

BLUE RIBBON COMMISSION ON AMERICA'S
NUCLEAR FUTURE

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MEETING

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WEDNESDAY,
SEPTEMBER 22, 2010

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The Commission convened at 8:30 a.m. in Ballrooms A, B and C of the Washington Marriott at 1221 22nd Street, Northwest, Washington, DC, Lee Hamilton and Brent Scowcroft, Co-Chairs, presiding.

MEMBERS PRESENT:

LEE HAMILTON, Chair
BRENT SCOWCROFT, Chair
MARK H. AYERS
VICKY A. BAILEY
ALBERT CARNESALE
SUSAN EISENHOWER

JONATHAN LASH
ALLISON MacFARLANE
RICHARD A. MESERVE
PER PETERSON
JOHN ROWE
PHIL SHARP

ALSO PRESENT:

TIM FRAZIER, Designated Federal Official
JOSEPH HEZIR, EOP Group
WARD SPROAT, former Director of DOE OCRWM
HENRY B. BARRON, Constellation Nuclear Energy Group
DONALD KETTL, University of Maryland

TODD LaPORTE, University of California, Berkeley

PUBLIC COMMENTERS:

TOM COCHRAN

MICHAEL HARDY

DARRELL LACY

ARJUN MAKHIJANI

ALFRED MEYER

IRENE NAVIS

BRIAN O'CONNELL

JUDY TREICHEL

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

(8:31 a.m.)

MR. FRAZIER: Okay, we're going to get - we're going to get started now. If the Commissioners could take their seats, please. Everyone else sit down. I'm going to turn it over to Congressman Hamilton. Sir?

CHAIR HAMILTON: Good morning to everyone. Before we begin the program, I recognize Mark Ayers for a statement. Mark?

MEMBER AYERS: Thank you, Mr. Chairman. First, let me say that it's both an honor and a privilege to serve on this Commission with such a distinguished group of national leaders and experts in the field of nuclear energy.

I also must recognize the vast number of talented and dedicated professionals that have offered comments and advice for the Commission. As you have so elegantly pointed out in describing the charge of our committee, we've been commissioned to address the

1 monumentally important and extremely complex
2 issue of the future of nuclear power in
3 America.

4 As President of the Building and
5 Construction Trades Department, AFL-CIO, which
6 represents 13 international and national
7 construction unions and over two million
8 workers, we are committed in our pledge to
9 support nuclear power continuing in our
10 country's future.

11 Now, since the Manhattan Project,
12 hundreds of thousands of our members have been
13 engaged in building and maintaining nuclear
14 facilities, and tens of thousands more have
15 been involved in various aspects of storage,
16 disposal, and cleanup of nuclear waste.

17 In our view, together with our
18 contractor counterparts, our unions and our
19 joint labor management training funds produce
20 the most skilled construction craft personnel
21 in the world.

22 So as this Commission and the

1 Subcommittee address, for instance, whether or
2 not this nation continues to build current
3 types of nuclear reactors or move to advanced
4 reactor types, it's important, at least in my
5 humble opinion, that we keep in mind that,
6 regardless of what is recommended, that the
7 construction, operation, and decommissioning
8 of current and future facilities, plus
9 ensuring safe handling, transportation,
10 storage, and disposal of waste will be carried
11 out by the members of affiliated construction
12 unions that we represent.

13 While we are committing to
14 providing the most skilled workers to the
15 nuclear industry, it is critically important
16 to me as a building trades union leader that
17 the safety and health of these workers are
18 protected.

19 Much of this Commission's work has
20 and will continue to focus on protecting the
21 environment and surrounding communities, and
22 rightfully so. However, as we consider these

1 issues, I would offer that policies and
2 procedures enacted to protect the workers
3 actually engaged in these processes will help
4 us also protect the environment and the
5 communities along the way.

6 We should consider the worker
7 safety and health track record in the nuclear
8 industry as we proceed. I'm not suggesting
9 it's bad, nor do I have readily available the
10 data to confirm that it's good, but I am
11 suggesting it's an issue to be explored as
12 part of this Commission's work.

13 As a labor leader, I strongly
14 believe and urge this Commission to consider
15 the workforce as we make recommendations on
16 the future of America's nuclear industry.

17 To that end, I offer the
18 Department's not-for-profit construction
19 research and training organization, CPWR, the
20 Center for Construction Research and Training,
21 to work with the Commission staff and
22 consultants on the issue of worker safety and

1 health. Mr. Chairman, thank you for the
2 opportunity to make comments.

3 CHAIR HAMILTON: Thank you, Mark,
4 for an excellent statement. We, of course,
5 will take advantage of your offer. Susan
6 wanted to make a comment.

7 MEMBER EISENHOWER: Yes, thank you,
8 Mr. Chairman. Yesterday, I was very tempted
9 to make a final intervention in the session
10 that related to generational equity and other
11 ethical issues but thought that perhaps after
12 we broke up for the evening that this morning
13 would be a better time to do it.

14 I would just like to say that for
15 the American public who may be watching this
16 by webcast that it's worth putting into
17 perspective that the nuclear industry is here
18 trying to solve the waste management issue.

19 Other forms of baseload
20 electricity do not have a path forward in
21 terms of dealing with their waste streams, and
22 so I think it's important for the public to

1 understand that this is a great act of
2 responsibility, I think, on the part of not
3 only our nation's policymakers but to put into
4 perspective that all baseload forms of
5 electricity have very big waste issues.

6 The coal industry, for instance --
7 I should say coal plants -- put their waste
8 right into the atmosphere. We're talking
9 about sequestering this or to adopt methods
10 that would, you know, ensure the future in
11 very specific ways.

12 So let me say one other thing. I
13 am very conscious of vocabulary, having
14 written any number of books myself, and I
15 would like -- I hope that we stop using the
16 word "burden," because burden is loaded.

17 Burden sounds like we will never
18 be able to move forward in any way that feels
19 constructive or positive at all. I would like
20 us to shift this whole paradigm and begin to
21 talk about responsibility, and so those are my
22 comments from yesterday.

1 I feel pretty strongly about this
2 that unfortunately we have a tendency in this
3 country to look at nuclear energy as being
4 something really quite separate, but the track
5 record of safety and commitment to safety in
6 this industry is significant, and it certainly
7 is part of a national quest to figure out how
8 to manage the waste streams of all these
9 baseload forms of electricity. Thank you.

10 CHAIR HAMILTON: Thank you very
11 much, Mark and Susan. The topic of discussion
12 this morning in the meeting of the Commission
13 will be the governance of the nation's program
14 for managing used fuel and high-level waste.

15 As we did yesterday, we will hear
16 from each speaker for 15 minutes, and we'll
17 then engage in a panel discussion, so I'd ask
18 the Commissioners to only ask clarifying
19 questions during the presentation.

20 Just to remind the speakers, the
21 light system, keep your eye on that, if you
22 would, please. The green light is on for most

1 of your 15-minute period. At the two-minute
2 period the green light begins to blink.

3 At one minute remaining, you'll
4 see a yellow light come on, and at the end of
5 that final minute, there will be a soft
6 buzzer. We will try to follow that very
7 carefully, and if the speakers will keep their
8 eye on the light panel, it will be helpful.

9 Our first speaker this morning is
10 Joe Hezir of the EOP Group here in Washington.
11 We thank you, sir, for coming, and you may
12 proceed.

13 MR. HEZIR: Thank you, Chairman
14 Hamilton, Chairman Scowcroft, and members of
15 the Commission. I am very pleased to be here
16 this morning. I am here in a personal
17 capacity this morning, but I hope to give you
18 some of the benefit of my experience.

19 I spent 18 years at the Office of
20 Management and Budget working on environmental
21 and energy matters, the last six of which I
22 was the senior career person in charge of the

1 Department of Energy and oversight of
2 Department of Energy programs.

3 I have since spent the last 18
4 years as a consultant in private industry
5 working for a number of the utility companies
6 in the nuclear industry, the Nuclear Energy
7 Institute, as well as other companies in the
8 nuclear fuel cycle, but I want to make it
9 clear up front that the views I express here
10 this morning are purely my own.

11 I really want to cover three
12 topics this morning, and the first, which I
13 will just touch on very quickly, is the
14 current structural situation with the DOE
15 management and budget as it affects nuclear
16 waste management.

17 And I use the word "structural"
18 very carefully, because while there have been
19 very -- a lot of very talented and very
20 capable people working in this program over
21 the years, their ability to execute really has
22 been limited not by their personal

1 capabilities or their professional
2 capabilities but rather by structural
3 limitations.

4 The second thing I want to cover
5 is some of the major functional capabilities
6 that I think that any future governance
7 structure should have, and then third and
8 lastly, I'll talk about -- a little bit about
9 organizational considerations. Normally, one
10 would talk about organization first and then
11 talk about functions, but I decided to do it
12 inside-out in order to really stress the point
13 about the functional capabilities.

14 So I will go through this fairly
15 quickly. I have a long presentation that's in
16 your book, but I do want to highlight a couple
17 of points here.

18 As I said, the Department of
19 Energy has operated this program since its
20 inception under a number of structural
21 limitations, and I think probably in the
22 management area I think the best critique of

1 DOE, and, again, and this comes from the
2 Government Accountability Office, is that for
3 two decades now the GAO has designated DOE
4 contract as a high-risk management area for a
5 variety of reasons.

6 In particular, the GAO has cited
7 the National Nuclear Security Administration
8 and the environmental management programs as
9 particular areas of high-risk management, and
10 I point that out because those two programs
11 have very similar characteristics to nuclear
12 waste management.

13 DOE also has some structural
14 limitations on its ability to execute its
15 budget for nuclear waste management, three in
16 particular I wanted to highlight. The first
17 is that operating -- in the DOE budget
18 structure, operating and capital funds are
19 commingled, and consequently it's very hard to
20 execute a long-term capital expenditure
21 program.

22 Secondly, capital costs are

1 incrementally funded, which makes it also very
2 difficult, and then, thirdly, over the years,
3 despite some attempts at various points in
4 time, looking at both DOE, OMB, and the
5 Appropriations Committees have been unable to
6 agree upon or to adhere to any form of a
7 multi-year budget-planning process, and so
8 consequently the budget goes through annual
9 volatility.

10 The bottom line point here is that
11 lacking an effective capital budgeting process
12 is not conducive to managing any type of a
13 long-term or large-scale commercial-type
14 enterprise.

15 So let me kind of shift now and
16 talk a little bit about, well, what should a
17 governance structure have in the way of
18 functional capabilities, and I want to briefly
19 touch upon six areas. These may not be the
20 only six, but these are six that I would at
21 least like to talk about, and I'll start with
22 policy.

