerns, and getting that
6 culture, is that we don't confuse -- we don't
7 confuse our people.

8 So I think it is possible, and I
9 think it is needed, and we have to be careful
10 we do this. But as we reduce these, we make
11 them more manageable, and we make them
12 clearer, let's talk in English on these
13 things. Okay?

14 Let's be very clear. What is it
15 we want our contractors to do? What will our
16 contractors get before? You know,
17 accomplishing what? Too many times I believe
18 in an effort to look at all possible
19 contingencies, we develop -- you know, I have
20 seen some of these paragraphs.

21 One sentence is a paragraph, you
22 know? I mean, gosh, you know, is there any

1 way we could make it a little bit clearer? If
2 we truly want every worker, absolutely every
3 person up and down the line to realize, to buy
4 into our safety thing, we have got to make it
5 understandable for them.

6 So I think that should be the goal
7 of these, certainly not lessening standards,
8 giving -- delegating. We talked about Admiral
9 Rickover, you know, giving up responsibility
10 or anything like that. But I think it is
11 absolutely imperative that we make these
12 regulations understandable, clearly
13 understandable, to everybody, not just the
14 nuclear physicist with a doctorate. Okay?
15 But the groundskeeper who is going to take
16 care of things, the brand-new post-doc that
17 walks in that does not completely understand
18 this facility.

19 So long answer to a short
20 question, but I believe, sir, that by reducing
21 these hopefully if we do it right we are going
22 to make things clearer, more easily

1 understood, and focus scarce resources on
2 those things most important for us to
3 accomplish our mission safely.

4 I don't think -- when you look at
5 those things, I don't think any human could
6 come away saying, "Oh, well, that's all --
7 it's all intuitively obvious in there." You
8 know, I think we need to make efforts to do
9 that. So, again, speaking for myself and not
10 the Deputy Secretary, I think that is the
11 thrust of our efforts to reduce the
12 regulations.

13 MR. BROWN: Thank you. My second
14 question is about the subject I spoke of in my
15 opening statement -- research and development.
16 And you are, by the implementation plan for
17 2004-1, the integrator for the Department in
18 nuclear safety research.

19 Do you -- is this the right level
20 for that integration function to be carried
21 out at? And do you feel empowered? It comes
22 out of your budget, doesn't it?

1 GEN. HARENCAK: Right.

2 MR. BROWN: And I -- it just seems
3 to me like competing against national security
4 requirements for nuclear weapons with health
5 physics is a tough competition.

6 GEN. HARENCAK: Well, I'll tell
7 you, sir. I had those same concerns, okay?
8 How have those concerns been addressed? Well,
9 I have come, as my staff -- as our staff has
10 told me, the true expertise for this in our
11 Department happens to reside, they live on the
12 fourth floor, you know, behind my glass doors
13 in Defense Programs. I have become convinced
14 that it is the expertise in the programs in
15 NA-12. It is these incredibly talented
16 members of NA-17.

17 For the Department, we are -- we
18 are the keeper of the orb of knowledge, if you
19 will, when it comes to this. So it is
20 probably debatable, but it is just -- it is
21 just the way it has kind of worked out, that
22 the lion's share of the expertise to implement

1 this thing lives in Defense Programs.

2 Now, can we use more money? Of
3 course. Are we aggressively trying to build
4 this, get expertise that does exist to a
5 lesser extent throughout big DOE and our
6 enterprise? Yes. We are not totally
7 satisfied with it, but -- and I will invite
8 Jim to add to that, but I'm convinced that at
9 the end of the day the reason it is with us is
10 because, you know, we've got the knowledge to
11 make this happen, and it resides in our rice
12 bowl.

13 MR. McCONNELL: I will just -- if
14 I can elaborate a little bit. Obviously, we
15 have a skill set in Defense Programs where we
16 have program managers who have experience
17 administering research and development
18 programs at our national laboratories. So the
19 skill set to administer the program is -- we
20 have what is needed in Defense Programs.

21 Now, our colleagues across the
22 Department have very capable people who

1 understand how to do research and what issues
2 need to be addressed, and so the
3 administration of the program resides in
4 Defense Programs. The management of the
5 program is jointly shared between those -- the
6 leadership in Defense Programs. And I think it
7 is actually Steve Krahn, if I'm not mistaken,
8 is -- from EM is their representative to this,
9 being EM and Defense Programs, the two largest
10 program offices of concern to the Board.

11 And so the actual governance of
12 research and development is a joint, broad
13 thing. The administration of it -- you have
14 to have somebody -- you know, one belly button
15 happens to be in Defense Programs. And so
16 that -- that is the structure. The broader
17 issue of funding is something I will -- as the
18 General said, is -- continues to be a
19 challenge. It had been a challenge under the
20 previous approach to this.

21 MR. BROWN: How can we help with
22 this subject?

1 GEN. HARENCAK: Yes. We need
2 about \$25 million.

3 (Laughter.)

4 And I -- now, I -- certainly, I am
5 being, obviously, not completely serious. I'd
6 take the money. That's --

7 (Laughter.)

8 But the point is, certainly, your
9 advocacy of this helps, as an independent
10 body. We appreciate your expertise on it, and
11 we -- again, you know, I go back to my first
12 couple of minutes of this thing. I don't --
13 you know, I'm not comfortable that we have it
14 100 percent right. And nobody is here.

15 So we need to continue to work.
16 This is a -- I see this as a living program
17 that should evolve, that should change, that
18 should grow. And, you know, if somebody comes
19 in to me and gives me the slides and goes,
20 "You can read it. We've got this one done.
21 What is the next project you've got for me?"
22 you know, that is the wrong -- that is the

1 wrong attitude, because this is going to be,
2 something that is going to be, I think, a
3 continual process.

4 MR. McCONNELL: And just one other
5 thing to add, make sure that, you know, there
6 are long-term, historically well-funded, and
7 continuing to be funded in the future, key
8 things like the criticality safety program,
9 which we manage under Dr. Jerry McKamy that
10 has had a long tradition and has continued in
11 our FYNSP (Future Years Nuclear Security Plan)
12 to be funded, as well as things like nuclear
13 explosive safety research and development.

14 And I'm sure Dr. Triay, when she
15 comes up, will talk about the technical
16 challenges that EM faces and their research
17 and development that they have in place to
18 address those issues.

19 MR. BROWN: And my last question,
20 this round at least, at the Board's hearing in
21 2003 that led to this recommendation, then-
22 Deputy Secretary McSlarrow talked about

1 specific examples where EM had used a contract
2 to hold contractors accountable. And he
3 listed off a series of examples of essentially
4 penalties at the Fernald site, at the Savannah
5 River site, at the Idaho site, and Price-
6 Anderson enforcement. Those are all what I
7 would call sticks.

8 It seems to me that carrots could
9 be used, too, to incentivize contractors to
10 operate safely. Do you have any examples of
11 either that DP (Defense Programs) has used, or
12 are you studying the kinds of -- are you
13 studying incentives as a means to ensure
14 safety? And could you share any of that today
15 or in the future?

16 GEN. HARENCAK: The answer is,
17 yes, sir, we are, and we are committed to
18 using incentives. We would -- of course,
19 everybody would much rather, you know, use
20 carrots than sticks. But do you have any
21 specifics, Jim, that you want to discuss?

22 MR. McCONNELL: It's -- I won't go

1 into any specific contracts, since they are
2 all structured pretty much the same. There
3 are -- in almost all of our contracts we have
4 incentive fees to achieve certain objectives,
5 and they can be, and are often, you know,
6 directly specifically safety-related,
7 implement some actions that came out of a DSA
8 (Documented Safety Analysis) and the SER
9 (Safety Evaluation Report) for that DSA.

10 And so those are -- those are core
11 incentives, and then we actually put on top of
12 that stretch goals. So we have -- so beyond
13 what we think we have directly funded, we
14 incentivize you -- whatever contractor it is
15 -- through your own initiative and your own
16 ability to implement those requirements
17 efficiently and effectively and cost
18 effectively to achieve an even higher level of
19 performance, implement -- you know, repackage
20 more material, upgrade more systems, whatever
21 they might be.

22 I don't want to get into the

1 details, but -- so we use incentives rather
2 than penalties, and then stretch goals to even
3 get our contractors to try and figure out on
4 their own how to gain efficiency. And we even
5 go so far as to have a complex-wide where our
6 eight sites are all mutually dependent to be
7 successful. For example, some of our nuclear
8 material shipping incentives are a complex-
9 wide goal. The eight sites together have to
10 achieve this, or none of the sites get that
11 incentive.

12 MR. BROWN: Okay. I have a couple
13 more questions, but I defer to anybody else,
14 if you would like to --

15 DR. WINOKUR: I would just like to
16 make a very brief comment. You mentioned
17 something about regulations before. But from
18 the workers' perspective, what I think we have
19 done is we have given them integrated safety
20 management, and that is what the workers
21 really need to know, to identify the hazards,
22 to identify controls and implement them to

1 perform the work, and feedback and
2 improvements.

3 So even though these regulations
4 can get very complicated, I do feel at a
5 worker level it should be understandable to
6 them, and the truth is most of the problems we
7 have are because things on that prayer wheel
8 aren't effectively done. We don't get the
9 hazards right. So it -- I understand
10 regulations themselves can read and they can
11 be very wordy, and so on and so forth, but I
12 do think we have given the workers -- DOE and
13 the Board working together -- some pretty good
14 tools.

15 VICE CHAIRMAN MANSFIELD: Joe,
16 would you like to --

17 MR. BADER: General, I would like
18 to follow up on Mr. Brown's line of
19 questioning on research and development. What
20 have you accomplished? I understand you've
21 got the competencies, and I understand you've
22 got the management capabilities. But what has

1 been accomplished?

2 GEN. HARENCAK: Well, we have --
3 well, we have had an NSR&D (Nuclear Safety
4 Research and Development) forum. We are
5 making a lot of progress on completion of
6 commitment 7, if you want -- you might want to
7 address that.

8 VICE CHAIRMAN MANSFIELD: That
9 would be good.

10 MR. McCONNELL: I think if your
11 question is, what is the completed research,
12 I mean, what is the syllabus of things we have
13 researched and published on, and, honestly, I
14 mean, we have work underway. I am not sure
15 outside of those specific things --
16 criticality safety programming -- I mean, I
17 can go into some pretty specific examples of
18 really very, very useful, for example,
19 collaborations with the French government that
20 have allowed us to both use our facilities
21 much better to gain data, and even to use
22 their facilities to gain, for example,

1 solution-based criticality safety knowledge
2 that we would be -- it would be unavailable to
3 us otherwise.

4 So our R&D (Research &
5 Development) program has enabled us to
6 continue to progress and even expand our
7 knowledge in some key areas. I'll get back to
8 you with the syllabus of published documents
9 or completed research, because I don't have
10 that at hand.

11 MR. BADER: But my picture of the
12 situation is not much. I mean, that is one of
13 the glaring areas that remains incomplete to
14 me in 2004-1. I mean, something as elementary
15 as airborne release fractions -- we are still
16 using experimental data where when they ran
17 out of fuel the investigator broke up some of
18 the boxes around them and tried to keep the
19 fire going to keep the experiment going.

20 I mean, this is antique data,
21 which if we had a better set of data, we would
22 minimize a lot of arguments and probably save

1 an awful lot of money for the Department of
2 Energy. And I don't see any -- I see no real
3 impetus behind the research and development
4 effort, safety research and development
5 effort.

6 I mean, most of what I see -- and
7 there are some good things going on -- are
8 very specific to projects, very specific to
9 programs, not broad-based safety R&D. And
10 these are the kinds of things that pay for
11 themselves hundreds of times over in the
12 design and construction of facilities.

13 That was too much of a speech and
14 not a question, but --

15 VICE CHAIRMAN MANSFIELD: I'll
16 make a little -- add a speech, too. I look on
17 this as something akin to training and
18 maintenance in an Air Force. You know, they
19 don't kill any enemy, they don't generate any
20 missions, they don't deliver any ordnance, but
21 without them you quickly fall apart.

22 GEN. HARENCAK: You know, I don't

1 disagree with that, and we certainly take that
2 critique in the -- I don't think any of us
3 disagree that we probably have not progressed
4 to the point that we had hoped we would on
5 that.

6 MR. BADER: And you are holding
7 the bag, but -- and that was I hope a good
8 comment I heard from the Deputy Secretary this
9 morning, and that was breaking -- that one of
10 his intentions was to break stovepipes. To
11 me, it would also make sense to invigorate
12 this kind of an effort, because it saves
13 money, time, and effort in an awful lot of
14 places, once it is successfully done.