1 In the area of policy
2 coordination, right now the program reports to
3 the Secretary of Energy. I know that some of
4 the organizational options that this
5 Commission may consider may involve placing
6 this function outside of DOE into a new
7 organization, and I just want to point out to
8 the Commission that it is very important that
9 whatever organizational framework you decide
10 upon, that two key things, I think, that are
11 needed in the area of policy coordination is
12 that this activity needs to have access to the
13 Secretary of Energy, because the Secretary of
14 Energy, at the end of the day, will always be
15 the lead national policy spokesperson on
16 energy policy matters.

17 Secondly, it's also very critical
18 that this entity have some means of
19 participation, at least on the Executive
20 Branch side, in various White House and
21 interagency policy councils.

22 This was one of the problems that

1 I observed when I was at OMB when we were
2 working with the Synthetic Fuels Corporation,
3 which was set up as a -- such an independent
4 entity that there was a complete breakdown of
5 coordination between that corporation and the
6 White House policy apparatus.

7 Personnel management. There's
8 really two objectives here. One is obviously
9 being able to have a compensation package to
10 attract and retain personnel, and this is
11 probably most acute at the Senior Executive
12 levels, which right now in the current federal
13 career system is subject to pay compression.
14 The federal system works much better at the
15 lower and mid-level executive levels.

16 The other thing I think is also
17 very important is the flexibility in hiring
18 and firing, and I think both of these
19 objectives will require some form of
20 legislative direction that would provide some
21 flexibility and some form of limited
22 exemptions from federal civil service

1 requirements.

2 Legal services. This is probably
3 an area that most people don't think about but
4 which also can be very important to an
5 effective, functioning organization. It is
6 essential, at least in my judgment, that any
7 governance structure have its own independent
8 legal counsel.

9 And if it remains within the
10 Department of Energy, it should be separate
11 from the Department of Energy General Counsel
12 office, and if it's outside the Department of
13 Energy, it also should have the ability to
14 have its own legal -- independent legal
15 representation in any dispute resolution or
16 litigation matters.

17 This has become an area where it
18 can delay and can be a deterrent to effective
19 legal representation, and I simply point out
20 that TVA is a possible model here. TVA is a
21 government corporation, does have its own
22 independent legal services, and can represent

1 itself in litigation matters.

2 Contracting authority. This is
3 also another critical area. Particularly
4 depending upon the nature of the program that
5 the Commission may ultimately recommend, it
6 will be important that the program have the
7 ability to execute large multi-year service
8 contracts, and obviously, those contracts will
9 need to be backed up by the financial
10 resources of the Nuclear Waste Fund.

11 Some examples of the type of
12 contracts that would probably need to have
13 special authority would be any type of a
14 service contract to provide long-term
15 services, whether it be for used fuel storage,
16 transportation, or processing.

17 Another type of contract would be
18 EPC contracts for the construction of new
19 facilities, facilities operation and
20 maintenance contracts, and any type of sales
21 contract, ultimately, if this entity
22 ultimately is recycling used fuel and is

1 selling used fuel products.

2 This would require some exemptions
3 from some of the current contracting rules.
4 Right now, contracts are generally subject to
5 the Anti-Deficiency Act, which means they're
6 subject to appropriations, which means that it
7 limits the ability for the program to enter
8 into any kind of a binding multi-year type
9 commitment. Consequently, in dealing with the
10 private sector, those types of contracts are
11 simply not bankable.

12 Finance. Again, without knowing
13 the nature of the program that the Commission
14 might recommend, I think it's important that
15 the Commission consider that the restructured
16 program have the ability to both borrow and
17 lend.

18 It may be dealing in a variety of
19 business transactions where it may either need
20 to borrow money, either on a short-term or
21 long-term basis, or to provide loans or loan
22 guaranties to entities that would be carrying

1 out services on behalf of the program. Also,
2 there could be the possibility of various
3 forms of joint ventures.

4 As I mentioned earlier, with the
5 contracting it's very important that having
6 the right contractual structure the program
7 can leverage third parties, who could then,
8 based on these contracts, enter into third-
9 party financing arrangements, and so in order
10 to do this, though, the Nuclear Waste Policy
11 Act borrowing authority would need to be
12 amended to be more flexible and perhaps new
13 loan or loan guaranty authority provided.

14 What I would recommend here is
15 that whatever financial mechanisms be provided
16 to the program, that they be backed solely by
17 the revenues in the Nuclear Waste Fund and not
18 necessarily by the full faith and credit of
19 the U.S. government, so in terms of any type
20 of bonding authority, for example, these would
21 be revenue bonds and not necessarily general
22 obligation bonds.

1 Then, finally, and I'll go into
2 some of the more details here in a moment, in
3 terms of budgeting, budgeting certainty is
4 essential to an efficient and effective
5 program, and in order to achieve this the
6 program needs to have some flexibility from
7 the annual appropriations process.

8 But it needs to be balanced in a
9 way that there is some form of oversight in
10 both the Executive Branch and in Congress. As
11 I point out here, that would really require
12 the restructuring of the Nuclear Waste Fund so
13 that it can operate as a true trust fund. If
14 you'll let me just digress here for a moment,
15 a little bit of history and jargon. I wanted
16 to explain how we sort of got to where we are
17 with respect to the Nuclear Waste Fund and how
18 it is, in my judgment, right now
19 dysfunctional.

20 I'll start with 1974 with the
21 Congressional Budget Act, which really set up
22 the first congressional budget control

1 procedures. That led by five years the
2 initial efforts by the Carter administration,
3 which first recommended the program that
4 ultimately was embodied in the Nuclear Waste
5 Policy Act of 1982.

6 The Carter administration
7 recommendations at that time called for the
8 concept of a trust fund, and the idea was,
9 very simply, that the Fund would be a unified
10 fund that would both be able to receive the
11 proceeds from fees and be able to make
12 expenditures to carry out the program, and
13 they would be managed within a single fund and
14 that, in terms of its federal budget
15 footprint, the Fund would be measured on the
16 basis of the net cash flows into and out of
17 the Fund.

18 There was a difference in Congress
19 when it came time to authorize the program,
20 and I just wanted to point out here that at
21 the time of the -- in the legislative history
22 leading up to the 1982 act, the Senate Energy

1 Committee at the time authorized the Fund as
2 a trust fund, specifically designated it as a
3 trust fund, and it exempted the Fund from
4 appropriations and from the Congressional
5 Budget Act.

6 The House established the program
7 as a special fund subject to annual
8 appropriations, and this was the form in which
9 the final bill was enacted. Both houses did
10 provide some very limited borrowing authority,
11 but it was subject also to appropriations.

12 So what happened during the
13 execution process? In 1985, about three years
14 after the act was passed, Graham-Rudman came
15 along, and it established a process called
16 sequestration, which required automatic
17 across-the-board spending reductions if
18 deficit targets weren't met.

19 When the Graham-Rudman program was
20 being implemented, OMB decided to split the
21 Nuclear Waste Fund for purposes of
22 sequestration, and it made the spending

1 portion of the Waste Fund subject to
2 sequestration where obviously the revenue side
3 or the receipt side of the Fund was not
4 subject to sequestration. Then, the objective
5 at that time was to keep as much of the
6 spending under the control of sequestration as
7 possible.

8 Then, in 1990, the Budget
9 Enforcement Act came along as the successor to
10 Graham-Rudman, and it established separate
11 caps on what they called discretionary and
12 mandatory spending, and it kept the splits
13 that were carried over originally from Graham-
14 Rudman, and so the Nuclear Waste Fund spending
15 was considered discretionary, whereas the
16 receipts that were going into the Fund were
17 considered mandatory.

18 So, consequently, what started out
19 as the concept of a unified trust fund ended
20 up being subject to two completely different
21 sets of budgetary rules, and that's why I said
22 it leads to the current situation where the

1 Fund is dysfunctional.

2 I'm going to skip over this chart
3 and really just talk for a moment, then, about
4 options for restructuring the Fund, and,
5 again, I won't go into details, but the idea
6 would be to try and bring the two pieces of
7 these back to create a holistic approach.

8 The other idea that's being --
9 that has been floated at various times has
10 been the idea of moving the Fund off-budget,
11 and there's different ways in which that could
12 be done. So I see that I now have the red
13 light, so I'm going to have to probably stop
14 right here, or if I could just take one more
15 minute and talk about pay-as-you-go, and then
16 I'll leave it at that.

17 CHAIR HAMILTON: We will give you
18 one more minute.

19 MR. HEZIR: Thank you, sir. To
20 change the current structure of the Nuclear
21 Waste Fund legislatively means that it would
22 be subject to the pay-as-you-go requirement or

1 PAYGO, and that requirement says that any
2 legislative change that affects mandatory
3 spending or affects revenues requires an equal
4 budget offset, and PAYGO is measured in
5 different budget windows.

6 In particular PAYGO would apply to
7 any change right now that would either change
8 the way the \$24 billion corpus in the Fund is
9 spent, or it would apply to any change in the
10 way that the one-mil fee is set or collected,
11 and I simply point that out because PAYGO,
12 while there may be a lot of different concepts
13 for how the Fund could be restructured, PAYGO
14 is a significant obstacle for how one might
15 implement such a -- such a change.

16 So, with that I will stop here,
17 and I'll leave the rest of my material for the
18 record. Thank you very much.

19 CHAIR HAMILTON: Thank you very
20 much, Mr. Hezir. Excellent presentation. He
21 will be followed by Ward Sproat, who is the
22 former head of DOE's Office of Civilian

1 Radioactive Waste Management. He oversaw the
2 filing of the Yucca Mountain License
3 Application with the Nuclear Regulatory
4 Commission. Thank you for coming, Mr. Sproat,
5 and you may proceed.

6 MR. SPROAT: Well, good morning,
7 Co-Chairmen Hamilton and General Scowcroft and
8 members of the Commission. It's an honor to
9 be asked to appear before you this morning to
10 talk about a subject that is near and dear to
11 my heart, since it took three years of my
12 professional career in running the Office of
13 Civilian Radioactive Waste Management at DOE.

14 I just want to be clear that my
15 comments this morning and my remarks are based
16 on my two and a half years of experience
17 running the nation's high-level radioactive
18 waste program. They're my own, based on my
19 own experience, and they don't reflect
20 necessarily the comments or opinions of my
21 current employer.

22 But having said that, you know,

1 the issue of governance of this program is one
2 that's been looked at a number of times by a
3 number of people in a number of commissions
4 and studies, and I would refer the Commission,
5 in the library on the Commission website is
6 one particular report, DOE/RW-0546, which was
7 issued in August of 2001, which specifically
8 looked at various options for managing the
9 program and funding it.

10 I highly recommend you take some
11 time to read that. It can do a much better
12 job than I can in terms of evaluating
13 different alternatives for structure and
14 funding and management structures for programs
15 like this, so it's an excellent piece of
16 reference material.

17 But my point that I'd like to make
18 to the Commission this morning is regardless
19 of what kind of governance structure is
20 established, it really doesn't matter unless
21 the enabling legislation that's put in place
22 for moving this program forward addresses

1 several key issues that have hamstrung the
2 ability of the Department, its leadership, and
3 the country, really, to move forward on this
4 program.

5 I've got four key issues that I
6 want to talk about very briefly that this
7 enabling legislation needs to address: number
8 one, certainty of funding. Joe's presentation
9 gave you some insights into why that's the
10 case. I'll come back to that in a second.

11 Second is continuity of
12 leadership. Having people come in as a
13 political appointee for six months, a year,
14 year and a half and leaving is not a recipe
15 for success.

16 Third is insulation from policy
17 changes, that is, policy changes over time,
18 and let's face it. When we're talking about
19 a nuclear waste program, we're talking about
20 a multi-decade program.

21 Policies, administrations change
22 over that period of time. If we really want

1 to get this done, we need to somehow find a
2 way to insulate the program and its governance
3 from those policy changes.

4 Fourth, address the issue of the
5 existing liability for the existing standard
6 contract spent nuclear fuel liability, and
7 those are four key issues I want to talk about
8 very briefly.

9 One is continuity of funding.
10 Joe's presentation did a very good job at
11 explaining some of the legislative beginnings
12 of why that was an issue.

13 From the person's perspective of
14 running the program, my ability to place
15 contracts, long-term contracts for equipment,
16 for waste canisters, for transportation,
17 equipment were all impeded by the fact that I
18 was very dependent on year-to-year
19 appropriations.

20 And while I, as the program
21 director, could put together a very detailed
22 justification and budget and multi-year plan

1 to design and build and operate the
2 repository, which we did, OMB said, "Geez,
3 that's great, but your budget target for the
4 next five years is this, this, this, this, and
5 this."

6 Didn't matter, because OMB and the
7 budget targets they gave the Department and
8 then what the administration was able to do
9 under the existing funding regime, and then
10 regardless of what those -- what the
11 administration asked for, the reality was that
12 that would go to Congress. Usually in the
13 House they would give us everything we asked
14 for. In the Senate it would be something
15 significantly less. They'd go to conference,
16 and a deal was cut, and so it was -- in the
17 last year of 2008, when we were trying to get
18 the license application submitted, we actually
19 received \$200 million less than what we had
20 asked for.

21 We still got the license
22 application in, but the future of the program

1 and our ability to execute for the following
2 years was severely adversely affected, so
3 certainty of funding is issue number one
4 that's got to be addressed.

5 Number two, continuity of
6 leadership. So when I was nominated to take
7 this position, because the position was a --
8 is a presidential-appointed, Senate-confirmed
9 position, I was nominated in September of
10 2005. I didn't get confirmed until the end of
11 May of 2006. That's nine months.

12 Now, fortunately, I was in a
13 financial position that I was able to wait
14 that out. I would say that most people in a
15 position to run a program like this with the
16 background and experience that's needed
17 probably would not be willing to do that, and
18 the reality was once I left, with the change
19 in administrations, that program -- that spot
20 was never filled.

21 So if you're going to try and run
22 a program that exists over a multi-decade

1 timeframe, continuity of leadership is
2 absolutely essential, and having the person,
3 if it is one person running it, as a political
4 appointee is probably not the right way of
5 doing it. So that's point number two that
6 needs to be addressed in the enabling
7 legislation.

8 Third is insulation from changes
9 in administration policy. You know, recognize
10 that this process has a political -- has a
11 strong political influence to it, regardless
12 of how it's run, and that whether it's at the
13 state level or the federal level, wherever
14 we're going to eventually put spent nuclear
15 fuel and high-level waste or where it
16 currently exists, the state and federal
17 politicians will have something they want to
18 say about it and be able to influence it.

19 Somehow we've got to be able, that
20 once decisions are made and a direction is
21 set, that we are able to insulate the
22 execution of the program from changes in

1 political leadership that will absolutely take
2 place over the decades that this program is
3 going to be in place. Recognize that's a
4 reality.

5 So my recommendation is that the
6 only time the program gets redirected is when
7 there is a change in congressional direction
8 mandated through legislation. When that
9 happens, that's the right mechanism for the
10 program to be redirected based on
11 congressional direction and congressional
12 legislation.

13 Fourth, the fourth area that needs
14 to be addressed is this issue of spent fuel
15 liability. I think, as you are well aware,
16 the Department of Energy has standard
17 contracts mandated by the Nuclear Waste Policy
18 Act with all of the commercial nuclear plants
19 in the country, and that contract requires DOE
20 to take back fuel.

21 That was to start happening by a
22 date certain in 1998 for the first plants,

1 oldest fuel first. That hasn't happened. The
2 Department has been found in partial breach of
3 the contracts by the federal courts.

4 Ideally -- we did a number of
5 studies trying to understand what the
6 potential future liability of the federal
7 government, hence the taxpayer, is for that
8 spent nuclear fuel liability. By 2020, that
9 liability will be \$20.5 billion -- that's with
10 a "b". And that liability will continue to
11 increase by a half a billion dollars a year,
12 on average.

13 It will change year to year based
14 on how we accept fuel and that plan, but the
15 bottom line is however we redirect this
16 program, there is this huge liability that's
17 sitting out there that's going to need to be
18 addressed somehow.

19 And as Joe talked about, some of
20 the financing options that whatever the new
21 authority, if there is a new authority that's
22 given, people are going to know who's paying

1 for that \$20.5 billion-plus that's sitting out
2 there, so that needs to be addressed.

3 There are the four key issues.
4 There are some others. Just quickly, the
5 site-selection process. I watched part of
6 yesterday afternoon's discussion on the web,
7 so I know you got into this a little bit, and
8 I'll be glad to give you a little more insight
9 into that, but just recognize that technical
10 arguments will always be overcome by political
11 decisions.

12 It's just the reality, and Yucca
13 Mountain is a great example of that. Private
14 Spent Fuel Storage in Utah is a great example
15 of that, and so I try to -- in my previous
16 talks on this topic, I always try and make the
17 point, recognize that the siting process,
18 however it's done, is a technically informed
19 political process. That's the reality, and
20 I'd be glad to talk about that more in the
21 question session if I get a chance.

22 Remember also, the timeframes

1 we're associated with with this process are
2 over decades, so when we talk about
3 stakeholder involvement, which is absolutely,
4 positively critical on an ongoing, continuing
5 basis, recognizing -- you have to recognize it
6 is an ongoing basis.

7 It's going to be the stakeholders
8 of today are not going to be the same
9 stakeholders 15 years from now, and you're
10 going to be able to need to address those
11 stakeholders over those very long time
12 periods.

13 So siting process needs to be
14 defined. I highly recommend the siting
15 process and the responsibility for it be kept
16 separate from the nuclear waste disposal
17 operations organization.

18 One of the things that DOE
19 suffered from, in my opinion, was that we
20 spent a lot of time trying to make the siting
21 process work, putting the license application
22 together, and then based on that, depending

1 whose view was considered, DOE's credibility
2 as a operator and disposal organization was
3 adversely impacted by the strong advocacy of
4 the technical arguments that we needed to do
5 in order to justify the site and put the
6 license application together.

7 So I'm highly recommending that
8 however we go forward, take the organization
9 that's got to accept the waste, dispose of it,
10 and run the disposal operation and separate
11 that from the organization that's got the
12 responsibility to do the siting. It's a -- I
13 think it would help a lot.

14 Obviously, within the -- within
15 the overall legislative structure there are a
16 number of other things that need to be
17 addressed. One of the things I would also
18 recommend is this Commission consider not only
19 high-level waste and spent nuclear fuel but
20 the low-level waste issues also.

21 I haven't met anybody in my
22 experience that thinks the low-level waste

1 program in this country is working well, and
2 as a matter of fact, the greater-than-Class-C
3 low-level waste, we don't have a clue what
4 we're going to do with it.

5 So, in terms of the big picture
6 that this Commission, I think, is entitled and
7 empowered to take a look at, seriously
8 consider within the scope not just spent
9 nuclear fuel and high-level waste but low-
10 level waste, including greater-than-Class-C,
11 and come up with an integrative proposed
12 solution. I think that's very much needed.

13 The other authority that we're
14 going to need to make sure that needs to get
15 addressed in the enabling legislation is
16 transportation authority. I'm sure you've
17 seen the statistics.

18 There are 121 sites in 39 states
19 that have high-level nuclear waste or spent
20 nuclear fuel in the country. Every one of
21 those sites when we looked at them requires
22 either rail, barge, or roadway with roadway

1 modifications for heavy haul to get that
2 material out of there to someplace else.

3 So what we ran into is that a
4 hodgepodge of local issues, and, quite
5 frankly, we did a lot of work with the local
6 emergency planning authorities, and I think
7 that worked fairly well, but what we also ran
8 into were the ability of individual states to
9 impede some of that.

10 For example, trying to build the
11 rail line in Nevada to Yucca Mountain, the
12 State of Nevada would not give us the water
13 permits in order to do the drilling to
14 characterize the earth underneath the rail
15 bed.

16 So, here we were, as the federal
17 government trying to install a railroad in the
18 middle of the desert down to Yucca so we could
19 bring the shipments in, and we couldn't get
20 water permits to do drilling on the rail bed
21 to characterize the rail bed. The enabling
22 legislation needs to be able to talk about and

1 address the local permitting and legislative
2 authority and the federal government's ability
3 to override that if and when appropriate.

4 So, in summary, I do think that
5 whatever the -- whatever the Commission
6 decides on in terms of recommendations, it
7 will absolutely need to be put into enabling
8 legislation. I think there are a number of
9 lessons learned from -- that we learned from
10 trying to implement the Nuclear Waste Policy
11 Act, but recognize we've got to send it
12 somewhere.

13 The optimum solution is not
14 leaving it at 121 sites. It's got to go
15 somewhere, and also recognize wherever it
16 goes, somebody's not going to be happy. I
17 mean, somebody is not going to be happy. It's
18 great to try and make everybody happy. It
19 ain't going to happen.