15 GEN. HARENCAK: I agree.

16 MR. BADER: So, anyway.

17 GEN. HARENCAK: I agree.

18 VICE CHAIRMAN MANSFIELD: All
19 right. Any further questions?

20 MR. BROWN: Yes. I just refer to
21 your statement here, following up on Mr.
22 Bader, talking about R&D resources. These

1 resources will be used to support about 10
2 projects, which could reduce the conservatism
3 and authorization basis controls, which
4 ultimately could result in cost savings. And
5 I see in the complex a very large bubble of
6 conservatism in everything we do, which is
7 based upon what we know.

8 There is a lot that we don't know.
9 And if this cross-cutting, integrated,
10 research and development could increase our
11 knowledge base, decrease the uncertainties, we
12 could save incredible amounts of money in the
13 operation and building of these facilities.

14 But because, in my view, we are
15 comfortable with that envelope that we have
16 developed in all of these orders, regulations,
17 and instructions, nobody wants to really go
18 back and redo those. And they fight to defend
19 them, and it seems to be -- like you mentioned
20 airborne release fraction, I think in your
21 statement as one of the areas.

22 It is -- by understanding that

1 better, we could change a lot of the things we
2 do, and I think for the better. There is
3 always the chance that if you do more research
4 you are going to find out something bad, that
5 you weren't conservative enough. But I don't
6 believe that's the case. I think there is so
7 fertile ground out there for research to bring
8 the conservatism bubble down that the
9 Department is really being penny-wise and
10 pound-foolish by not aggressively going after
11 these areas of research.

12 You mentioned that you can't
13 improve unless you measure, and later on we
14 were talking about risk, and I wondered how
15 you measure risk in DP. I mean, do you have
16 a formal process for measuring risk? Or is
17 this kind of how -- you know, based on what
18 the Board says and HSS says and --

19 GEN. HARENCAK: Well, that is --
20 you know, that is a tough question. I mean,
21 it depends of course on the risk we are
22 looking at. Obviously, if it is a specific --

1 a specific task, I think we are very good with
2 ways that, you know, we -- using formulas,
3 using, you know, tried-and-true procedures, we
4 come up with the risk.

5 Now, as you look at the bigger
6 enterprise, you know, I think -- I think our
7 operational risk, if you will, comes down to
8 less of a science and more of an art based on
9 our experience, based on those issues. So I
10 guess the answer to the question is: it
11 depends. It depends on what we are talking
12 about. Are we talking about a specific
13 dismantlement exercise, or are we talking
14 about, you know, overall uranium processing
15 for that matter?

16 MR. BROWN: Well, I would go back
17 to what Dr. Winokur brought up as the lead-in
18 for the fire water system at Pantex. We have
19 -- apparently, the risk has been assessed that
20 that can be put off for several years. I was
21 wondering if that is just based on intuitive,
22 or is there an analysis that has been done?

1 GEN. HARENCAK: Well, it is
2 definitely an analysis. If you want to --

3 MR. McCONNELL: That is an example
4 where I would submit that the risk we are
5 taking is an operational risk.

6 VICE CHAIRMAN MANSFIELD: Yes,
7 that's mission risk.

8 MR. McCONNELL: Mission risk --
9 because if the lead-in fails, the fire water
10 pressure will go down, we will fail to satisfy
11 an LCO (Limiting Condition for Operation), and
12 we will have to suspend operations.

13 VICE CHAIRMAN MANSFIELD: Yes.

14 MR. McCONNELL: So because we have
15 -- the only -- in the conditional risk where
16 somehow it fails during a demand, would
17 actually be a real safety risk. But for the
18 most part what we are -- we have to figure out
19 is, relative to our priorities in our --
20 because that safety issue is inherent in
21 mission success, it is not do the mission and
22 do it safely, it is safety is a core value, so

1 the mission inherently includes that safety.

2 We have concluded that -- that
3 specific example, there is some indication of
4 that failure, such that we can take action.

5 We will, unfortunately, have to absorb a
6 mission risk, but there might be some other
7 thing we need to do where we are not as lucky
8 to be able to identify a facility failure.

9 And so we -- that -- we can't control that
10 risk as well, and so we have to make an
11 educated decision to put our resources
12 somewhere else for now -- 9212 (Y-12), for
13 example.

14 VICE CHAIRMAN MANSFIELD: Can I --
15 one point that Mr. Brown made about the
16 sometimes overwhelming and discouraging
17 conservatism that are in some of your safety
18 analysis, almost "can't get there from here"
19 sort of thing.

20 A good example is in (DOE
21 Standard) 3009 we -- you almost always use
22 Appendix A, which means the -- you know, since

1 it says the MAR (Material at Risk) is
2 everything in the building. That is not the
3 only way that 3009 allows you to proceed. You
4 can approve something else, like, for
5 instance, you could -- you know, some material
6 could be considered less dispersible, and
7 blah, blah, blah.

8 But even more, the worst case of
9 it is that you have, in our Recommendation
10 2009-2, these terrible numbers were based on
11 an amount of material that you don't even have
12 in the building. And it's -- and why?
13 Because it is too much trouble to lower the
14 MAR limit. It is too much trouble, if you
15 lower it, to try to get back up again. I
16 think that is probably an artificial problem,
17 and it is making you look bad.

18 Okay. Anything -- I think we
19 ought to move on.

20 MR. BROWN: Well, I have one --

21 VICE CHAIRMAN MANSFIELD: Oh, yes.

22 I'm sorry.

1 MR. BROWN: -- one short question.
2 And this is kind of a yes or no question. The
3 Congressional Commission on Strategic Posture
4 of the United States is quoted as saying,
5 "Existing DOE production facilities are
6 genuinely decrepit and are maintained in a
7 safe and secure manner only at high cost." Do
8 you agree that DOE's defense nuclear
9 facilities are genuinely decrepit?

10 GEN. HARENCAK: You said yes or
11 no. I would say it depends. It depends.

12 (Laughter.)

13 So, you see, I have been in
14 Washington only nine months, and I have got it
15 down. It really -- there are specific things
16 where they are decrepit. I have said publicly
17 many times, you walk through 9212, and you
18 wear a hard hat, not just because OSHA
19 (Occupational Safety and Health
20 Administration) tells you, but because crap
21 falls on your head. Okay.

22 That is unacceptable. That is

1 unacceptable for a nuclear power, as we are
2 the world's foremost nuclear power, and that
3 is the place where we process uranium. That's
4 insane. In my military -- best military
5 advice, okay, that's insane.

6 On the other hand, we do have some
7 pretty nice facilities out there that we have
8 spent, so I think that is a broad comment that
9 is very accurate in some issues and in other
10 sides. I certainly wouldn't call NIF
11 (National Ignition Facility) decrepit. I
12 wouldn't call many of our mason -- all those
13 systems -- we've got a lot of -- a lot of good
14 out there, but we've got a lot more we
15 absolutely have to invest in. This is too
16 important for our national defense to defer
17 any main site.

18 The reason -- we have too many
19 areas where we are single-point failures --
20 high explosive pressing, for example. I mean,
21 you know, that thing was built during the
22 McKinley administration or something --

1 (Laughter.)

2 -- you know, I mean, we have got
3 to -- you know, we have got to find out those
4 single-point failures, we've got to fix it.
5 But I would not -- you know, unfortunately, I
6 would not point to it that everything is
7 decrepit. There are areas that are -- we need
8 to aggressively fix those, and we need the
9 money to do so.

10 MR. BROWN: Thank you very much.

11 GEN. HARENCAK: Thank you.

12 VICE CHAIRMAN MANSFIELD: General
13 Harencak, thank you for your time and your
14 attention and your wise comments.

15 Now I would like to --

16 GEN. HARENCAK: Thank you.

17 VICE CHAIRMAN MANSFIELD: -- ask
18 Dr. Triay, the Assistant Secretary, to address
19 the environmental restoration issues and waste
20 management.

21 The Board notices Mr. Dae Chung
22 and Dr. Steven Krahn as joining Ms. Triay on

1 the -- at the witness table.

2 Thank you.

3 DR. TRIAY: Good morning, Mr. Vice
4 Chairman, and members of the Defense Nuclear
5 Facilities Safety Board. I appreciate the
6 opportunity to be here today to represent the
7 Department of Energy's Office of Environmental
8 Management and address the actions our office
9 has taken regarding oversight of complex,
10 high-hazard nuclear operations.

11 My remarks cover the six topics
12 you provided to the Secretary in your letter
13 dated August 25, 2009.

14 Safe operations, including safety
15 of the public, safety of our workers, and
16 protection of the environment, are paramount
17 to the environmental management program.

18 While the cleanup work we accomplish is
19 fundamental to risk reduction, it is more
20 important that all of our workers are able to
21 go home at the end of each day as healthy as
22 they were when they arrived for work.

1 I have often heard the Board
2 describe safety management by using an analogy
3 to a three-legged stool. The idea is that you
4 need all three legs of the stool for the
5 system to work properly. One leg is
6 requirements, and the other two legs are
7 bright and inquisitive people performing
8 oversight, along with good processes and
9 procedures.

10 I believe this analogy
11 appropriately identifies our safety management
12 approach within the environmental management
13 program. We rely on requirements, people,
14 such as our facility representatives, and our
15 processes and procedures to ensure safety.
16 Our strategy for meeting the environmental
17 management's programmatic goal is the rigorous
18 application of our rules, standards, and
19 requirements, many of which you have helped us
20 develop through your recommendations and
21 comments.

22 Line management and oversight will

1 ensure that these requirements are effectively
2 implemented, and a system of rewards and
3 penalties when they are not. Our field
4 offices provide management of the contractors
5 that run our facilities. They have delegated
6 responsibilities for most nuclear safety
7 functions, a prominent exception being startup
8 authority for Category 2 nuclear facilities,
9 which I retain at headquarters.

10 The environmental management
11 program takes a list of these limited term
12 delegations and reviews and issues delegations
13 annually. EM requires that managers with
14 nuclear safety responsibility be qualified as
15 senior technical safety managers and take
16 nuclear executive leadership training.

17 My field of office managers rely
18 on their staffs to ensure that the Department
19 of Energy requirements are implemented.

20 Foremost among these are our facility
21 representatives. I depend on my facility
22 representatives as my eyes and ears in the

1 facilities.

2 Procedure development and
3 compliance is a significant part of the
4 oversight conducted by the facility
5 representatives. They are assisted by the
6 Headquarters Office of Safety Operation
7 Assurance.

8 A frequent question is: how do we
9 strike a balance between safety and mission?
10 The view being if, evidently, that we somehow
11 need to sacrifice safety to accomplish our
12 cleanup mission. I reject this view.

13 We select controls to ensure that
14 all of our operations are safe and believe
15 that a well-structured set of controls can
16 improve both safety and mission effectiveness.
17 Certainly, experience gained in the commercial
18 nuclear industry supports this.

19 In addition, we have been
20 encouraging and partnering with contractors in
21 an effort to improve our integrated safety
22 management systems by providing tools for

1 contractors to improve their safety culture.

2 A primary result of the
3 coordinated contractor and DOE effort is the
4 identification of three focus areas and
5 associated attributes that will have the most
6 impact for improvement -- leadership,
7 employee/worker engagement, and organizational
8 learning. Our experience shows us that safety
9 culture is an important element in our overall
10 performance improvement.

11 A number of DOE and EM contractors
12 are currently piloting safety culture
13 improvement tools and will be working to
14 provide feedback on their effectiveness and
15 sharing lessons learned, so that others can
16 take advantage of this pilot effort.

17 We have also been monitoring the
18 Nuclear Regulatory Commission rulemaking
19 effort in the area of safety conscious work
20 environment and issued a Federal Register
21 Notice to solicit public comment on the need
22 for the DOE to pursue similar rulemaking.

1 At headquarters, the Environmental
2 Management Office tracks a suite of DOE
3 corporate database indicators on a monthly
4 basis for all of its operations from a field
5 office, site, contractor, and contractor
6 corporate viewpoint, including normalized and
7 severity-weighted scores that represent a
8 composite of all safety-related occurrences.

9 Various types of operating
10 experience events tracked by control chart and
11 dashboard indicator methods, including
12 electrical safety, nuclear criticality,
13 authorization basis, near misses,
14 environmental releases, conduct of operations,
15 equipment degradation and failure, fire
16 protection, occupational safety, industrial
17 hygiene, and radiological control.

18 The final measure is total
19 recordable case and days away from work on
20 work restriction or job transfer case rates.
21 The monthly indicators are analyzed and
22 reported to the Assistant Secretary and other

1 senior EM leadership and shared with the field
2 office managers. The reports are intended to
3 give management some standard tools to
4 evaluate safety performance and/or the
5 identification of adverse trends for
6 investigation and improvement activities as
7 needed.

8 While these indicators have been
9 shown to be useful, they are used in
10 conjunction with a robust line in safety and
11 project oversight effort that provides the
12 headquarters daily operational awareness of
13 emergent safety issues. These emergent issues
14 are brought to my attention daily, or are
15 documented in a weekly report as the events or
16 issues warrant.

17 I have brought along the most
18 recent monthly safety report and will submit
19 it for the record.

20 Glenn Podonsky will be going over
21 the status of the Department's implementation
22 of your recommendation 2004-1 in more detail.

1 I would like to take this opportunity to
2 mention two of environmental management's
3 actions in response to this recommendation.

4 The environmental management
5 organization improvements have been made since
6 2004. They have included organizations that
7 focus on safety policy and increased safety
8 line oversight and operational awareness. The
9 environmental management safety organization
10 also added quality assurance two years ago to
11 improve the environmental management's overall
12 quality assurance posture, as well as focusing
13 on safety and quality assurance of capital
14 nuclear facility construction projects.

15 EM's technology development
16 includes objectives to improve safety,
17 performance, and reduce uncertainties
18 associated with design and operation of our
19 facilities. Specifically, our multi-year
20 program plan summarizes the strategic
21 initiatives to improve safety and reduce costs
22 and environmental impacts associated with

1 waste processing.

2 Safety-related items in the multi-
3 year program plan include evaluation of high-
4 efficiency particulate air filter performance
5 under upset conditions, enhanced chemical
6 cleaning, and long-term performance of
7 cementitious wastefoms and materials of
8 construction, among others.

9 EM is an active participant in the
10 annual nuclear safety research and development
11 forum, and I know that Dr. Krahn has briefed
12 you several times on the environmental
13 management technology development program.

14 The environmental management
15 program has supported the integrated safety
16 management as the foundation for safety
17 management since your recommendation on the
18 subject almost 15 years ago.

19 In the area of integrated safety
20 management, the 2009 annual environmental
21 management declaration process is underway.
22 This process requires the environmental

1 management field organizations to perform an
2 integrated safety management systems and
3 quality assurance effectiveness review for
4 fiscal year 2009 and submit a declaration
5 report to the environmental management Office
6 of Safety and Security by October 30, 2009.

7 The annual integrated safety
8 management system effectiveness review
9 conducted by the environmental management
10 field organizations and contractors is an
11 essential element of the integrated safety
12 management systems implementation that allows
13 for evaluation and making necessary
14 adjustments.

15 This review is a comprehensive
16 review that encompasses multiple elements,
17 including review of self-assessments,
18 oversight review results, integrated review
19 across multiple reporting elements,
20 performance against established safety
21 performance measures, and other feedback and
22 performance information.

1 Elements of this review are
2 ongoing throughout the year and culminate in
3 a review report that supports an annual
4 summary evaluation. This year's annual
5 declaration is required to address 10 criteria
6 designed to assess effective integration of
7 safety, quality assurance, and environmental
8 management systems elements.

9 Along with the annual integrated
10 safety management systems and quality
11 assurance declaration report, the field
12 offices have been requested to provide the
13 most recent update of their office's
14 integrated safety management systems
15 description. We review these declarations in
16 detail every year.

17 We apply the principles of
18 integrated safety management during reviews of
19 our construction projects. The overall
20 purpose of the environmental management
21 construction reviews are to determine, through
22 the use of an independent technical review

1 team, whether the scope of the projects, the
2 underlying assumptions regarding technology,
3 project management, cost and schedule
4 baselines, along with the contingency
5 provisions, are valid and credible with the
6 budgetary and administrative constraints under
7 which DOE must function.

8 The major elements addressed in
9 each review are project relevant technical
10 disciplines -- project management, contract
11 systems, cost engineering, environment,
12 safety, and health, quality assurance, and
13 prior reviews.

14 The following projects were
15 reviewed in 2009: Depleted Uranium
16 Hexafluoride Conversion Facility at
17 Portsmouth, plutonium preparation at Savannah
18 River Site, Waste Treatment Plant at the
19 Office of River Protection, Solid Waste
20 Processing Facility at the Savannah River
21 Site, uranium-233 at Oak Ridge, Integrated
22 Waste Treatment Unit at Idaho.

1 The 2010 review schedule is being
2 developed.

3 Implementation of a contractor
4 assurance system is defined in the
5 Department's Oversight Order 226.1A, which is
6 included as a requirement in our contracts.
7 We use the information provided by our
8 contractors, such as self-assessments and
9 assessments performed by our field offices, as
10 input to development of the headquarters
11 assessment schedule.

12 Our reviews cover both the field
13 office and their contractors. We at
14 headquarters perform an average of more than
15 one safety or quality assurance assessment per
16 month, and target those areas where additional
17 oversight is appropriate, based on continuous
18 monitoring of site office and contractor
19 safety and quality assurance performance.

20 In addition to the baseline
21 reporting requirements of the occurrences, EM
22 has put in place enhanced reporting

1 requirements that ensures that injuries or
2 process offsets that might not otherwise be
3 reportable are also discussed with my
4 headquarters safety and quality assurance
5 management.

6 Our recent environmental
7 management headquarters reorganization is now
8 nearing completion. Safety functions and the
9 staffs responsible for those functions have
10 not changed significantly as a result of the
11 reorganization. As you know, I have named Dae
12 Chung as my Principal Deputy, and Dr. Steve
13 Krahn as Deputy Assistant Secretary for Safety
14 and Security. I believe that these changes
15 have strengthened our safety posture by having
16 substantial nuclear safety expertise at these
17 two senior positions within our organization.

18 Now that the reorganization is
19 nearing completion, I am allowing the
20 environmental management staff to request
21 reassignments. However, I do not anticipate
22 that any resulting reassignments will affect

1 critical safety functions, and I will be
2 monitoring any moves to ensure a strong safety
3 posture is maintained.

4 Additionally, the Chief of Nuclear
5 Safety and his staff have a continuing role to
6 support the environmental management program.
7 As you know, the Chief of Nuclear Safety is
8 staffed with a cadre of senior safety
9 specialists. The Chief of Nuclear Safety is
10 providing support in the Secretary's
11 initiative on external regulation and
12 represents the environmental management
13 program regarding this initiative.

14 The Chief of Nuclear Safety has
15 led construction project reviews for the
16 environmental management program, initiated
17 discussions with the major construction
18 projects on developing a comprehensive
19 approach to commissioning activities and has
20 developed a Code of Record policy for the
21 environmental management program.

22 The Chief of Nuclear Safety is

1 also conducting 2007-1 reviews in accordance
2 with the Board's 2007-1 implementation plan.
3 Further, the Chief of Nuclear Safety has
4 worked closely to integrate oversight and
5 assistance efforts with the environmental
6 management Deputy Assistant Secretary for
7 Safety and Security.

8 The environmental management
9 program also has comprehensively documented
10 individual and organizational safety
11 responsibilities in the environmental
12 management functions, responsibilities, and
13 accountabilities document, and, in specific,
14 formal safety delegations of authority.

15 First, I would like to discuss my
16 February 25, 2009, letter emphasizing safety
17 in planning Recovery Act work and the role of
18 Recovery Act readiness evaluations in ensuing
19 preparations for this work, maintain and build
20 on the environmental management long-term
21 commitment to safe work execution in the
22 Recovery Act work.

1 This letter required the
2 following: federal oversight to include
3 standard site coverage for facility
4 representatives, federal project directors,
5 and as an element of site oversight of
6 contractor assurance programs for safety
7 management programs. Contractor oversight to
8 ensure that the work is accomplished within
9 the bounds of existing integrated safety
10 management systems, including safety
11 performance metrics tracking.

12 Recovery Act readiness activities
13 to supplement existing site safety support,
14 establish headquarters oversight site
15 representatives at each site receiving
16 Recovery Act funds, reporting directly to
17 headquarters, and nuclear safety requirements
18 for scope performed within Hazard Category 2
19 or 3 facilities, include 10 CFR 830 compliant
20 or properly-exempted authorization basis. And
21 meet DOE Order 425, Operational Readiness
22 Requirements, as applicable.

1 The environmental management
2 program has consistently encouraged worker
3 involvement to participating continuous safety
4 improvement. EM encourages our sites and
5 contractors to develop and implement voluntary
6 protection programs to better involve workers
7 in planning and performing work safely.

8 Many of our environmental
9 management contractors have received, or are
10 pursuing, Voluntary Protection Program
11 recognition. Eight field offices have
12 contractors recognized under the Department of
13 Energy's Voluntary Protection Program.

14 The environmental management line
15 management believes worker involvement is
16 fundamental to ensuring safety improvement.
17 The headquarters environmental management and
18 integrated safety management systems
19 description provides for mechanisms for all
20 workers and management to participate in the
21 integrated safety management systems and
22 improve safety program and performance.

1 Field office integrated safety
2 management systems descriptions follows the
3 lead of the headquarters integrated safety
4 management systems description. Contractors
5 are encouraged to provide programmatic avenues
6 for worker involvement through participation
7 and development of the integrated safety
8 management systems and other safety management
9 programs and procedures, workplace oversight,
10 and event investigations.

11 An important example of worker
12 participation is work planning and control
13 where crafts, engineers, subject matter
14 experts, and others work together to fully
15 identify hazards and effective controls. Our
16 contractor employees receive training in their
17 worker rights, responsibilities, and ways to
18 participate in the contractor's 10 CFR 851
19 worker safety and health programs.

20 The unions representing our
21 workers have proven to be valuable to program
22 improvement activities and the communication

1 of worker-identified hazards or other safety
2 concerns requiring the Department of Energy's
3 involvement. I encourage our contractors to
4 continuously communicate with the unions at
5 our sites.

6 EM has made strides in ensuring
7 health effects from our operations are
8 identified and evaluated through strengthened
9 industrial hygiene and occupational exposure
10 assessments and occupational medical programs.
11 An example of this is our operations at the
12 Hanford tank farms and the Savannah River
13 Site.

14 The Hanford tank farm contractor
15 made significant improvements in its
16 industrial hygiene program several years ago
17 in response to increased occupational
18 exposures due to an increase in tank waste
19 transfer activities. This industrial hygiene
20 program is continuing to improve by
21 implementing protective exposure limits for
22 chemical contaminants that do not have

1 regulatory limits.

2 Environmental Management program
3 continues to support occupational exposure
4 database and health surveillance activities
5 provided by the DOE Office of Health, Safety,
6 and Security, to include reporting into the
7 Beryllium Registry and supporting HSS health
8 evaluations for DOE former workers.

9 I am constantly working with my
10 senior leadership here at the headquarters and
11 in the field to identify good practices and
12 quickly share and implement lessons learned.
13 This past month we provided guidance to the
14 field on the conduct of quarterly safety and
15 recurring event analysis to emphasize the
16 rigor and followup needed to ensure continuous
17 improvement opportunities are identified and
18 addressed.

19 I have several programmatic
20 opportunities for EM senior management to
21 discuss recent operational experience and
22 sharing of lessons learned, including bi-

1 monthly environmental management field manager
2 calls and monthly and quarterly project
3 reviews. These calls and reviews emphasize
4 safety as an integral part of the discussion.

5 In summary, safe operations,
6 including safety of the public, safety of our
7 workers, and protection of the environment,
8 are of the highest value to the environmental
9 management program, and this is reflected in
10 our management approach.

11 We have made, and continue to
12 make, progress implementing improved oversight
13 of nuclear operations. We are using the
14 principles of integrated safety management as
15 well as our nuclear safety requirements as a
16 foundation for our safety programs.

17 In addition, from the outset of
18 the Environmental Management's Recovery Act
19 planning, I have directed that it is even more
20 important for us to ensure this work is
21 planned and conducted to meet the high safety
22 standards and performance expected within the

1 Environmental Management program and that
2 safety must be integral and robust from the
3 beginning of this effort.

4 Poor safety performance due to
5 inadequate safety infrastructure, immature
6 safety management programs, inadequate safety
7 training, or the lack of appropriate work
8 planning, will not be acceptable or tolerated.