20 So as I watched the conversation
21 yesterday about stakeholder involvement, I
22 think it's absolutely needed. I think it's

1 essential, but recognize if we come up with a
2 solution that says everybody has to agree, and
3 all the stakeholders have to buy in, be
4 prepared to fail. Thank you very much.

5 CHAIR HAMILTON: Thank you very
6 much, Mr. Sproat. The third speaker will be
7 Brew Barron, President and CEO of
8 Constellation Nuclear Energy Group. Mr.
9 Barron, thank you very much for coming and
10 joining us this morning. You may proceed.

11 MR. BARRON: Thank you, Chairmen
12 Hamilton and Scowcroft, distinguished members.
13 Thank you for the opportunity to speak with
14 you today. My name is Henry B. Barron, but I
15 go by the nickname Brew if you prefer that.
16 I do.

17 I'm the President/Chief Executive
18 Officer of Constellation Energy Nuclear Group,
19 LLC. My company is a joint venture of
20 Constellation Energy and the EDF Group. We
21 own and operate five nuclear power reactors
22 located in Maryland and New York. We employ

1 approximately 2,700 employees and have annual
2 revenues of \$1.5 billion.

3 The work of this Commission is
4 very important, and the complexity of the
5 issues that must be deliberated is very high.
6 On May 25, 2010, Marvin Fertel of the Nuclear
7 Energy Institute testified to you that, and I
8 quote, "America's used nuclear fuel program
9 should be transferred to an entity with a
10 management and financing structure that is
11 able to function in the presence of the
12 inevitable political and policy changes that
13 will occur over the coming decades."

14 Then last week MIT released a
15 report titled "The MIT Study on the Future of
16 Nuclear Fuel Cycle." In that study, an
17 interdisciplinary group concluded, again
18 quoting, "The failures and successes of U.S.
19 and European programs suggest that a nuclear
20 waste management organization should have the
21 following characteristics: one, authority for
22 site selection in partnership with state and

1 local government; two, management authority
2 for the Nuclear Waste Funds; three, authority
3 to negotiate with facility owners about spent
4 nuclear fuel and waste removal; four,
5 engagement with policy makers and regulators
6 on fuel cycle choices that affect the nature
7 of the radioactive waste streams; and, five,
8 long-term continuity in management." I think
9 there are some consistent themes that you're
10 hearing today.

11 The study further concluded that,
12 again, quote, "These characteristics are not
13 recognizable in the U.S. program to date."
14 Consistent with Mr. Fertel's view, the MIT
15 study recommends that a new quasi-government
16 management organization be established to
17 implement the nation's waste management
18 program.

19 I previously served as Chairman of
20 the Used Nuclear Fuel Working Group under the
21 -- under NEI. In that role, I spent a
22 considerable amount of time monitoring and

1 evaluating the Department of Energy's progress
2 in implementation of the Civilian Radioactive
3 Waste Program, paying particular attention to
4 changes that I and the group believe would
5 significantly enhance the overall probability
6 of success of the program. My conclusions and
7 those of the group are the same as those of
8 Mr. Fertel and the -- and the MIT study group.

9 Now, legislatively, George
10 Voinovich introduced Senate Bill S-3322.
11 Representative Fred Upton introduced very
12 similar legislation in House Bill HR-5979. If
13 enacted, these statutes would establish the
14 United States Nuclear Fuel Management
15 Corporation.

16 I believe this proposed
17 legislation generally provides an excellent
18 blueprint for accomplishing the objectives
19 established in the -- established for that
20 organization that has essential elements
21 identified in the MIT study, advocated by NEI
22 and the nuclear industry, and I believe

1 reflects a lot of the same comments you are
2 hearing today.

3 Within the context of this
4 proposed legislation, I'd like to focus on two
5 key attributes, governance and financial
6 management, first addressing governance. The
7 proposed law establishes a nine-member Board
8 of Directors for this government-owned
9 corporation.

10 The role of the Board and its
11 fiduciary responsibilities will be to
12 represent the interests of the equity
13 investors in the corporation, these investors
14 -- investors being those who have previously
15 contributed or will continue to contribute
16 waste fees to the Nuclear Waste Fund.

17 Consequently, at least half of
18 this Board should consist of qualified
19 individuals who directly represent regulated
20 electric customers of nuclear owning utilities
21 or nuclear power plant owners themselves.

22 Nuclear waste fees with a net

1 present value in excess of \$30 billion have
2 been invested for the purpose of disposing of
3 used nuclear fuel from commercial power
4 reactors. Assuming -- assuring that these
5 funds are deployed for their intended purpose
6 will be the primary responsibility of this
7 Board.

8 Additionally, the proposed
9 corporation's Board will have the
10 responsibility to select and hire a Chief
11 Executive, who will have the responsibility
12 and authority to direct the day-to-day
13 operations of the corporation.

14 The Board will delegate to this
15 individual the authority necessary to carry
16 out those duties, including the execution of
17 contracts, pay the expenses of the
18 corporation, and finance and implement capital
19 projects the Board has approved.

20 No authority beyond that held by
21 the Board of Directors would be acquired --
22 required to appoint or remove this Chief

1 Executive. This structure more efficiently,
2 more effectively focuses on the ongoing
3 operations of the corporation and helps
4 insulate it from the U.S. political cycles.

5 Most importantly, the Board of
6 Directors will be charged with resolving many
7 of the issues that this Commission has been
8 deliberating and tasked for making
9 recommendations, the most significant change
10 being that this Board will be tasked with
11 making decisions rather than recommendations.

12 It will be accountable for
13 deciding and then tasking management of the
14 corporation to execute plans that fulfill the
15 obligations of the corporation that it has to
16 its shareholders.

17 As I am sure this Commission has
18 observed through its deliberations, these are
19 not trivial matters. They require ongoing
20 evaluation in the light of future changes in
21 energy policy, as well as technology
22 development. This new corporate Board must be

1 equipped to execute that duty.

2 Solutions that are politically
3 perfect or academically elegant are very
4 interesting bookends to this discussion but
5 fail to address the practical realities of
6 used nuclear fuel management in this country.
7 In this country, we value debate, as open
8 debate leads to better solutions, but
9 universal agreement on any given path forward
10 is highly unlikely.

11 Additionally, nuclear waste
12 management is not a simple technology, and
13 today's technologies will improve in the
14 future, but, again, waiting for the elegant
15 solution to appear is not necessarily the most
16 responsible approach for meeting the
17 obligations of the corporation to its
18 stakeholders.

19 The Board of this corporation must
20 be prepared and empowered to set a path
21 forward and follow it, making course
22 directions as energy policy and technologies

1 evolve and change. Whether a selected path is
2 direct disposal on one hand or recycling on
3 the other, it'll be another 15 years at the
4 earliest before either could be reasonably
5 expected to be operational.

6 By that time, there will be
7 approximately 100,000 metric tons of used
8 nuclear fuel in inventory. Roughly 2,000
9 metric tons of used nuclear fuel is produced
10 each year.

11 The Yucca Mountain project, as an
12 example of geological -- of a geological
13 disposal solution, predicted an acceptance
14 rate of 3,000 metric tons per year. Simple
15 math makes the rate of inventory reduction
16 only 1,000 metric tons per year, or, in other
17 words, a 100-year backlog.

18 The largest recycling operation in
19 the world, the La Hague facility in France,
20 has an annual capacity of 1,600 metric tons
21 per year. It would take a facility 25 percent
22 large than La Hague simply to stop the

1 inventory rise in this country, much less
2 reduce that inventory.

3 Decisions to deploy available
4 technologies or to wait for better solutions
5 have impacts on the future. Beyond the tenure
6 of this Commission, there must be a designated
7 body with the accountability to assess these
8 issues on an ongoing basis with the authority
9 to make the decisions necessary to address
10 them.

11 Part of that assessment will be
12 gaining an understanding of the macroeconomics
13 of the nuclear fuel cycle within the overall
14 electric sector. Let's turn to some financial
15 issues.

16 For example, I consider it
17 unlikely that the current one-mil per kilowatt
18 hour fee will remain adequate indefinitely if
19 any real actions are taken to advance the
20 disposition of used fuel.

21 The one-mil fee is roughly
22 equivalent to \$1 per ton of carbon in a coal-

1 based electric system or \$2 per ton of carbon
2 in a natural gas-based electric system. In
3 the overall debate regarding the need for the
4 pricing of carbon, floor and ceiling prices
5 between \$10 and \$30 a ton are routinely
6 discussed.

7 Carbon pricing, if it
8 materializes, will clearly enhance the
9 economics of nuclear power. Within that
10 enhanced economic context, change in the
11 nuclear waste fee schedule, if associated with
12 real actions towards disposition of used
13 nuclear fuel, are not unthinkable.

14 Sticking to the financial issues,
15 I note that one focus and intent of the
16 proposed legislation is to establish a
17 financial accounting system that generally
18 reflects the accounting for assets and
19 liabilities in a manner similar to that
20 utilized in the non-government sector.

21 On the asset side, the proposed
22 statute establishes two financial accounts, an

1 operating account and a capital reserve
2 account, both held by the U.S. Treasury. The
3 operating account will receive the ongoing
4 cash revenues from waste fees or other sources
5 of revenues to the corporation.

6 Its use would not be subject to
7 congressional appropriations. Under the
8 authorities delegated to the management of the
9 corporation by its Board of Directors, these
10 funds would be used to pay the expenses of the
11 business.

12 The capital reserve account would
13 be created from the unexpended balance of the
14 Nuclear Waste Fund, often referred to as the
15 corpus, as an unfunded asset placed on the
16 balance sheet of the corporation.

17 This asset, which will continue to
18 accrue interest, would represent the value of
19 the statutory obligation that the U.S.
20 Treasury will continue to hold for the
21 ultimate disposal of nuclear waste from
22 commercial nuclear power reactors.

1 On the liability side, under
2 generally accepted accounting principles the
3 corporation would be expected to perform life
4 cycle cost estimates of the ultimate cost of
5 disposal of its current and project
6 inventories.

7 They then must demonstrate that
8 the assets ultimately available to fund those
9 liabilities will be adequate at that time in
10 the future when they are needed. This is a
11 similar approach to assessing employee pension
12 fund or nuclear facility decommissioning fund
13 adequacy in a gap context.

14 This accounting is not only needed
15 to demonstrate that the funds paid into the
16 Nuclear Waste Fund will ultimately be
17 available for their intended purpose but also
18 to demonstrate that the cost of disposal of
19 used nuclear fuel beyond that which has been
20 paid in nuclear waste fees will not become an
21 obligation on the U.S. tax payer.

22 The proposed legislation also

1 provides the corporation's Board with the
2 authority to adjust the nuclear waste fee
3 schedule. This authority is essential to the
4 corporation's and its Board's ability to carry
5 out its fiduciary obligation.

6 Moreover, when combined with the
7 substantial assets on the balance sheet, the
8 authority to adjust revenues from fees should
9 establish a favorable credit assessment for
10 the corporation. This credit assessment
11 should be adequate to be able to raise the
12 capital needed to fund the investments in
13 facilities that may need -- that it may need
14 without dependence, direct dependence on the
15 corporation's capital reserve account.

16 The ability to carry out its
17 operations independent of the actions of
18 Congress is a critical component of the
19 potential success of whatever organization is
20 tasked with the responsibilities of the
21 Civilian Radioactive Waste Program.

22 A perspective that is important to

1 keep in mind is that the Nuclear Waste Policy
2 Act of 1982 established the principle that
3 both the disposition of used nuclear fuel and
4 the payment of expenses are shared obligations
5 of commercial nuclear power plant operators.
6 Consequently, the costs associated with
7 movement of used fuel from any given site are
8 to be shared by the operators through the
9 established fee structure.

10 If a path were pursued where the
11 disposition process included reprocessing or
12 recycling of used fuel, the incremental cost
13 of that path should be borne by all operators,
14 not just those operators that are -- that are
15 purchasing the recycled fuel. The financial
16 management structure in the -- as proposed in
17 the Voinovich and Upton legislation supports
18 a continuation of that nearly 30-year-old
19 principle.

20 In closing, I would like to repeat
21 my observation regarding the importance of the
22 work of this Commission, the complexity of the

1 issues that it must deliberate. As I'm sure
2 you realized, management of used fuel is a
3 very long-term endeavor.

4 Success will depend on
5 establishing a governance structure that is
6 sustainable and has the authority to go beyond
7 making recommendations. That structure must
8 provide for decision-making, as well as
9 accountability for performance.

10 I very much appreciate the
11 opportunity to be here today and provide these
12 remarks. I look forward to answering your
13 questions during the panel session.

14 CHAIR HAMILTON: Thank you very
15 much, Mr. Barron. We are very pleased to have
16 you appear. The fourth speaker is Dr. Don
17 Kettl, the Dean of the School of Public Policy
18 at the University of Maryland. Dr. Kettl,
19 we're pleased to have you, and you may
20 proceed.

21 DR. KETTL: Than you very much,
22 Chairman Scowcroft and Chairman Hamilton and

1 members of the Commission. It's a great
2 pleasure to appear here this morning, and I
3 want to spend some time talking about the
4 issues of trust and confidence and the issues
5 of governance that go behind that.

6 To do that and to begin I want to
7 begin with a story. About 18 years ago, I
8 served on a task force to try to advise the
9 Secretary of Energy, not on what to do with
10 nuclear waste, but on how to try to make
11 decisions that would generate some confidence
12 and trust in the decisions about nuclear
13 waste.

14 On a morning very much like this
15 one, we were out in Las Vegas, and the major
16 difference was in the process of having a
17 public hearing we had massive numbers of
18 demonstrators on the outside.

19 In the middle of a break that we
20 had, though, a woman came up to me and said
21 that, "My name is Cynthia of the Desert," she
22 said, and given the atmosphere that we had and

1 given the way the conversation started, I told
2 myself, "It's time to reach for the seat
3 belts, because it's going to be a rough
4 conversation now," but it turned out that it
5 was anything but.

6 She said, "I live with my husband
7 and my baby out in the desert, not too far
8 from Yucca Mountain." She lived virtually in
9 the shadow of Yucca, and she said, "The idea
10 of my living out there at a time when the
11 government's talking about putting massive
12 amounts of nuclear waste was something," she
13 said, "just terrified me, and so I started
14 going and talking to the people at the
15 Department of Energy."

16 She said, "Why are you doing
17 this?" and they started to explain, and they
18 started to explain how they were going to try
19 to run the operation of Yucca, and she said
20 she went from a position of being profoundly
21 distrustful to saying, "These people, at least
22 they're trying very hard."

1 "These people seem to know what
2 they're talking about. They tried to explain
3 the situation to me, and over time I began to
4 understand some of the technical issues and
5 why it was that they were doing what they were
6 doing."

7 From that, came one of the most
8 important observations at least I drew 18
9 years ago in that effort to try to understand
10 the conditions for trust and confidence, which
11 is that trust and confidence is not the
12 product of either a structure or of any kind
13 of basic policy, but it's the product of
14 relationships.

15 Trust flows to people who behave
16 in trustworthy ways, and people who don't
17 behave in trustworthy ways don't generate
18 trust, and, most importantly for the situation
19 that we have right now, when we have a
20 situation where trust is clearly broken, there
21 is no kind of magic wand and creation of a new
22 policy, a new program, or new agency that can

1 simply wipe away the results of generations of
2 problems of discussions unlike the ones that
3 Cynthia of the Desert had.

4 I want to make three basic points.
5 One is to try to look a little bit more at the
6 issue of trust as the product of behavior and
7 not of structure; the second, that
8 organizational structures, though, can help by
9 creating the preconditions for trust; and
10 then, third, to make the argument that in
11 doing so no organizational forum necessarily
12 is ideal.

13 So, to go back to the first point,
14 trust is really the product of relationships
15 and based on past behavior. If you were to
16 try, hypothetically, to create a situation
17 that was as difficult as possible on which to
18 generate trust, it would be hard to do better
19 than the issue of what to do with the long-
20 term storage of nuclear waste.

21 If you take something that is
22 inherently scary, that most people, frankly,

1 don't understand, and that, frankly, in the
2 long haul nobody fully understands, you add to
3 that the enormous technical uncertainty,
4 because no one's exactly 100 percent sure or
5 can predict with absolute confidence what the
6 long-term technical issues are.

7 See what happened at Yucca
8 Mountain, where the basic question was what to
9 do about the issue of can we create a storage
10 system that will last for 10,000 years, and
11 the scientist said, "Probably," and the
12 question was, "Are you sure?" and the answer
13 was, "We can't be sure. We're pretty sure but
14 not 100 percent sure."

15 And so you add that technical
16 uncertainty, and add to that the fact that the
17 situation, the solution has to last longer
18 than the recorded history of life on earth, as
19 one of the members of the audience when we
20 were in Las Vegas reminded us.

21 We've only been writing history
22 down for five or six thousand years, and the

1 half-lives of some of these elements is ten
2 thousand years, so we have to try to devise a
3 solution that in its very character has to
4 convince people that it has to be able to last
5 longer than any of our technical certainties
6 or uncertainties, longer than we've been
7 writing about history, and longer than any
8 government on earth has ever existed.

9 So if you were to try to create a
10 situation that was any more difficult, it
11 would be hard to imagine anything that would
12 be more so. Add to that the debates, the
13 battles, the back-and-forth, the inevitable
14 politics that surround all of this, and it
15 would be hard to create a circumstance that in
16 many ways is more difficult than the one that
17 this Commission is wrestling with, but the
18 reason has to do not with fundamentals of
19 structure or even issues of policy but on
20 patterns of behavior.

21 As Cynthia told us when we were in
22 Las Vegas, the only way out of that is to

1 create the conditions of trust by creating
2 behavior that reinforces the trust that people
3 -- we want to have and they want to have in
4 the process.

5 The second, the second point is
6 that organizational structures and funding,
7 while they can't provide a magic wand, can at
8 least create the preconditions of trust,
9 because what trust is the product of is strong
10 leaders who can create a clear and convincing
11 sense of what it is that they're doing, that
12 contains a frank recognition of the scientific
13 uncertainties, that engages citizens'
14 concerns, doesn't recognize necessarily we're
15 going to be able to engage citizens and get
16 everybody to buy into the solution, but it has
17 to frankly recognize the concerns that
18 citizens have and then creates consistent
19 messages that underlines the strategy that is
20 not going to change from Congress to Congress,
21 administration to administration, because that
22 causes two senses.

1 One is that if you're on the
2 losing side, the only sensible answer is to
3 wait people out and fight the battle another
4 time, which then creates further uncertainty
5 on the part of citizens about there's no way
6 anybody's ever going to be able to solve this
7 problem.

8 In addition to that is the problem
9 of predictable funding streams, because as
10 we've heard already this morning, without a
11 sense of the fact that we're going to be there
12 and be able to make good on the promises that
13 we make, it's going to be very hard to create
14 the conditions of trust that are going to be
15 required to solve this problem.

16 So the first point is that trust
17 is the product of relationships. Some
18 structures, as a second point, underline the
19 fact, work better than others in creating the
20 conditions for trust.

21 The third point, and this gets
22 even more complicated and complex, I believe,

1 is that in pursuing this no one organizational
2 forum is ideal, that there are proposals for
3 government corporations, and we have a great
4 deal of experience with government
5 corporations.

6 In the most recent financial
7 meltdown, in fact, we've had a great deal of
8 experience with two government corporations,
9 Fannie Mae and Freddie Mac, neither of which
10 acquitted themselves especially well on
11 precisely the reasons that they were set up.

12 They were set up to try to
13 insulate themselves from policies, to operate
14 in a kind of technical fashion to try to
15 supply credit to the financial markets, and
16 operated in the end in a way that neither
17 created strong financial management or
18 sufficient political accountability.

19 On the other hand, we know that
20 some organizations do really well in dealing
21 with questions that require high performance
22 and high degrees of trust. Think about just

1 a list of things that I came up with.

2 One is the Coast Guard, the kind
3 of Ghostbusters of the U.S. Government. When
4 a problem comes up, who are you going to call?
5 And the answer is the Coast Guard. When New
6 Orleans was being flooded, we called the Coast
7 Guard. When we had problems with the BP oil
8 spill, we called the Coast Guard.

9 Coast Guard does what it does
10 because it's figured out how to put,
11 essentially, ten men out in a boat, not
12 knowing what's going to be over the next wave,
13 and creating both capacity but also leadership
14 to be able to attack those problems in a
15 trustworthy way.

16 We have the Navy Nuclear Power
17 Program with a long and distinguished history
18 where, when it comes to nuclear programs, few
19 are trusted more than the Navy. Nuclear
20 Regulatory Commission, in a most recent survey
21 of the best places to work in the federal
22 government, the Nuclear Regulatory Commission

1 went to the very top of the list.

2 Another one, the Federal Deposit
3 Insurance Corporation. When other government
4 corporations were melting down, the FDIC was
5 seen as the bulwark of public confidence.