9 We continuously assess contractor
10 safety performance and take actions, as
11 necessary, to ensure worker and public
12 protection. Safety functions have been
13 maintained throughout our recent
14 reorganization, and we expect continuous
15 improvements in our already-strong safety
16 performance. Nevertheless, we will never be
17 complacent when it comes to safety.

18 We will continue to pursue this
19 and other steps to ensure the safety and
20 protection of the public, our workers, and the
21 environment.

22 I thank you for all the work that

1 you have done personally, and including your
2 staff, and I look forward to your comments and
3 questions.

4 Thank you.

5 VICE CHAIRMAN MANSFIELD: Thank
6 you, Madam Secretary. I have two. We will
7 speed things along here.

8 The Deputy Secretary and General
9 Harencak, noted that they realize the
10 necessity of our sometimes intrusive
11 involvement in the processes of the Department
12 as a necessary part of our conducting our
13 oversight. It especially affects your
14 organization, because you are building
15 essentially all of the big facilities that
16 have issues of -- that require us to get
17 involved early.

18 You will remember we didn't do
19 that very much at the beginning, because we
20 weren't told to. We have been told to, and we
21 have been given more people to do that. The
22 result is that we are going to be there -- we

1 are already -- early and often, and our work
2 can easily -- and is -- easily be perceived,
3 and is perceived by the contractor, as being
4 intrusive.

5 We are -- we intend to continue to
6 challenge technically and probe and identify
7 potential mistakes. Nobody likes that, and
8 they complain, and they probably complain to
9 you. And I know they complain to the Deputy
10 Secretary that we are out of bounds by pushing
11 too hard too early before they've got their
12 activities together.

13 We see no other way to do that.
14 Some say it is not our business. I say it is.
15 And what do you say?

16 DR. TRIAY: I think it is, and,
17 interestingly, when I stood up the Recovery
18 Act program, my principal deputy, Dae Chung,
19 and I, as well as Dave Anderson, the head of
20 the Environmental Management Recovery Act,
21 talked a lot about oversight. And Dae Chung
22 said, "It appears to me the diverse oversight

1 model is the Defense Board model for
2 oversight."

3 So in the Recovery Act, we have
4 the Defense Board model for oversight. We
5 deploy representatives from the headquarters
6 operation and embed them at the sites, so that
7 we can address issues in real time. There is
8 always a natural tension between an oversight
9 role and an advocacy role that, for instance,
10 headquarters needs to have with its field
11 operations, that the field offices need to
12 have with their contractors, but I think that
13 that natural tension is healthy.

14 In having the model that you
15 essentially have instituted, which is the
16 deployment of representatives to the field
17 offices, if you -- to keep in mind, you know,
18 that we do need to accomplish work throughout
19 the complex. It actually can streamline
20 decision-making rather than waiting until the
21 issue has become so huge that it is not easily
22 addressed.

1 We can address issues early and
2 perhaps even prevent the majority of the
3 issues as we move forward. That is the name
4 of the game. In order to obtain performance,
5 which is not only results but achieving
6 results safely, securely, and compliantly, we
7 need to not only resolve issues early but
8 avoid issues altogether.

9 That it has been, in our opinion,
10 the best oversight model that we have seen
11 implemented, and as it is said, that imitation
12 is the highest form of flattery. We have
13 adopted that same oversight model for our
14 Recovery Act implementation.

15 VICE CHAIRMAN MANSFIELD: Thank
16 you. Thank you. I totally agree, obviously.

17 My second question is --

18 (Laughter.)

19 I set you up on that one.

20 (Laughter.)

21 My second question is about
22 collecting data on occurrences that may not

1 otherwise be reportable. I struggle with
2 that. I have a strong suspicion that there is
3 value there, but I am not competent to suggest
4 what sort of data would be useful to collect
5 and analyze.

6 I am encouraged to say that you
7 have put in place enhanced reporting
8 requirements to achieve that end. Can you
9 tell us at all when these will be at a degree
10 of maturity such that they can be kept in a
11 database and searched the way the ORPS reports
12 are?

13 DR. KRAHN: Let me try to answer
14 that.

15 MR. AZZARO: Would you identify
16 yourself for the record?

17 DR. KRAHN: This is Steve Krahn.
18 I am the Deputy Assistant Secretary for Safety
19 and Security. We have had in place by memo,
20 I believe for about two years, these enhanced
21 reporting requirements. There are criteria
22 for what needs to be reported to the chain of

1 management at headquarters on a timely basis.

2 Because these are, as the Chairman
3 correctly points out, below reportable level
4 -- I can't use the term "occurrences" in the
5 DOE parlance. Let's call them events. We
6 have to date received these reports in text
7 format. They are described to us from the
8 standpoint of what injury, if any, occurred;
9 what equipment failure, if any, occurred; and
10 what the perceived near-term causes were. And
11 then, there is discussion between headquarters
12 and the field whether additional investigation
13 is required.

14 I would say what we have done most
15 frequently, both myself and my predecessor who
16 is sitting on my right, is accumulate those
17 more on an anecdotal basis, and determine if
18 aggressive headquarters action is required to
19 reverse what appear to be adverse trends.

20 I would point out, at least since
21 I have had the privilege of this job, we have
22 done that once at Savannah River where we had

1 several injuries that occurred in addition to
2 some less than reportable items. We discussed
3 in detail, both myself and Dae Chung and Dr.
4 Triay, with the field office management our
5 convinced belief that action was required on
6 their part to turn around what was a potential
7 adverse trend in worker safety in this case.

8 And we have monitored the
9 contractors and the field office's response to
10 that. I took a trip down there directly
11 focused on this several weeks ago, and my
12 operational safety group has since followed up
13 on that. So I don't know that we can dump
14 them into a database yet, Mr. Chairman, but we
15 are certainly using them --

16 VICE CHAIRMAN MANSFIELD: Okay.

17 DR. KRAHN: -- on a day-to-day
18 basis in performing our line management job of
19 managing safety.

20 VICE CHAIRMAN MANSFIELD: Let me
21 suggest that an overemphasis just on non-
22 reportable but safety-related events may not

1 be the best way to proceed. I mean, your
2 responsibilities are QA as well as safety.
3 You know, everything that happens that is not
4 the way it is supposed to happen, like things
5 not getting delivered on time, or the --
6 failing a slump test on the concrete or things
7 like that -- are non-reportable occurrences,
8 but they give you a good picture of what is
9 going on.

10 If that had been involved -- I
11 realize this is not your area, but if such a
12 collection -- method to collect events were
13 available for the HEUMF, the Highly Enriched
14 Uranium Materials Facility, I have a feeling
15 that things would have been discovered quite
16 a bit earlier and could have been remedied
17 quite a bit cheaper if that had been done that
18 way.

19 That is the end of my questions,
20 and I will pass that on to --

21 DR. WINOKUR: First of all, Madam
22 Secretary, I want to thank you for the

1 leadership you displayed by writing that memo
2 requiring the safe performance of work on the
3 recovery program. I thought it was
4 outstanding.

5 I have just a couple of very brief
6 questions. Conduct of operations at some EM
7 sites is kind of cyclic in nature. We have
8 periods of outstanding performance punctuated
9 by periods of poor performance. And we hope
10 that that variation is centered around some
11 average high value, but still we have these
12 peaks and valleys. Do you have any sense of
13 what the root cause or solutions are to that
14 performance?

15 DR. TRIAY: We have part of --
16 some of these initiatives that we have started
17 between the contractors and the Department of
18 Energy is actually to analyze the data that we
19 all have been collecting -- they have, we have
20 -- and try to address how to deal with those
21 cycles.

22 I mean, like you mentioned, people

1 appear to get distracted, you know, very close
2 to the holidays, during the summers, you know,
3 that we have the majority of our work being
4 done because the weather is -- is -- helps us.
5 We also see a lot of issues.

6 So it is part of what we are
7 trying to address, you know, with our
8 contractors, to see whether we can do what I
9 call adjusting time lessons learned. You
10 know, as they are walking out the door, you
11 know, during that plan of the day, you know,
12 that we remind them that at this time of the
13 year it is very easy to fall due to the snow
14 or, you know, to whatever.

15 It is very easy at this time of
16 the year to get distracted because the holiday
17 season is upcoming, and that in the past three
18 years at that site there have been X number of
19 accidents or incidents related to this
20 particular function that they are about to
21 perform.

22 Not unlike, you know, what

1 happens, you know, when you get coached, you
2 know, if you are into sports. You know, the
3 coach tells you before you walk in the field,
4 "Don't drop the ball." You know, so that's
5 what is in your mind, you know, as you are out
6 there under the pressure of the activity that
7 you are conducting.

8 So this is part of the things that
9 we are trying to work out with our
10 contractors, aided by EFCOG of course. That
11 is the organization that helps us out.

12 And I would like to also give the
13 opportunity to Dae Chung or Steve Krahn if
14 they have additional comments on this
15 particular -- we have noticed the same
16 cyclical type of trending.

17 MR. CHUNG: Yes. Just a comment
18 that we have gone through some contract
19 changeovers in the recent years. We have
20 taken particular attention to the leadership
21 aspect of our contractors. I think that is a
22 key to maintaining good conduct of ops without

1 -- someone mentioned from the Board this
2 morning about walking the talk.

3 We want the top leaders at our
4 site organization, particularly the contractor
5 and the field organization, to walk the talk
6 by not just sending e-mail messages or letter
7 messages to spend the time in the field. Many
8 of our work -- whether it's nuclear or non-
9 nuclear -- are very transactional in nature,
10 hands-on activities. So without really
11 walking the talk, it would be very difficult,
12 in my mind, to be able to maintain high status
13 of conduct of ops.

14 So we -- that is something we
15 emphasize every time we have an opportunity to
16 meet as a leadership, not just within the
17 field managers and the headquarters
18 leadership, but also with the contractors'
19 leadership in the field as well as their
20 corporate entities.

21 For instance, URS (United Research
22 Services) has a promulgated corporate conduct

1 of ops types of very investigative review
2 process at their responsible sites. For
3 instance, at WIPP (Waste Isolation Pilot
4 Plant) we have some issues with the conduct of
5 ops. Rather than headquarters taking the hard
6 charge assessment, we work with the URS
7 Corporation to be able to send their top
8 safety leaders and con ops leaders to be able
9 to assist in a way to have their sister
10 organization at WIPP to realize that there
11 were some issues.

12 So that is something that we have
13 worked out as a mutually beneficial process.
14 Sometimes we send our own representatives to
15 participate or observe. Certainly, we get to
16 discuss the results, so that is -- in my view
17 is very important in terms of having those
18 leaderships to walk the talk in terms of con
19 ops and any other safety initiatives or main
20 processes.

21 DR. WINOKUR: I would suggest that
22 there is a big benefit to you to solve the

1 problem, because typically what I see -- and
2 I think you know it -- is fixes, where we have
3 supervisory watches, and these things to me
4 are just, you know, more and more checkers,
5 and so on and so forth, and they are really
6 not good solutions.

7 So to me it sounds like you are
8 looking at some safety culture-related aspects
9 of things, which I think might be the best
10 approach, but I urge you to pursue that,
11 because I think it will have a big payoff for
12 you.

13 And the last question I have very
14 briefly is: on your desk, Madam Secretary,
15 are there any metrics you really like, that
16 you really feel comfortable with, that tell
17 you something about how things are going in
18 terms of safety at the EM sites?

19 DR. TRIAY: I look a lot at the
20 daily occurrences, you know, that get
21 summarized every morning, you know, and sent
22 to -- to every line manager in the

1 organization. Those occurrences probably, you
2 know, say more about the culture of the
3 organization than almost anything else.

4 TRC (Total Recordable Case), DART
5 (Days Away From Work, on Work Restriction or
6 Job Transfer) important metrics, I do look at
7 them very carefully. But I get a weekly
8 report that summarizes the prominent aspects
9 of those daily occurrences.

10 And I feel that it is not only
11 what happens, but how is it dealt with? It
12 tells you a lot about the safety culture of
13 the organization. You see an organization
14 that, you know, tends to blame the worker, if
15 you will, you know, because the worker is the
16 closest, you know, to that incident or
17 accident by, for instance, saying, well, you
18 know, there was a sign, you know, saying not
19 to take this particular vehicle -- all the
20 others were fine, this one in particular we
21 couldn't use.

22 Well, you know, the question would

1 be: well, why do you have it in a row with
2 everything else, just with one sign? You
3 know, why did you not remove it to another
4 area? You know, the person is busy, you know,
5 they come in, you know, they grab the first
6 vehicle that they come to, why have it there?