6 So what conclusions can we draw
7 about that for the implications for government
8 structure? And the answer is that what we
9 have here is a traditional bureaucracy, the
10 Coast Guard, independent regulatory
11 commission, the NRC. We have a quasi-
12 governmental corporation.

13 What can we conclude on the basis
14 of this? It's that there is no one
15 organizational forum that by its nature is
16 inherently more likely to generate trust than
17 another. The reason is at the core that first
18 organizational choice is political choice and
19 that all political choices have their life in
20 the way in which organizations behave.

21 We can have all the policies that
22 we want, but the only way we really know what

1 values we pursue is by the way that the
2 organizations in charge of carrying them out
3 behave. So it's not so much in the structure.
4 It's in the behavior.

5 So what are the conclusions that I
6 draw from this? A couple. First, that trust
7 and confidence comes to those who behave in
8 trustworthy ways, that the deeper -- this next
9 point, that we have in history with a series
10 of operations, behaviors, organizations that
11 have a lack of trust, the harder it is to try
12 to regain it. We have, in short, a kind of
13 trust deficit right now in trying to deal with
14 these issues.

15 That trust is generated by people
16 who not only behave in trustworthy ways but
17 who serve as effective leaders in their
18 organizations to create a culture of engaging
19 people to be able to solve the problems in
20 ways that create confidence around their
21 decisions.

22 That we are here. We're going to

1 be here. We're going to be here tomorrow.
2 We're going to continue to behave in
3 trustworthy ways. If you put your trust in us
4 today, we're not going to change tomorrow.
5 Ultimately, it's supported by stable resources
6 so that there's a sense on the public that
7 we're going to make good on the promises that
8 we make.

9 As hard as it is to try to deal
10 with this problem, and of all the issues that
11 we face in American society, in fact, in the
12 world society, it's hard to imagine a problem
13 more difficult than this one. It's hard to
14 imagine any problem that has to be solved that
15 has to last longer than this one.

16 We can try to think about issues
17 about what to do with the future of Congress
18 or about problems of healthcare, but none of
19 them are going to have to work with any kind
20 of confidence-based way for 10,000 years.

21 So what we need to do is to
22 recognize that at the core we're making a deal

1 with ourselves. We're making a promise not
2 only to ourselves as a country but, more
3 broadly, to us all as citizens, and we have to
4 try to understand that it's acting in
5 trustworthy ways and assuming that obligation
6 that is the basis of the trust.

7 This was, in fact, the lesson that
8 Cynthia of the Desert taught us, I think. It
9 was remarkable, and what I wished and what I
10 was most disappointed about was that this was
11 a kind of side conversation I had, and I
12 wished that I could take the conversation that
13 I had with her and put it in a bottle so that
14 I could take it and show people and have them
15 sort of sip on a bit of the wisdom that she
16 shared with us, because the basic lesson that
17 Cynthia of the Desert shared with us in Las
18 Vegas was that here was a very hard problem
19 with an organization that frankly had had
20 decades' worth of difficulties in trying to
21 generate trust, that was not trusted at all in
22 Nevada, that the demonstrators outside

1 reminded us constantly that this is an
2 organization we don't trust at all. No matter
3 what, we wanted it to go away.

4 Here was one person, one citizen
5 of the United States, though, who started with
6 the premise that, "I'm not sure I like this at
7 all," but began in a relationship with
8 officials for the Department of Energy who
9 generated trust in her by behaving in a
10 trustworthy way.

11 In a sense, it's a matter of
12 taking that relationship, repeating it often
13 enough, and building a structure around it to
14 ensure that there's confidence that once those
15 relationships are built, we'll be able to
16 sustain it for the long haul.

17 So, in the end, the basic
18 conclusions are, I think, that trust right now
19 is broken, that we have a serious and severe
20 trust deficit, that trust, though, is not the
21 product of structure but is the product of
22 relationships, that some organizational forums

1 are more likely than others to create the
2 preconditions for trust and to generate the
3 trust that we need, that no organizational
4 forum for doing that is ideal.

5 But in the end, this is a
6 relationship that is political in the very
7 most fundamental sense of the word, because it
8 embodies our values, and that in the end it's
9 a product of our making a deal with us not as
10 a government, not even with citizens, but in
11 the long-term for society that is the key
12 toward trying to deal with this most
13 fundamental of all scientific and technical
14 questions.

15 Thanks so much for the opportunity
16 to have a chance to talk with you this
17 morning.

18 CHAIR HAMILTON: Thank you very
19 much, Dr. Kettl. It's a pleasure to have you.
20 Now we hear from Dr. Todd LaPorte, professor
21 of political science at the University of
22 California, Berkeley. Dr. LaPorte, thank you

1 for joining us, and you may proceed.

2 DR. LAPORTE: Chairmen Scowcroft
3 and Hamilton, you're seeing a -- and
4 Commissioners -- an example of
5 intergenerational equity. I'm doing the old-
6 fashioned way, having been completely
7 flummoxed by the other kind.

8 Today I want to -- and I
9 appreciate your invitation and perhaps your
10 patience as you listen to me reflect on the
11 governance questions that you're taking up
12 now.

13 I'm going to be using a different
14 dialect than most of you have been hearing
15 except with Don Kettl, and that's over four
16 different organizational studies and a long
17 interest in organizations that operate
18 hazardous systems really very well.

19 In some ways, they keep defeating
20 Murphy year after year in very complicated
21 organizational settings, and what I want to do
22 today is to reflect a little bit about what

1 the challenge is, a kind of analytical
2 challenge. I'll be adding some detail to what
3 Don Kettl presented, and I want to start by
4 thinking about governance for the guarded
5 nuclear systems with sort of the background of
6 two ideas.

7 We're returning to this issue
8 because of the need for greater energy
9 interdependence. At the same time, it's
10 connected to the reduction of carbon
11 emissions, and so there's a -- it's -- there
12 are sort of two aspects going here that you
13 begin to wonder what's the scale of the system
14 we're talking about here.

15 One of the things I've been struck
16 about is that if you think of governance here
17 as -- which, as you discovered, has very --
18 has sort of different kind of meaning, let me
19 tell you what I mean by governance, imagining
20 your charge here, and something about the
21 properties of the system of handling nuclear
22 materials that make it particularly

1 challenging.

2 You might say that governance can
3 be an authoritative, orderly -- organizing to
4 develop, deploy, operate, and, if need be,
5 rescue widely disbursed systems for reliable
6 safe management of very hazardous materials.
7 One of the things I was struck by is how large
8 the system actually is likely to become.

9 Let's suppose that what we're
10 talking about here is a system that has twice
11 the size of our present system or more than
12 200 nuclear power stations. With the backlog
13 we heard Brew talk about, we're talking about
14 a really large industrial system here in the
15 future if we're going to take the notion of
16 interdependent -- of energy independence and
17 carbon emissions seriously.

18 So if that's the case, what are
19 the properties of -- this is what I want to
20 begin -- what are the properties of the system
21 from a management or from a government --
22 governance point of view? You've heard some

1 of them, and I'll go through these pretty
2 quickly.

3 We have -- think about the
4 governance not just with nuclear waste but of
5 the rest of the system, too. I don't think
6 the outside world separates them very much,
7 and I think you should at least imagine we
8 have a system where every place we have a
9 nuclear power activity will be a 100-year
10 footprint. It's fixed.

11 There will be a network of
12 transportation transactions. We've already
13 heard a little bit about the scale of that
14 with over 200 sites for the -- you can almost
15 say the production of nuclear materials, and
16 there's transaction in getting it to the holes
17 in the ground for the repository systems
18 themselves.

19 Then you have, essentially,
20 expectations to operate really, really
21 effectively for over 100 years above ground
22 and probably 1,000 below ground. I mean, when

1 you get past 1,000, it's sort of almost
2 meaningless in terms of the social aspects of
3 it. It's essentially a social forever with
4 regard to our capacity to think ahead as far
5 as the governance systems that you're
6 considering will essentially need to.

7 If you then ask the question, "How
8 can we consider the" -- the first step in
9 governance, in the governance challenge, let
10 us suppose the U.S. will continue to use the
11 market system as a major mode of social
12 discipline.

13 If you ask that question and say,
14 "Okay, what is it about the market system from
15 a governance point of view that's" -- make
16 sure we've got the right one -- okay, I've
17 been flummoxed already. Here we go.

18 The market system works well --
19 best when you have rapid feedback to the
20 discovery of failure, when the consequences of
21 failure are relatively small and reversible,
22 and as you can -- you can imagine, now, think

1 about the properties of nuclear systems. Much
2 of it you can't tell you've failed for many,
3 many years.

4 Even nuclear power stations have a
5 long lag toward the discovery of failure.
6 Nuclear waste repositories is really long, and
7 so you've got a situation where you've got a
8 lag in feedback, very costly if you make a
9 failure, and almost irreversible in terms of
10 the consequences of what you've done.

11 The implication here is that the
12 more you move in the direction of over here on
13 the properties of nuclear operations, the
14 requirements for regulations just skyrocket, because
15 you have simply lost your capacity for
16 the market system to be a source of confident
17 social discipline.

18 What that means in governance
19 terms is that you've got a system where you
20 want -- it's a complicated industrial system
21 that the demands are for very reliable
22 operations across the whole system, not just

1 any pieces of it.

2 You want -- you want steadfastness
3 or commitment through time through
4 generations, one generation after another.
5 I'll call it institutional constancy.

6 You have a requirement to do all
7 of this with institutions that continually
8 demonstrate to the public they are worthy of
9 the public's trust for generation after
10 generation after generation. You can --
11 generations can be 20 years. It can be
12 management generations or political ones.

13 I'm suggesting that as you
14 consider the various proposals for governance
15 and institutional design you imagine that each
16 of these are vetted against the requirements
17 to produce these sorts of outcomes in the
18 institutions that carry them out, not just the
19 government ones but the contractors, too.
20 They're -- the contractors are as important a
21 player in this as the government institutions
22 that you have primarily had as your -- as your

1 focus.

2 What I want to do now is to say,
3 "What does it mean to try to do these three
4 sorts of things?" It turns out that if you
5 put together the whole list of factors that
6 are associated with this, there's about 25 of
7 them. We can't talk about that.

8 What I want to do is to take each
9 of them and just show you a little sample of
10 what the properties of the organizational
11 activities are themselves. You've been
12 talking about so far the financial and sort of
13 macro governance aspects in your conversation
14 so far, and what I'm about to say may have had
15 some resonance in your conversations last --
16 yesterday. I wasn't able to be here for them.

17 Let us suppose you want to get
18 really, really reliable organizations,
19 defeating Murphy. Another way of putting it
20 is the next error is your -- if you believe
21 your next error is your last trial, what
22 happens in an organization? There are two

1 that are in your -- I think I passed these
2 around.

3 So what I want to do with this is
4 just to simply give you a taste of what it is
5 that we're imagining here. You've got sets of
6 internal processes that when they're there,
7 you continue to essentially be really reliable
8 in what you do, and these are based on a
9 number of -- about ten years of research.

10 The one I'm going to just --
11 because of the time frame, I'm going to -- I'm
12 going to just point to one or two properties
13 that turn out to be kind of surprising. One
14 of them is for internal processes, processes
15 that reward the discovery and reporting of
16 one's own error.

17 Now, think about most
18 organizational settings. That's very rare,
19 but these sorts of settings, the implication
20 is for the institutions involved that's what's
21 becoming required.

22 In the external -- in terms of

1 external relationships where you have
2 essentially a very strong -- and I somewhat
3 academically call it a very strong
4 superordinate institutional visibility in the
5 parent organization like General -- I mean,
6 Admiral Rickover, who insisted in the Navy
7 that his people would operate very reliably.

8 I'm going to skip along now,
9 because I want to spend a bit of time on the
10 institutional constancy, but let me just go to
11 the next -- the next one that Don Kettl was
12 beginning to talk about. I must say I
13 relished his story of Cynthia of the Desert.

14 I was there, too, and it was like
15 sort of almost a throwback. I'm from
16 Berkeley. It was almost a throwback to the
17 time when we had lots of Cynthias of the
18 Desert wandering around often in the midst of
19 tear gas.

20 What I want to do here is to -- is
21 to suggest that in this regard, you've heard
22 a lot about public trust and confidence over

1 the last sessions. I want to not so much talk
2 about the external relationships here, the top
3 ones. Those are all sort of familiar to you,
4 but what happens --

5 What happens when transparency is
6 effective? What it means is that people who
7 are -- who are you engaging, the Cynthias and
8 the rest of us, discover not only who they are
9 but what's inside the organization. The more
10 transparent, you discover --

11 Let me ask you a question. When
12 you really get to know an organization, what's
13 the consequences? It's not usually that you
14 come away saying, "This is a really cool
15 organization." It's, "Oh, Jesus, is it really
16 like this?"

17 Think about what it means to be
18 transparent, and what would you want to find
19 out if you -- when you saw the patterns of
20 organization? What would you want to see that
21 would say, "That organization is trustworthy,
22 worthy of my trust"?

1 Well, that's what I have in the --
2 some of these in the lower internal
3 organizational characteristics, and one of the
4 things that we would want to see, and I ask
5 you would you see as a consequence of the
6 governance regimes that you're considering,
7 this one right here, processes of self-
8 assessment that permits the agency -- in this
9 case the operator -- to get ahead of the
10 problem before it's discovered by an outsider.

11 If you think about that, that's a
12 hard process to sustain in organizations,
13 because it produces internal criticism.
14 Usually that's punished so that if you're an
15 outsider, you want to see organizations doing
16 exactly that. You'd say, "Okay, they're doing
17 that. I know we can trust them not to fool me
18 so much."

19 There are some -- there are a lot
20 of other ones here, but I want you to have the
21 sense of when you're really good at being
22 transparent, they discovery who you really

1 are. You want to know then now -- what will
2 they be discovering, and in the governance
3 regimes that you're thinking of, what will
4 they produce inside as the many years now go
5 on?

6 I feel a sense of -- I guess it's
7 empathic fear for you all because of the
8 steepness of the climb that you are taking as
9 I talk, and I want to end with or go to the
10 one that you began to touch on rather
11 considerably this last couple of times, and
12 that is what if you need to do this for a
13 really long time, generations, and what are
14 the characteristics of the institutions that
15 can signal to others that they're steadfast in
16 their commitment to doing the things you
17 agreed to do in the -- in the present?

18 This is a -- in a way, I would
19 frame it in my own head the most dramatic
20 aspect of this is Congress has to constrain
21 its own future. That's essentially -- we've
22 never done that, but to be -- they are the

1 major player.

2 You have all seen Mark Sullivan's
3 letter to his constituency in Wyoming,
4 remarkable, and I have copies of some of its -
5 - that essentially captures in this country
6 the problem of institutional constancy, and
7 what I've done is to suggest some of the
8 properties of institutions when they have it,
9 people outside will say, "They will -- they
10 will keep their promises to me," the public,
11 or in the case of siting, the communities that
12 have signed up to be the primary risk takers
13 of that.

14 My time is out. I just -- I want
15 to get -- I wanted to get to this, because I
16 think that's the most important and most
17 difficult challenge that commissions of this
18 order have to address. We can talk about them
19 in more detail later.

20 CHAIR HAMILTON: Well, thank you
21 very much, Dr. LaPorte, for your presentation.
22 We'll now proceed to a panel discussion. The

1 participants are already lined up, and I'll
2 open the floor for questions from the
3 Commissioners. Are there any questions?
4 John, you'll lead off.

5 MEMBER ROWE: I think that I heard
6 Ward Sproat say that he thought a new federal
7 corporation or federal structure should run
8 the waste facilities but not have the
9 responsibility for the siting and scientific
10 work, whereas the MIT study seems to suggest,
11 and I thought I heard Mr. Barron suggest, that
12 this new entity be responsible for both.

13 And I wonder if those two and any
14 other members of the panel might like to flesh
15 that out, because it seems to me that the
16 coordination of a scientific process and a
17 public process, if coordination and scientific
18 are not non-sequiturs, is a very different
19 kind of activity from the building and
20 operation of facilities. I'd be interested in
21 the opinion of any of the panel members on
22 this.

1 MR. SPROAT: If I could -- if I
2 could address that point, the current model
3 that we have is OCRWM at DOE had the
4 responsibility for both siting the repository,
5 doing the license application, and then, upon
6 receipt of the license, moving forward with
7 the construction and operation phase, two
8 different missions which required
9 significantly different competencies within
10 the organization. That's one point.

11 What I found was that over the
12 life of the program to date and through the
13 licensing period, very heavily dependent on
14 National Laboratories, outside contractors who
15 had a lot of experience in geology and other
16 advanced sciences, very appropriate, a very
17 focused and critical set of skills needed for
18 repository characterization, siting,
19 licensing.

20 Completely different competencies
21 are needed for construction and operations, so
22 from an organizational competency standpoint,

1 they're different, but the primary driver of
2 my observation or my recommendation that we
3 consider separating those two missions into
4 two different organizations is that I do
5 believe that the --

6 If, in fact, the trust model was
7 broken on Yucca between DOE and its
8 stakeholders, it was primarily because it was
9 being asked to do a process, a siting process
10 which, as I said before, is a technically
11 informed political process.

12 So it was seen as politically
13 driven by the stakeholders, which put the
14 trust -- which put the ability of the
15 stakeholders to trust the DOE organization
16 into question, my point being is that if that
17 was done by somebody else and put aside, the
18 organization that has the responsibility to
19 build and operate the repository and make it
20 work well won't be burdened by that issue of
21 public trust associated with the siting
22 process.

1 MR. BARRON: I respect Ward's view.
2 He sat in that seat for what seemed like an
3 eternity, I'm sure, to him, but I believe that
4 if we subdivide the account abilities for
5 essentially getting the job done, and that
6 takes it all the way from siting through
7 construction and operation, I think we're
8 subdividing our ability to be successful.

9 If the same decision-making body,
10 if that no longer becomes the United States
11 Congress, the same decision-making body I
12 think has to be looking out at all aspects of
13 the project from community outreach and siting
14 to the technological work associated with
15 designing the processes, constructing the
16 facilities, and then ultimately operating
17 them.

18 And then within the context of
19 what Don said earlier, it's about trust, and
20 if we subdivide who is doing what component of
21 it, I believe it might be easier to lose trust
22 than if it is all in one organization, and

1 that organization is tasked with all those
2 accountabilities.

3 CHAIR HAMILTON: It'll be helpful
4 to the Chair if members of the panel who want
5 to respond to a question would just put their
6 lights on, and then I'll call you. I have
7 Allison and Per and Phil. Allison?

8 MEMBER MACFARLANE: Great. Thank
9 you very much, all of the panelists this
10 morning. Warren, I want to go back to you.
11 As promised, I was going to ask you more
12 questions.

13 So I found your presentation
14 fascinating, and I want to push you to help us
15 think through some of the potential solutions,
16 and so what kind of organizations, plural, now
17 that you think that you need two, do you think
18 would be appropriate?

19 You know, should it -- should some
20 of this responsibility remain within the DOE?
21 Should it be a separate agency? Should it be
22 -- should we just throw this to the industry?

1 How should we deal with this, and
2 then how do you think we need to insulate
3 ourselves from the policy changes that you --
4 that you talked about, and then how should we
5 deal with the liability?

6 MR. SPROAT: That's --

7 MEMBER MACFARLANE: And answer in
8 two minutes, please.

9 MR. SPROAT: That is quite an
10 agenda. First of all, in terms of the
11 organization itself, the point I tried to make
12 is that there are -- and several of the other
13 speakers I think would agree with this. The
14 organizational structure itself is not as
15 important as what the organization is able to
16 do and how it is funded and how it is set up
17 through its enabling legislation.

18 So I made reference in my remarks
19 to this previous DOE report that was issued in
20 August of 2001, very -- could do a much better
21 job than I could do about pros and cons of
22 different federal government organizational

1 models and what they're good for, what they --
2 what their advantages are, different funding
3 mechanisms.

4 I highly recommend that, but in
5 terms of the ability of the organization to
6 insulate itself from the policy issues, the
7 reality of the way the government works, at
8 least by my observation living in it for two
9 and a half years, is that the administration
10 sets the policy for the government. The
11 Secretary of Energy has -- is the President's
12 implementing instrument for that policy in his
13 area of responsibility.

14 So if the program reports to the
15 Secretary of Energy, which it currently does,
16 then the program will be directed and will be
17 influenced by that policy and possibly,
18 possibly for the siting issue, given it's --
19 and the siting process, given that it's a, I
20 believe, it's a technically informed political
21 process, that may very well make sense.

22 But for the operations side to get

1 it done, to go out and figure out how to go to
2 these 121 sites and figure out how to
3 transport it back to a central repository or
4 several central interim locations, I think
5 that part of the operation needs to be
6 divorced from that potential of policy change
7 and should be only influenced by legislative
8 fiat through the Congress.