7 I understand that indeed there was
8 a sign, that indeed the worker was told not to
9 use that vehicle, but does that make it easy
10 for that worker to do something that is going
11 to put him or her in an unsafe condition?

12 So I believe those daily
13 summaries, they tell you a lot about the
14 safety culture of the organization, and the
15 further review on a weekly basis of those same
16 occurrences I think are the most helpful tool
17 that I use to assess what is the safety
18 posture of the environmental management
19 complex.

20 DR. WINOKUR: Thank you.

21 VICE CHAIRMAN MANSFIELD: Mr.

22 Bader.

1 MR. BADER: Dr. Triay, I would
2 like to compliment you on your testimony. It
3 has a heavy preponderance of actions that
4 commends itself to me.

5 Going beyond that, one of the
6 things we have talked about this morning has
7 been the self-regulating role of the
8 Department and the necessity of independent
9 oversight. Would you comment on the value of
10 the role of HSS in providing additional
11 independent oversight to what you provide
12 internally to EM, please?

13 DR. TRIAY: I think the value of
14 the independent oversight of HSS is extremely
15 important. HSS's role -- you know, the way I
16 see it, and, of course, you know, I definitely
17 defer to Mr. Podonsky, who is going to be in
18 front of you next, number one, is to ensure
19 that we have requirements that in my view many
20 of which need to be standardized across the
21 complex.

22 I believe that those requirements,

1 like has been said, if they are based on a
2 sound technical basis, could actually help
3 reduce the cost of many of our operations. So
4 that, in my opinion, is the first extreme
5 value of having an HSS organization that looks
6 across the Department of Energy.

7 The second, of course, is the
8 independence of the oversight. Many a time
9 when we have a particular accident or incident
10 inside environmental management program, Dr.
11 Krahn or Mr. Chung have decided if we are so
12 close, you know, to this particular issue that
13 having a different pair of eyes, you know, to
14 come in and tell us how have people addressed
15 this situation, what could be the potential
16 root causes of this, is extremely valuable.
17 And we have used HSS exactly in that manner in
18 the environmental management program.

19 Like the Deputy Secretary said,
20 that does not mean that the huge and vast
21 expertise of HSS cannot be used to assist a
22 particular field office that either asks for

1 help or needs the help based on the outcome of
2 our particular review.

3 And I think that that duality is
4 also extremely beneficial, and I find the
5 independence, if you will, of HSS, which is
6 based on the fact that they are outside of the
7 chain of command of the Environmental
8 Management program, you know, the
9 organizations that have to deliver a
10 particular product, invaluable.

11 MR. BADER: Good. I have one
12 other question. If you look at the situation
13 of safety R&D in the Department, do you have
14 any thoughts on how we could get broad-based
15 safety R&D identified and funded?

16 DR. TRIAY: In terms of --

17 MR. BADER: Good question.

18 DR. TRIAY: Well, yes. In terms
19 of the thoughts that I have, I mean, I do
20 agree with what has been said regarding
21 research and development in the safety area.
22 I mean, hydrogen issues are something that we

1 have spent a lot of resources addressing.
2 Perhaps if we had better data some of those
3 continual resources that we spent addressing
4 this particular issue could be reduced. Like
5 you mentioned, those investments pay huge
6 dividends in many areas of our safety
7 envelope, you know, so there are several
8 options.

9 Of course, you know, we could make
10 that an integral part of the research and
11 development portfolio of the Department of
12 Energy. And when we are developing the
13 research and development priorities of the
14 Department, we can have that as part of the
15 research and development that we must do in
16 the Department of Energy.

17 So perhaps one option would be a
18 complete integration, if you will, of the
19 safety research that is needed into the
20 research portfolio of the Department of
21 Energy, which we looked at very carefully
22 every year, you know, during the planning for

1 the submittal of ultimately the President's
2 budget to Congress, so that we can focus on
3 the type of research that would have this type
4 of return on investment.

5 You know, perhaps what we have not
6 done well is point out, you know, to the
7 senior management that gets around the table
8 to make the decisions on priorities, the
9 return on investment of this research, perhaps
10 that is the way to proceed in order to give it
11 a higher priority.

12 MR. BADER: Thank you.

13 VICE CHAIRMAN MANSFIELD: Mr.
14 Brown.

15 MR. BROWN: Yes. Welcome, and
16 thank you very much for the statement. I
17 found it very comprehensive.

18 DR. TRIAY: Thank you.

19 MR. BROWN: And I would say it
20 reflects, in my view, the performance of EM's
21 headquarters under your leadership, which has
22 been -- which I think has embraced the

1 principles of 2004-1 maybe better than any
2 other organization at the headquarters.

3 Part of that is you have had the
4 flexibility, which is probably funding that is
5 made available for you to take initiatives,
6 and that is important for you to have that
7 capability, because if you didn't have that
8 flexibility you would not be able to implement
9 those initiatives.

10 I particularly appreciated in your
11 comments about fac reps.

12 DR. TRIAY: Absolutely.

13 MR. BROWN: They are, as you say,
14 the eyes and ears. But you can have eyes and
15 ears, but if you don't listen to them, then
16 they are worthless. I looked at the GAO
17 report that talks about -- recommends in HSS
18 establishing an increased presence at sites
19 with nuclear facilities to provide more
20 frequent observations of nuclear safety. But
21 for the fac reps, the Department would not
22 have any eyes and ears.

1 And so while I agree with GAO
2 personally that there should be greater
3 presence at the sites, the fac reps are very
4 important, and I appreciate you pointing that
5 out, and also, in ARRA (American Recovery and
6 Reinvestment Act) for deploying folks out to
7 emulate that experience of people onsite.

8 So my question to you is, with
9 regard to 2004-1, our recommendation, are
10 there any things in that that you would change
11 in the way of more emphasis or less emphasis
12 or new directions that it should take?

13 DR. TRIAY: In my view, you know,
14 the recommendation, I thought, was extremely
15 well crafted and thought out. We have taken
16 it to heart. You know, we feel that it is
17 essential to enhance, if you will, our role
18 when it comes to integrating safety into the
19 management of our operations.

20 So perhaps the area that I
21 believe, like I believe that you share that
22 opinion, is in the area, indeed, of research

1 and development. You know, that the important
2 area of trying to reap the benefits of some of
3 these technical issues, that if resolved by
4 having a clear path forward based on the -- on
5 good science and technology, we actually could
6 improve the safety of the complex, and perhaps
7 even spend less resources.

8 I'm sure that maybe Steve Krahn or
9 Dae Chung have additional comments.

10 MR. CHUNG: In that vein, I think
11 that we have some opportunities coming. We
12 have learned valuable lessons when we took an
13 effort to standardize transuranium waste-
14 related safety documentation processes over
15 the past several years. I think we can
16 achieve a similar type of benefit perhaps in
17 the tank waste arena.

18 Just as Steve and I were going
19 through some of the pending issues related to
20 2004-2, validation process, we recognize some
21 discrepancies or some differences between
22 Hanford tank farm versus Savannah River.

1 Maybe there should be a difference, but we
2 could not come up with that conclusion during
3 our conversation.

4 So using that as an example, I
5 think -- and the Assistant Secretary talked
6 about, you know, the great value that we can
7 enhance through a standardization effort. I
8 think there is an opportunity.

9 Safety research -- I think if we
10 accept a more mechanistic approach, I think
11 one of the reasons why we are not terribly
12 motivated sometimes is that we take, you know,
13 an ultraconservative approach in postulating
14 our accident scenarios in a very non-
15 mechanistic fashion.

16 That may be discouraging our very
17 smart people to -- not to talk a whole lot
18 about, hey, let's take a different
19 phenomenological approach or let's challenge
20 some of our assumptions that were made in the
21 Handbook 3010 in terms of release fractions.
22 Perhaps if we can allow for more mechanistic

1 approaches that -- I think we can stimulate
2 more thoughts in terms of R&D arena.

3 DR. KRAHN: The only thing I would
4 add to what my colleague said is I think one
5 of the things that, in coming back into the
6 Department, I enjoyed about joining the EM
7 management team is that management meetings
8 focused on safety, not just management
9 meetings, but management meetings focused on
10 safety.

11 We have inside the Environmental
12 Management operations, the Technical Authority
13 Board, which is a senior group of managers who
14 meet only to evaluate technical and safety-
15 related matters. It is a different focus of
16 meetings when the only reason you are getting
17 together is to discuss safety-related issues.
18 Very often we, as senior managers in the
19 Department, have many pressing issues on our
20 minds. There is great value to be added by
21 meetings that just have safety as a focus.

22 I think the commercial nuclear

1 business has understood this with their plant-
2 specific safety groups and their corporate
3 safety review groups that are required by the
4 NRC (Nuclear Regulatory Commission).

5 The other thing I would add is
6 that, you know, we do focus on safety even in
7 our regular management meetings. We have bi-
8 weekly field management calls where there is
9 -- I don't want to use the coy word of "safety
10 topic," but we all -- with a \$9 billion
11 program with the ARRA, there is always enough
12 going on so that somebody can share a lessons
13 learned.

14 And we tend to delegate out to the
15 field, or somebody who has been what Mr.
16 Conway used to call "Lucky Pierre," and has
17 had -- had an event at their site to share
18 both the event and what their analysis and
19 corrective actions are, even if they aren't
20 complete. I mean, it is a management team,
21 and we are discussing management issues.

22 The other -- and the reason I

1 focus on this a bit is because often our
2 corrective actions for safety-related matters
3 can be so focused on the people -- the actual
4 event that sometimes we miss management-
5 related insights.

6 So I think that is one of the
7 things that when we talked with our colleagues
8 out at Savannah River, there was an awful lot
9 of focus in their corrective action management
10 on workers being more attentive, which is
11 certainly very important. Board Members have
12 already discussed the important part that our
13 workers play in executing work safely.

14 But we also encouraged the
15 Savannah River team and their contractors to
16 have their management teams act more, to be
17 more visible, and to be more informed, visible
18 participants in the safety management process,
19 as they worked through their trend.

20 So that -- I would say that you --
21 that actual meetings where management sets
22 aside the time to focus on just safety-related

1 issues are a very important lesson learned
2 that I -- I have gotten over the last two
3 years.

4 VICE CHAIRMAN MANSFIELD: Thank
5 you, Dr. Krahn.

6 MR. BROWN: One more question. I
7 talked about performance incentives and
8 contracts with the earlier witnesses. Are
9 there any incentives, either carrots or
10 sticks, that have been particularly effective
11 or ineffective in promoting continuous
12 improvement in safety from your perspective?

13 DR. TRIAY: I think that, you
14 know, when it comes to safety I do believe
15 that it is important to have carrots and
16 sticks, meaning when we talk about improving
17 performance, you know, performance are the
18 results obtained, but also the manner in which
19 those results were obtained, which means that
20 you have to conduct delivery of that product
21 in a safe, secure, and compliant manner.

22 So those are the rules of the

1 game. When a contractor is not capable of
2 delivering the product in a safe manner, we --
3 I believe those penalties that are associated
4 with reduction in fee are important, because
5 it sends a message. This is, if you will, a
6 part of what you come to work every day, is to
7 make sure that those workers can return home
8 as healthy as when they came in in the
9 morning.

10 With respect to carrots, I must
11 admit that I have agonized over that
12 particular question. Should we have
13 incentives that just focus on improving
14 performance, safety performance? And how do
15 we measure that?

16 Let's say that we measure TRC and
17 DART, as an example. Is that going to
18 encourage non-reporting? In other words, are
19 we going to have a situation where the
20 workers, you know, are under pressure by their
21 peers, you know, and nobody wants to report
22 because that is going to cost the company

1 money, which ultimately, you know, if it is --
2 if they share, if you will, into the company
3 profits, which is very often the case, they
4 feel this is going to effect my pocketbook, if
5 I am reporting something like -- perhaps it
6 could even be a somewhat trivial accident.
7 You know, I fell or, you know, whatever it is.

8 So this is the debate that we have
9 been having in the Environmental Management
10 office with the contractor team that EFCOG
11 actually facilitated, you know, for us to have
12 these discussions.

13 We do incentivize resolving
14 specific safety issues. You know, the Vice
15 Chairman, you know, talked this morning about
16 a mixing -- jet pulse mixers, technical
17 issues, or hydrogen in the pipes. We do
18 incentivize resolving those safety-related
19 issues. Certainly in the nuclear world those
20 are part of the design of issues that the
21 facility has in order to be able to move
22 forward.

1 So those I believe are
2 incentivized. That is the right thing to do,
3 and that is an important carrot, you know, for
4 the contractor to deliver on that particular
5 set of products.

6 When it comes to just metrics,
7 like TRC, DART, occurrences, the only concern
8 that has been expressed so many times is, how
9 do we continue to encourage reporting, because
10 reporting is how we learn, how they learn, you
11 know, that their colleague also had the same
12 issue, and perhaps there is something that
13 needs to be done that is just not as simple as
14 that worker just violated that procedure.

15 You know, after that happens,
16 there is an opportunity to say, "Well, you
17 know, that procedure will result in many
18 workers violating that particular step,
19 because it is not clear, it is not placed in
20 the right order, you know, whatever it is.
21 And if we stop reporting just because we want
22 to get to the incentivization of the fee, that

1 would not serve us well.

2 So we have taken the approach of
3 not incentivizing specific safety measures
4 directly, you know, not to say, well, if you
5 increase your performance, or essentially you
6 have a better TRC or DART, we are going to
7 give you this amount of money associated with
8 that incentive. So we use essentially a --
9 the penalty approach. We do use that.

10 Second, we use -- when there are
11 award fees associated with the contracts,
12 certainly that is part of the -- how the
13 contractor is actually performing their work,
14 and we take their safety performance into
15 account. And, in addition to that, we
16 definitely incentivize specific safety issues
17 that need to be resolved in order to move
18 forward with the design. But, in general, we
19 don't incentivize a particular safety metric.

20 MR. BROWN: Thank you very much.

21 MR. DWYER: Dr. Mansfield, before
22 we go further, if I could ask a question?

1 VICE CHAIRMAN MANSFIELD: Yes.

2 Mr. Dwyer.

3 MR. DWYER: Dr. Triay, just a
4 logistics question. When the CNS office was
5 initially set up, the funding for those
6 billets came out of your budget. Is that
7 still the case, or has that been shifted
8 elsewhere?

9 DR. TRIAY: As you know, the
10 Environmental Management program is the
11 program that gives the Chief of Nuclear Safety
12 the most business. And for that reason, the
13 staff of the Chief of Nuclear Safety does come
14 out of the Environmental Management budget.
15 But it is just a matter of we are the ones
16 that, by and large, have the issues that the
17 Chief of Nuclear Safety on behalf of the Under
18 Secretary for -- the Under Secretary, in other
19 words S3, Under Secretary Johnson, has to
20 focus on, you know.

21 So it was just a matter of you are
22 using this particular function the most, you

1 know, so it is going to come out of your
2 budget.

3 MR. DWYER: Thank you.

4 VICE CHAIRMAN MANSFIELD: Thank
5 you very much, Madam Secretary. We appreciate
6 your views and appreciate you could spend so
7 much time with us. You are dismissed.

8 DR. TRIAY: Thank you.

9 VICE CHAIRMAN MANSFIELD: Now, the
10 next is Mr. Glenn Podonsky, the Chief Health,
11 Safety, and Security Officer of the agency.

12 Now, I mean no disrespect or no
13 slight or no affront, I mean only to recognize
14 Mr. Podonsky's diligence in getting his
15 statement to us four days ago, so that we
16 could put together our questions. And,
17 therefore, I would like to ask him to just
18 summarize his views, perhaps with the
19 following focus.

20 In your opinion, are the DOE's
21 plans to respond to the GAO recommendations on
22 track? Do the management reform efforts of

1 the National Laboratory Contractors Group
2 paper -- are those consistent with the
3 direction of the oversight that you believe
4 you have been tasked to do?

5 And how -- what is your feeling
6 about the ever-difficult problem of balance
7 between line management's authority and
8 oversight from headquarters?

9 MR. PODONSKY: Thank you, Mr. Vice
10 Chairman, and Board Members. I just quickly
11 took my 17 pages and cut it down to three to
12 answer the focus of the public hearing today.
13 I truly want to say I very much appreciate
14 that you are having this hearing, so we have
15 this opportunity, as the Chief Health, Safety,
16 and Security Officer, to give you an update on
17 where we are going and what we are doing
18 within the Department as it relates especially
19 to the responsibilities that reside within my
20 office.

21 I do think it is very important --
22 if you will indulge me just for a moment and

1 recognizing time is limited -- but I would
2 like to begin recounting a little bit of the
3 past, because the past seems to be prologue
4 currently, in that in May of 1994, former
5 DNFSB (Defense Nuclear Facilities Safety
6 Board) Chairman Conway wrote to Secretary
7 Hazel O'Leary to understand in detail what we
8 were going to do in terms of managing the
9 Department's safety. And that was the birth
10 of integrated safety management.

11 In my office back then, as the
12 Deputy Assistant Secretary for Independent
13 Oversight, out of the former EH (Environment,
14 Safety, and Health) organization, we actually
15 helped put that correspondence together that
16 later became the implementation plan for the
17 Board Recommendation 95-2.

18 It is important also to share with
19 you I believe that Chairman Conway also sent
20 a letter to the Assistant Secretary for ES&H,
21 Tara O'Toole, expressing interest in
22 recommendations by a Federal Advisory

1 Committee on the external regulation of health
2 safety at the Department facilities.

3 The Chairman stated in his letter,
4 "One must always remember that no outside
5 regulator or other agency outside DOE can
6 assure safety. Nuclear and non-nuclear safety
7 at DOE facilities is the responsibility of
8 you, parenthetical, Tara O'Toole, and other
9 DOE personnel responsible. It cannot be
10 delegated or transferred to others."

11 I share that with you, Board
12 Members, because today the Department is again
13 examining its regulatory model. We heard the
14 Deputy Secretary say today under testimony
15 that he and the Secretary are looking to
16 reinforce the commitment to ISM, to the
17 principles of strong safety culture, and an
18 effective nuclear safety posture. And we
19 endorse all of that.

20 I would also say that my
21 organization, beginning in 1996 as the
22 independent oversight, we examined other

1 industrial models. We benchmarked against
2 IBM, Dupont, Dow Chemical, General Electric,
3 and we used that benchmarking to establish the
4 type of oversight that we have been doing now
5 for 15 years.

6 In respect of the administration,
7 the administration wanted to examine, as we
8 heard the Deputy Secretary talk about,
9 examining what is the correct model for
10 safety. Mr. Winokur, he -- Dr. Winokur, he
11 differentiated, as you did, safety versus
12 nuclear safety.

13 And I want to emphasize -- if you
14 look at the correspondence that I put out as
15 HSS to the community in changing the model, we
16 didn't talk about nuclear safety. So now I
17 want to make this very clear. In April of
18 this year, April of '09, I signed a letter
19 with the concurrence of all program offices,
20 all Secretarial offices, to accept and start
21 implementing the GAO recommendations that were
22 contained in the GAO report. And we have done

1 many of those right now.

2 As we also heard the Deputy
3 Secretary say, I think to the Technical
4 Director's question, how do you have
5 independent oversight, and then you also have
6 assistance, and he talked about duality. So
7 I suppose I am now the Chief of Duality.

8 (Laughter.)

9 But the reality is that after 15
10 years, Mr. Vice Chairman and Board Members, we
11 have developed a technical expertise
12 unsurpassed in HSS. It continues to get
13 stronger with new hires that we are bringing
14 in with nuclear engineering backgrounds, so
15 that we are in fact compliant with our OMB
16 budget, so we are spending what we have been
17 allocated, and how we have been allocated
18 that, to do independent oversight.

19 As you sit there, you may say,
20 okay, so during the last 11 months, Mr.
21 Podonsky, how many independent oversight
22 nuclear safety reviews have you done? And I

1 will say, "We have changed the model during
2 this study period. We went out to Livermore,
3 and instead of doing the traditional
4 inspection we did more of an assist role,"
5 using the same protocols that we always have.

6 And my technicians -- my technical
7 experts are telling me categorically, "We are
8 learning more the way we are doing this right
9 now than we would just in the pure
10 inspection." And the results are even
11 greater, and I'll tell you why. I have
12 testified many times on Capitol Hill where
13 members of Congress have said, "Your reports
14 are very good as an independent overseer, but
15 the Department doesn't always take actions to
16 your reports."

17 I will tell you, we are getting
18 more mileage over this last 11 months, even
19 though it has been very tumultuous for us, I
20 am very pleased to hear the Deputy Secretary
21 in a public session confirm his commitment to
22 nuclear safety oversight that HSS does.

1 I am also very pleased to hear the
2 General talk about how unpopular we are,
3 because I agree that is a good indication that
4 the -- I should clarify, the unpopularity of
5 our operations tells me that we are on the
6 right track in a number of areas.

7 Now, how does this flush out to
8 our assistance? Dr. Triay, for example, has
9 asked us in a number of areas to go and
10 assist, take a look at different areas. I
11 don't think that compromises our independence,
12 because if independent oversight is done
13 properly, it is another form of assistance.

14 I would offer to the Board the
15 question is: how does the Department receive
16 the oversight? You all were gracious enough
17 to have an implementation or a Board
18 Recommendation 98-1 that helped us, as an
19 independent oversight, have the Department
20 respond to our findings. It was very
21 important for us to make sure that the
22 Department followed through on our findings as

1 opposed to the fact that, since we are not
2 founded in legislation, it was just our
3 technical prowess that they would respond to.

4 So today, Mr. Vice Chairman, I
5 would say that we are at a crossroads. We
6 know that nuclear safety is very important,
7 and we intend to adhere to all the
8 recommendations in the GAO report, and go
9 beyond. And so that independent nuclear
10 safety oversight is not going to change other
11 than be strengthened in every aspect of the
12 GAO report.

13 In regard to worker health and
14 safety, it will also be strengthened, but in
15 a different model, where we are using the
16 under secretaries -- I will use that -- say
17 that again -- where we are using the under
18 secretaries to get the under secretaries to
19 make sure that their responsibilities are
20 carried through all the way through the line.

21 I will close my extemporaneous
22 statement here by saying after 15 years of

1 this model, we find that it is really good for
2 HSS to also assist the line as opposed to just
3 leave a report with ratings, because we have
4 seen -- we have oftentimes corrective action
5 plans that we negotiate back and forth. We
6 have not always seen the results that we are
7 seeing now.

8 The last example -- we went up to
9 Argonne National Laboratory. Originally, it
10 was an inspection. The Office of Science
11 asked -- they said they have a lot of
12 problems, they really don't need an
13 inspection, they need assistance.

14 The only thing we did differently,
15 we didn't give ratings. We had findings, we
16 had issues. And as the head of my
17 organization from that inspection, or that
18 review, said that we learned a lot more and we
19 got more done. And at the end of the day, the
20 contractor and the lab learned a lot more.

21 So the duality, Mr. Dwyer, is all
22 about doing assistance, using our technical

1 expertise where we can, and using our
2 independent oversight to focus on nuclear
3 safety work we must do.

4 VICE CHAIRMAN MANSFIELD: Thank
5 you. Thank you, Mr. Podonsky. Before we go
6 on to questions, let me correct an oversight
7 on my part.

8 The record shall include the
9 written statements of General Harencak and Mr.
10 Podonsky.

11 Dr. Winokur.

12 DR. WINOKUR: Glenn, you say, "We
13 will endorse and we will implement the
14 recommendations of the GAO report." Do you
15 mean by that the Secretary and the Deputy
16 Secretary of Energy want you to do that? They
17 are fully invested? I mean, that is senior
18 management's decision that that is what the
19 Department is going to do.

20 MR. PODONSKY: It's a two-part
21 question. At first, in September of last
22 year, the last administration, we took issue

1 and signed out by former Assistant Deputy
2 Secretary Kupfer -- we took issue with some of
3 the way that the GAO report was couched.

4 DR. WINOKUR: Yes.

5 MR. PODONSKY: And the Acting
6 Comptroller General came and talked to the
7 Acting Deputy Secretary, and then we had the
8 transition of the administration. For the
9 first three months of the administration, I
10 had briefed the various Chief of Staff, Deputy
11 Chief of Staff, and then finally -- and we
12 were waiting for the Deputy Secretary.

13 In the meantime, I instructed the
14 HSS staff to proceed forward with putting
15 together an action plan to make sure that we
16 were going to be addressing the
17 recommendations. But I still required the
18 approval of the Deputy Secretary and the
19 Secretary, which we had not had at that time.

20 I mentioned in my just brief
21 comments here this morning, or this afternoon,
22 that we got full concurrence from every

1 program office in the Department, and I was
2 the one who finally signed it out. I don't
3 believe I signed it out without the approval
4 of the Deputy Secretary. When I say I don't
5 believe it, I have talked to the Deputy
6 Secretary as recent as last week, and he is
7 fully on board with what we are doing.

8 I think, clearly, as the Deputy
9 said, when you asked about the special review,
10 he said we haven't come to a conclusion yet.
11 And the reality is is that the Secretary and
12 the Deputy have to decide on the
13 recommendations that have come out of the --
14 of that report.

15 So in the meantime, we have the
16 GAO focusing on nuclear safety, and then we
17 have this other piece on worker safety.

18 DR. WINOKUR: I understand. So
19 what you are saying is the Deputy and -- the
20 Secretary of Energy and his Deputy have fully
21 approved your new vision for oversight. They
22 are fully -- and as well as they have endorsed

1 that you implement the recommendations of the
2 GAO report.

3 MR. PODONSKY: Correct.

4 DR. WINOKUR: Great. You know, I
5 am a little concerned that you may not
6 continue to be unpopular if you pursue this
7 role of being in assist mode, but you will
8 have to -- maybe that will be one of your
9 metrics that will tell you how good a job you
10 are doing.

11 But I do want to talk about
12 something in your written testimony. I was
13 sensitive to it. You were talking about the
14 management reforms we just mentioned, and you
15 say -- and I'm quoting from your written
16 statement, "The Secretary has recognized that
17 many aspects of safety performance within the
18 Department are excellent, particularly in the
19 area of worker safety and health. However, he
20 also believes that it might be possible to
21 maintain high levels of safety performance, as
22 well as necessary rigor and oversight and

1 enforcement of high-risk areas under a
2 modified structure that would support enhanced
3 productivity and the achievement of mission
4 goals."

5 And when I read that, it makes me
6 think that there is a tradeoff taking place
7 here, that the Secretary doesn't necessarily
8 demand the highest levels of safety. He wants
9 them just to be high enough so that he can
10 accomplish -- you know, do the enhanced
11 productivity and achieve his mission.

12 Do you think that's in the trade
13 space of what is going on here? Do you think
14 the sense is achieving the highest safety
15 goals is really not what we should be doing or
16 what the Department should be doing?

17 MR. PODONSKY: There is no --
18 there is no second-guessing on safety. It has
19 to be the number one priority. I don't
20 disagree with the General when he says, "Get
21 the job done," but you have to get it done
22 safely first. And I will -- and I do not

1 think -- I do not believe the Secretary is
2 intending for us to put safety as a secondary
3 focus to mission.

4 On the contrary, if I can give you
5 one anecdotal in talking to the Office of
6 Science of recent. One of the senior managers
7 -- we were talking about the tritiated water
8 situation up at Brookhaven that took place
9 back in 1996/97 timeframe. And the site
10 manager told the science manager that, "You
11 should have given me money for the monitoring
12 wells," and the response came back, "I did.
13 It was the first \$35,000 you should have been
14 spending, before you spent it on anything
15 else."

16 So I think, Dr. Winokur, that the
17 Department is trying to balance getting a very
18 challenging mission done and not compromising
19 safety. And one of the issues are, when you
20 first come into the Department, and you see
21 directives, guides, rules, the whole litany
22 that we have, it becomes somewhat confusing if

1 you are first coming in.

2 And so that is why we have been
3 asked to explore, are there industrial
4 standards out there that are not DOE-centric?
5 Not relative to nuclear safety -- I want to
6 make that clear. Not relative to nuclear
7 safety, but looking at all of the other safety
8 requirements that we have in the Department.
9 Is there a better way of doing it?

10 And I would offer to you, after a
11 short 25 years in the Department, some of the
12 solutions the Department has come up with over
13 time have been bolted on to be responsive to
14 one committee or another and haven't always
15 been analyzed thoroughly, and then we live
16 with them.

17 And so I believe what the
18 Secretary is trying to do is, as he said,
19 "Reset the Department, not to denigrate
20 safety, but make sure that we are more
21 efficient as we do this."

22 DR. WINOKUR: Okay. Thank you. I

1 will have other questions later if there is
2 time. But let me defer now.

3 VICE CHAIRMAN MANSFIELD: Mr.
4 Bader.

5 MR. BADER: If we look at
6 enforcement actions, you have had no
7 enforcement actions on nuclear safety this
8 calendar year. How does that fit with the
9 duality of having independent oversight as
10 well as assist?

11 MR. PODONSKY: For the last 11
12 months, we have had -- we have had nuclear
13 safety enforcement issues that have been
14 coming up to me, and we have been looking at
15 them. I deliberately have held them until we
16 were -- until I was convinced that not only
17 did we have a good case across the board, but
18 that we also were thinking in terms of how
19 effective the enforcement is.

20 So there is -- if you will indulge
21 me, there's two parts to the answer. The real
22 thing is that since 1994 the enforcement

1 activities of the Department of Energy, in my
2 opinion, have been very convoluted. It is a
3 process that, for example, at Savannah River
4 we had a fatality a few years back, and the EM
5 acting manager at the time, Paul Golan, took
6 immediate action.

7 The former EH organization took
8 exception, because they thought they were in
9 enforcement space. The enforcement actions
10 took 18 months and resulted in were a far
11 smaller fine. So during this past 11 months,
12 while we knew that the Secretary and the
13 Deputy Secretary and the entire Department
14 were examining another regulatory model, I
15 said, "We cannot stop this effort. We should
16 not stop this effort. We have to have the
17 moral fiber," as, Dr. Winokur, you talked
18 about in oversight. But we also have to be
19 somewhat circumspect on how we are doing this.

20 And I will assure you, Mr. Bader,
21 that the enforcement rollout that we are going
22 to be coming up with in the next few months is

1 going to be much more rigorous and much more
2 focused and much more timely than it has in
3 the last 15 years.

4 MR. BADER: So we can expect to
5 see enforcement actions in the not-too-distant
6 future.

7 MR. PODONSKY: Absolutely.
8 Without question.

9 MR. BADER: Good.

10 MR. PODONSKY: You are going to
11 see them in a timely fashion, and they are
12 going to be appropriately focused, and it is
13 going to involve the line management, because
14 the enforcement rules -- all three, not just
15 nuclear safety -- it was not intended just to
16 be an HSS tool. It is supposed to be a tool
17 of the line managers. They are supposed to
18 help embrace this to help -- to hold their
19 contractor accountable, not just HSS. So you
20 are going to see a whole different
21 enforcement, much more rigorous.

22 MR. BADER: Do you expect to

1 continue to do audits, in the true sense of
2 the word, as part of your duality?

3 MR. PODONSKY: Just yesterday --
4 the answer is yes. Just yesterday I was
5 talking to the Administrator, Tom D'Agostino.
6 We talked about the fact that we have been
7 helping some of the sites as the regulatory
8 model was being examined. And I told him that
9 we must, because of timing, complete our
10 efforts in the GAO implementation. And that
11 means that we need to do a rigorous nuclear
12 safety oversight of the defense facilities.
13 He totally agreed.

14 I share that with you, because he
15 is one of our biggest customers, if you will.

16 MR. BADER: Yes.

17 MR. PODONSKY: And so, as I said,
18 the short answer is yes, and that is what we
19 are going to do.

20 MR. BADER: And these will have
21 findings, and they will have action plans to
22 mitigate those findings.

1 MR. PODONSKY: Everything that we
2 have done in the past will be there. The
3 difference, since you mentioned the duality,
4 and I have mentioned it as well, is that it
5 would be a shame to take all of the expertise
6 that we have and not apply it to some of the
7 sites, the non-nuclear sites, that can use our
8 expertise in a way that they will get better.

9 Some of our expertise we are also
10 going to apply at our National Training
11 Center. One of the shortfalls of this
12 Department has been training and retraining of
13 some of the folks that are out there. The
14 challenges that I gave to my independent
15 oversight during this last 11 months is take
16 a look at all of the findings that we have had
17 across the complex.

18 Where are the issues? Where are
19 the places we need to -- where we need to
20 circle back to make sure that we have
21 coursework developed for people to reexamine
22 things that they haven't studied for a while,

1 or haven't learned, other than reading our
2 reports? So we are using the resources in a
3 number of ways while this regulatory
4 examination has been taking place.

5 MR. BADER: Okay. Thank you.

6 VICE CHAIRMAN MANSFIELD: One
7 question. You mentioned that the Department
8 and your group are examining the order system
9 to see what kind of simplifications can be
10 made. But it wouldn't change any of the
11 orders having to do with defense nuclear
12 facilities.

13 Besides those orders which have
14 obvious linkages to defense nuclear
15 facilities, there are a number of other orders
16 that the Board has traditionally been
17 interested in, and included in a list of that
18 name, "Orders of Interest to the Board". It
19 includes such things as emergency management,
20 the technical standards in general, differing
21 professional opinions, things of that nature.

22 Can you assure us that those will

1 remain intact?

2 MR. PODONSKY: What I can assure
3 you at this point, given the authorities I
4 have, is that we are doing a thorough review
5 within HSS on existing requirements and orders
6 compared to whatever national standards are
7 there and what we believe that the Department
8 could afford to change. And then, we are
9 going to take that to the Assistant -- to the
10 under secretaries.

11 The reason I say that is because
12 the Deputy Secretary and the Secretary wanted
13 a top-down look as opposed to bottoms up. And
14 we have been doing bottoms up, noodling in the
15 fringe, for quite a long time. We decided to
16 take all of our policy staff and managers to
17 take care of this ourselves, to make sure that
18 we did not unintentionally create a
19 vulnerability with the elimination of any
20 order arbitrarily and capriciously. So we are
21 examining that.

22 So as far as -- again, as far as

1 my authorities go, I can assure you that we
2 are not going to endorse the elimination of
3 anything that is going to denigrate nuclear
4 safety.

5 VICE CHAIRMAN MANSFIELD: Okay.

6 Good.

7 Mr. Brown.

8 MR. BROWN: Thank you, and good
9 morning. In the GAO report, one of the items
10 was to establish an increased presence at
11 sites with nuclear facilities to provide more
12 frequent observations of nuclear safety.
13 Without getting into what your response is
14 going to be, can you give me some options of
15 how you might execute that direction?

16 MR. PODONSKY: We are examining
17 the fac rep program, and I'll tell you why,
18 Mr. Brown, because a while back I actually had
19 nuclear site residents, and I had industrial
20 safety occupational residents as well in the
21 old EH model. And it wasn't very effective,
22 and it wasn't because we didn't get qualified

1 people. We couldn't keep them from going --
2 in the NRC terms, going native.

3 And so over time that program was
4 disbanded by the former -- one of the
5 assistant secretaries, and we did not
6 reestablish it. We do have, as you all know
7 through our Defense Board Liaison Office, the
8 sponsorship of the fac rep program.

9 They are not part of our
10 organization, but it is, we believe, a tool
11 that we need to utilize, in addition to a more
12 rigorous examination of the reports coming in
13 through our analysis group and utilizing our
14 analysis group, together with our oversight
15 reports, to have a more real-time
16 understanding of what is going on at the
17 sites, as opposed to the last four or five
18 years of modeling where we have just mostly
19 relied on our independent oversight
20 inspections, which don't go out there enough
21 to maintain the presence that I believe GAO is
22 looking for, and I think that they are

1 correct.

2 MR. BROWN: So it isn't an
3 increase in numbers of people. It would be a
4 duality, if you will, of responsibilities that
5 the fac reps would have to line management and
6 to HSS? Is that --

7 MR. PODONSKY: No, it would be our
8 utilizing their information more appropriately
9 than we have used in the past, as well as our
10 own analytical function that we have.

11 MR. BROWN: Okay. You mention in
12 your testimony our Recommendation 2009-1 on
13 risk. If I could ask a question that relates
14 to that. It is really a question of whether
15 or not there is unnecessary conservatism in
16 DOE's regulatory approach.

17 And, as you know, DOE and NRC have
18 different methodologies for assessing risk.
19 NRC uses a probability risk assessment, and
20 DOE relies upon a different methodology called
21 deterministic.

22 Last week in a speech about risk

1 management to the American Nuclear Society,
2 NRC Commissioner Dale Klein said that the
3 NRC's policy statement on use of probabilistic
4 risk assessment "seeks to reduce unnecessary
5 conservatism associated with current
6 regulatory requirements or, where appropriate,
7 use PRA (Probabilistic Risk Assessment) to
8 support the proposed additional regulatory
9 requirements."

10 This past summer we made the
11 Recommendation that DOE establish a policy on
12 the use of quantitative risk assessment. In
13 response, the Secretary has reaffirmed the
14 primacy of DOE's current approach, as I read
15 the letter.

16 Does this mean that DOE has the
17 conservatism about right, or is it that DOE
18 has another approach to reducing unnecessary
19 conservatism, and what would that be?

20 MR. PODONSKY: Well, first of all,
21 let me -- in deference to the Board, let me
22 say, while this hearing was supposed to focus

1 on 2004-1, the reason I put 2009-1 in my
2 testimony is because I wanted the Board to
3 know officially that while the implementation
4 plan that we are working on was not -- and our
5 correspondence back was not totally
6 satisfactory to the Board, it is not our
7 intention to continue down that same path.

8 We think that the 2009-1, first,
9 was a very difficult Recommendation to get the
10 entire Department to embrace, to understand
11 what the Board was attempting to get the
12 Department to do. I can't speak directly for
13 the Secretary right at this moment, but I
14 believe that the Department is very
15 conservative in its risk approach in a number
16 of areas. And the Secretary has said in many
17 speeches that he felt that we were being risk
18 averse.

19 So there is going to be a very
20 difficult balancing act here on risk aversion
21 versus the conservative approach in terms of
22 nuclear. I don't think there is a question.

1 There is no room for risk in nuclear. But in
2 other operations within the Department, I
3 think intellectual people can come together
4 and take a look and figure out a way to plan
5 accordingly for the operations.

6 That is why 2009-1 is -- I believe
7 is going to be one of the bigger challenges
8 that the Department faces, defining the risk.
9 In fact, we -- one of our plans is to have a
10 senior group come together to examine, how do
11 you teach risk? And we can -- we have already
12 notified a number of folks in the private
13 sector that we are going to touch base with,
14 because I don't believe that in the Federal
15 Government that we have a culture of: how do
16 you manage risk appropriately? And I haven't
17 seen it in the Department.

18 MR. BROWN: Thank you. That's
19 all.

20 VICE CHAIRMAN MANSFIELD: Mr.
21 Bader.

22 MR. BADER: A comment. In an

1 informal discussion with an acquaintance, who
2 is a British nuclear regulator, he made the
3 comment to me that they thought that too much
4 emphasis was being given in nuclear safety to
5 probabilistic risk assessment, and they were
6 going more heavily towards deterministic. Any
7 thoughts on that?

8 MR. PODONSKY: No. I really do
9 not have any thoughts on that that I could
10 give you any intelligent answer to. I would
11 like to be referred to the individual that you
12 talked to to understand their experience.

13 MR. BADER: It was just about
14 exactly what I told you. No more great depth
15 than that. It was a comment.

16 MR. PODONSKY: Okay.

17 MR. BADER: I would also say that
18 one of the things that I have noticed is that
19 there seems to be a lot more use of risk
20 assessment, risk management, and risk
21 mitigation practices in the commercial world
22 than there is in the government. And we are,

1 as a group, probably behind the times is a
2 good way to put it.

3 No further comments.

4 VICE CHAIRMAN MANSFIELD: I might
5 ask you the same question I asked before. It
6 is possible, according to 10 CFR 830 and 3009,
7 to present to the approving authority a
8 proposed safety basis that does not include
9 all of the very conservative approaches in
10 Appendix A that we can now consider the safe
11 harbor.

12 I don't believe that is used very
13 often. It is -- and certainly you are not the
14 one to take charge of making it used. But I
15 point out that if such things are done, there
16 is certainly risk, that in the rush to get to
17 productivity that a site might approve a
18 document safety analysis that was less
19 conservative than before.

20 I hope you would be the one that
21 would find out about that first.

22 MR. PODONSKY: We would hope so.

1 But I would like to say, again, I was not
2 being coy when I said I appreciate that the
3 Board is having this public hearing, because
4 I think we are getting on the record positions
5 for the Department and where we stand where
6 there is seemingly confusion, some of which
7 were -- emanated out of my own organization.

8 VICE CHAIRMAN MANSFIELD: Now I
9 would like to recognize the Technical
10 Director, Mr. Dwyer.

11 MR. DWYER: Glenn, you had a
12 vision statement that I thought, when I was
13 reading it, said that you would be doing
14 assisting only, not auditing, but now you are
15 telling us that you will continue to do --

16 MR. PODONSKY: No. In that vision
17 statement what is -- what is deliberately not
18 mentioned is nuclear safety. What was
19 mentioned in there was all focused on what the
20 special review was, which was industrial
21 safety.

22 MR. DWYER: Okay.

1 MR. PODONSKY: And for the last 11
2 months, as the administration was getting, in
3 the terms of Navy, sea legs, we were trying to
4 make sure that we didn't lose momentum of the
5 expertise that we had, but at the same time
6 was able to carry through with what our new
7 Secretary was looking for.

8 So the best way to do that was to
9 take our expertise, as I have said in a couple
10 of my answers earlier, take that expertise and
11 apply it to the field where the field could
12 use that expertise. And I would say, Mr.
13 Dwyer, in reflection of 25 years of oversight
14 at the Department, I have come to find that
15 sometimes, sometimes our organization has been
16 part of the problem, because they were waiting
17 -- sometimes the field has waited for us to
18 come tell them what was wrong.

19 And so this is why I think this
20 duality, as -- using the Secretary -- the
21 Deputy Secretary's term, which is, you know,
22 a set of two, dual purpose, I think it is a

1 model that is not -- is not alien to a lot of
2 organizations. In fact, you may disagree, but
3 I think in many cases the DNFSB has served
4 that role, helping the Department, instead of
5 just hammering the Department.

6 In terms of the vision statement,
7 we put that out because there was an awful lot
8 of confusion within the community of DOE, both
9 nuclear and non-nuclear, as to what the future
10 oversight was going to be. Was there going to
11 be oversight? Or were we going to just go to
12 an external regulator?

13 So we put out a vision statement
14 of what we were going to do, make it available
15 to the under secretaries, while at the same
16 time working in parallel, as I said in my
17 April 2009 letter to the GAO, that we were
18 going to be developing implementation for the
19 recommendations.

20 MR. DWYER: Okay. So what I
21 thought I just heard you say is nuclear safety
22 is not treated in your vision statement.

1 MR. PODONSKY: Not in that
2 statement, that's correct.

3 MR. DWYER: Okay. And so the
4 reason I go there is that the vision statement
5 also included a caveat that HSS would not go
6 to any site unless invited by the Under
7 Secretary. And I was trying to understand how
8 an invitation only and an oversight
9 organization could exist.

10 MR. PODONSKY: Well, as I said in
11 one of my earlier answers is, we are
12 challenging the under secretaries to be now
13 engaged in oversight of their own
14 organization, utilizing us.

15 When we talked about invite,
16 perhaps that wouldn't be the best choice of
17 words. But it is more of a collaboration, if
18 you will.

19 We don't lose our independence.
20 Just as I said -- just last evening when I was
21 talking to Administrator D'Agostino, and I
22 will just repeat. I said, "We need to, at the

1 end of this period, recognize that your sites
2 are going to be inspected from the nuclear
3 standpoint in the same way we always have done
4 that." And he said he wouldn't expect it any
5 other way.

6 MR. DWYER: Okay. And then,
7 specifically related to 2004-1, we have a
8 series of documents in the directive system
9 that appear to be hung up. We have some
10 documents associated with ISM. We have some
11 documents associated with oversight. We have
12 some documents associated with activity-level
13 work planning. Is there any prospect in
14 getting those out in the near future?

15 MR. PODONSKY: The short answer is
16 yes. And it all is linked with the
17 Secretary's final decision on the regulatory
18 model. In my written statement, in what was
19 going to be my oral statement, I mentioned
20 that it appears that we are moving away from
21 an external regulatory model.

22 And I want to quote the Secretary

1 that he made to the Defense Board during a
2 meeting back in May, I believe it was, where
3 Vice Chairman Mansfield asked about NRC and
4 OSHA, and the Secretary said, "NRC was not a
5 consideration."

6 While the Deputy Secretary -- I am
7 not here to preempt his or the Secretary's
8 decision, while he said the decision is still
9 pending, it is a very clear indication to us
10 that the model that we have presented, both in
11 terms of the assistance role for some sites
12 and the oversight nuclear safety role, is what
13 they are endorsing, which leads me to conclude
14 that the external regulatory model is not
15 going to be the answer. It is going to be a
16 more robust --

17 VICE CHAIRMAN MANSFIELD: May I
18 interrupt? If I can quote for the record the
19 statement that you referred to in your
20 testimony. "As the Department's reform
21 efforts have become more mature, and the
22 options for external regulation have become

1 more informed, it is clear that the Department
2 is moving forward to improve our current self-
3 regulatory model."

4 MR. PODONSKY: Okay. Thank you,
5 Mr. Vice Chairman.

6 DR. WINOKUR: Mr. Vice Chairman?

7 VICE CHAIRMAN MANSFIELD:

8 (inaudible)

9 MR. DWYER: No sir, that's all.

10 VICE CHAIRMAN MANSFIELD: Yes, of
11 course.

12 DR. WINOKUR: May I make a quick
13 question? I just wanted to be clear about
14 this duality. Will your decision on which
15 model to use be based upon the site? In other
16 words, would you actually go to a defense
17 nuclear facility and say for the nuclear
18 safety-related aspects, "I'm going to do my
19 traditional independent oversight, but where
20 I see chemical safety-related activities I
21 might do an assist"? Would you actually split
22 a site so you would handle different aspects

1 of its safety program differently?

2 MR. PODONSKY: Let me use -- the
3 answer to that is it would depend on what is
4 going on at the site. I think independent
5 oversight has to be dynamic in how we use our
6 resources. I think that we are committed to
7 do a rigorous oversight within what we say
8 with the GAO report, but I think there will be
9 times, albeit not frequent, where a site might
10 want to use some of our expertise for
11 something else.

12 That has happened, for example, in
13 emergency management out at the Nevada Site,
14 where they needed our expertise. And what we
15 did is we sent those people out to work at the
16 site, to help them, because no amount of
17 inspections was going to change anything.
18 They just didn't have the -- and then, we put
19 a fence around the people that did it, and
20 they could no longer go back and inspect that
21 site, we felt, because then there would be a
22 potential conflict where they would be

1 inspecting their own work.

2 So I think, Dr. Winokur, it is
3 really going to depend on there may be
4 circumstances that we might want to provide
5 assistance, or the under secretaries may ask
6 for it, just as Assistant Secretary Triay just
7 asked me that we would help down at Savannah
8 River in some areas.

9 DR. WINOKUR: It could get
10 confusing.

11 MR. PODONSKY: There's no
12 question, we are going to have to have some
13 very clear protocols that can stand the
14 scrutiny of the Congress and this Board.

15 DR. WINOKUR: Thank you.

16 VICE CHAIRMAN MANSFIELD: Anybody
17 else?

18 MR. BADER: It sounds to me like
19 you wind up fencing off your people and
20 saying, "You are inspectors; you are
21 assistants."

22 VICE CHAIRMAN MANSFIELD: Not

1 necessarily.

2 MR. PODONSKY: It depends on the
3 site. But the point of where I'm going to is
4 that we have been -- in fact, we have been
5 very cautious about conflict of interest and
6 the perception of conflict of interest,
7 because the perception is somebody else's
8 reality.

9 We haven't run into that a lot,
10 but where we have we have fenced them off,
11 because we have to keep the integrity of the
12 oversight intact.

13 VICE CHAIRMAN MANSFIELD: There
14 being no further comments, the invited
15 witnesses have presented their testimony, and
16 the Board has asked several questions and
17 gotten answers. And that concludes the first
18 part of this public hearing.

19 In accordance with the Board's
20 practice, and as stated in the Federal
21 Register Notice, we will now welcome comments
22 from any interested members of the public.

1 Are there any such?

2 (No response.)

3 There being none that have
4 appeared, I may now note that the -- this
5 hearing is not adjourned. The record will
6 remain open until December 24th. The Board
7 reserves the right to further schedule and
8 otherwise regulate the course of this meeting
9 in the future, to recess, reconvene, postpone,
10 or adjourn this meeting, finally, and exercise
11 its authority under the Atomic Energy Act of
12 1954, as amended.

13 This concludes this session of
14 this meeting and hearing of the Defense
15 Nuclear Facilities Safety Board at this time.
16 We will recess and take up at the call of the
17 chair when that time is necessary.

18 Thank you.

19 (Whereupon, at 1:22 p.m., the
20 proceedings in the foregoing
21 matter were concluded.)

22

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