9 How we set that up, there are
10 different models in that report that show how
11 that could be done with the appropriate levels
12 of oversight from a Board of Directors, how
13 that Board of Directors gets selected.
14 Presidential-appointed, Senate-confirmed is
15 one option, but there are -- there are several
16 options in that report that would be very
17 helpful.

18 Regarding the liability, I have --
19 it's a conundrum that is difficult to come up
20 with an immediate solution. I think in any
21 kind of a large -- when you've got a large
22 potential for a large actual liability and

1 continuing growing liability, there's always
2 a -- I personally believe that settlement is
3 the right way of going.

4 A number of companies, small
5 number of companies, have settled on their
6 claims with the federal government associated
7 with the non-performance on the spent
8 contract. Others have not, but coming to some
9 settlement of that liability, I think, really
10 is important.

11 Trying to get the federal
12 government, Department of Justice,
13 specifically, to work with the industry to
14 come with some -- to some resolution and
15 settlement of that I think is very important.

16 MEMBER MACFARLANE: Great. Maybe
17 Mr. Barron can also address the liability
18 issue.

19 MR. BARRON: I think simply the
20 easiest way to resolve the reliability issue
21 is to at least set up interim storage
22 locations and begin to perform, begin to

1 remove fuel from the site at a rate that
2 approaches the acceptance rate that was
3 designed for -- designed for Yucca Mountain.

4 The damages that have occurred and
5 will occur between now and the point at which
6 that happens are the results of the
7 performance of prior administration, and they
8 did not -- the Court has held they -- that
9 they are in partial breach of the contracts,
10 and they're liable for those damages.

11 I think trying to figure out how
12 someone is going to pay for a future amount is
13 the secondary question where the primary
14 question is how are we going to avoid the
15 damages? Let's get on with doing something
16 that creates performance under the contracts
17 and allow that to be the mechanism that caps
18 the liability, as opposed to just letting it
19 go and trying to figure out who's going to pay
20 for it.

21 CHAIR HAMILTON: Okay. I have Per,
22 Phil, Richard, Jonathan, Susan. Per?

1 MEMBER PETERSON: Thank you. I'd
2 also like to express my appreciation for the
3 very helpful information that all of the
4 panelists have provided. My questions are
5 going to relate to the structure of a
6 independent organization that might be created
7 to manage the storage, transport, and disposal
8 activities for used fuel and high-level waste.

9 I guess that these are activities
10 which are natural monopolies, that is, there's
11 not a logic to duplicating all of that
12 infrastructure to create competition, and what
13 we've discovered is that the federal
14 government has not been particularly effective
15 in doing this kind of work, which is one of
16 the reasons why we've heard these proposals
17 about developing some type of federal
18 corporation that might execute these things.

19 My questions relate to the
20 structure of that potential organization. The
21 first is a very quick and specific one to Joe,
22 which is there's sort of a long laundry list

1 of important capabilities that that type of
2 corporation would need to have in order to
3 function properly that you listed, legal
4 services, executive compensation, et cetera.
5 My question would be does --

6 The current Voinovich bill
7 actually includes many details that have been
8 thought out. Is it complete, and if not,
9 might you be able to submit some written
10 recommendations as to additional things that
11 might be included so that we make sure that
12 you don't leave out something like legal
13 services that, in the end, would make it
14 difficult for that entity to function
15 properly?

16 MR. HEZIR: Sure. I would just say
17 that the -- I think that the Voinovich bill
18 does provide a very good starting point for
19 looking at it, and while I think it addresses
20 many of the issues I raised, I would have to
21 go back and just double-check to make sure
22 there's none missing there, but I think it

1 does give you a pretty good blueprint.

2 MEMBER PETERSON: Okay. That's
3 important, because, frankly, this is outside
4 my expertise as a nuclear engineering
5 professor, but I would want to make sure that
6 that entity would have all of the necessary
7 capabilities, and, therefore, if we start from
8 some starting point such as the Voinovich
9 bill.

10 The next -- the next element is
11 that when one sets up a natural monopoly, of
12 course, one regulates it, and then you can
13 either structure it to be non-profit or
14 profit-making.

15 My question is among those two
16 different options, of course, if it's a
17 profit-making entity, then that provides an
18 opportunity to generate some source of revenue
19 that could be used as one of the incentives
20 that's needed among a number of incentives to
21 encourage local communities and states to
22 actually sign on and participate.

1 So I'd be curious about the
2 tradeoffs between a profit-making, regulated
3 utility type of structure that would have some
4 sort of external oversight like a public
5 utility commission to assess its performance
6 in terms of setting fees and prudence versus
7 something that would simply be a non-profit
8 implementing type of organization.

9 Then the other element of
10 incentives that might prove to be important
11 would be how one invests the funds that are
12 currently being placed in federal Treasuries
13 for the Nuclear Waste Fund and whether or not
14 at least some fraction of those funds might be
15 better invested the way decommissioning funds
16 might be but those investments direct --
17 investments directed into those states and
18 local communities that have assumed
19 responsibilities for managing centralized
20 storage or disposal facilities. Perhaps, Joe,
21 you can probably comment on that and then
22 others, as well.

1 MR. HEZIR: I'll start off, and I
2 think that, well, first of all, to kind of put
3 it into context, remember here we're talking
4 about a waste management enterprise that by
5 statute is now set up as a government
6 monopoly. We only have one service provider,
7 but having a corporate structure I think does
8 provide some opportunities to create the kinds
9 of incentives that you've described.

10 I mean, I think, for example,
11 having a Board of Directors that has
12 representatives from -- that represent the
13 utilities and consumer groups would provide
14 some incentive on the management of the
15 organization to be efficient in how they carry
16 out their responsibilities and thus keep the
17 fee down.

18 I think also in my presentation I
19 did talk about, in the section on finance,
20 that this entity should have the capability to
21 enter into various types of joint ventures and
22 also be willing -- be able to both borrow and

1 lend or provide loan guaranties.

2 So one could think with those
3 kinds of functions one could set up a variety
4 of business-type transactions with either a
5 host community or with various companies that
6 were providing services to have some form of
7 not only risk-sharing but also rewards-
8 sharing, and those would obviously --

9 Again, if it were in a -- if we
10 had a waste fund that was a true trust fund,
11 the benefits of that or at least the
12 organization's share of those benefits would
13 flow back into that fund and would provide
14 additional resources.

15 So I think -- I think your ideas,
16 I think, are very good, and I think that
17 having a flexible structure with some broad
18 authorities and some flexibility could
19 actually, you know, bring that about, because
20 there's probably --

21 I think the one thing, I think,
22 that is true is that we probably could not at

1 this table today think of all the various
2 types of ideas that could emerge, but if you
3 provide this entity with the right tools, then
4 I think that there will be opportunities that
5 will arise over time.

6 CHAIR HAMILTON: Phil?

7 MEMBER SHARP: Yes. Well, thank
8 you very much. I think for one we found the
9 solution this morning. That's call in the
10 Coast Guard, and I must say it was refreshing
11 to have a discussion in this country where
12 some people in organizations in the government
13 were identified as competent and effective and
14 important, and I think we ought to celebrate
15 that for 20 seconds, given what's going on in
16 America.

17 MEMBER MESERVE: And it's the NRC.

18 MEMBER SHARP: And it's the Nuclear
19 Regulatory Commission. Certainly, when he was
20 Chairman, that was the case. Unfortunately,
21 Rickover is dead, authoritarian that he was,
22 slightly in conflict with our democratic

1 discussion yesterday, but let me -- which
2 shows you the complexity of this thing. You
3 can choose things, but let me go on --

4 John Rowe raised a very important
5 question about the functions, what functions
6 would we put in this entity that might well be
7 highly independent from the political process,
8 and we actually have, I think, a third point
9 of view, which was yesterday, if I understood,
10 although I have not yet and I will read the
11 details of the MIT study, but it is that, you
12 know, you would actually add in there
13 selection of the new cycle, fuel cycle and all
14 these kinds of things.

15 It strikes me one of the most
16 important questions that we have if we're
17 going to recommend something like this is to
18 be clear on the functions, and obviously we
19 have some work to do squaring what we've
20 heard.

21 The second thing is much of the
22 talk now has been so far on the side of how do

1 we get this independent of what we view as the
2 political interference out of Congress or
3 Presidents or the system, but at the same time
4 there's always the final issue, well, how do
5 we keep some accountability for this new
6 entity?

7 It's going to have billions of
8 dollars. It's going to make big decisions.
9 It's going to have big impacts from the point
10 of view of industry, of local communities and
11 others, and my suspicion is that none of the -
12 - it will not function perfectly, either.

13 So the question goes to Mr. Hezir.
14 He mentions in the process congressional and
15 administrative oversight, and I just wondered
16 if you would not articulate in what specific
17 ways that was, and a follow-on is to Brew in
18 terms of -- I haven't read Senator Voinovich's
19 legislation yet, and I'll certainly get up to
20 speed on it, but is how the Board of Directors
21 is selected.

22 At what elements does the Congress

1 and the President have an appropriate role?

2 They're going to authorize this under law to
3 begin with, but there's an ongoing issue of
4 how you exercise oversight and when is it
5 appropriate to become engaged.

6 MR. HEZIR: It's a very good
7 question for which there is not a very simple
8 answer. Clearly, if the -- if the new entity
9 is a corporate-type structure with a Board of
10 Directors, then having the appropriate types
11 of representatives on that Board is one way of
12 having this oversight.

13 I think that there's probably two
14 things I think the Commission could consider,
15 and I think that if we look at the financial
16 side first, what I recommend and I think other
17 -- and I think that Ward would agree with is
18 that we both recommended that the financial
19 transactions be removed from the annual
20 appropriations process.

21 That does raise a question, then,
22 of what oversight and accountability would

1 exist, because one of the reasons it was put
2 under annual appropriations was that at the
3 time that the legislation was being developed,
4 the nuclear utilities were concerned about the
5 very question you raised, and they thought
6 annual appropriations would provide that
7 accountability, and --

8 MEMBER SHARP: It goes to show you
9 in politics very often what you seek and what
10 you get --

11 MR. HEZIR: Right.

12 MEMBER SHARP: You make a big
13 mistake from your own interest, but go ahead.

14 MR. HEZIR: So I think that one way
15 to kind of strike a balance there, and, again,
16 I'll use an analogy here, is that you would
17 have exemption from an annual oversight
18 process, but there would be some mechanism for
19 Congress to review and approve a multi-year
20 financial plan or to reauthorize spending over
21 so many periods of time.

22 One example, and, again, this is

1 in the Department of Energy, is the Bonneville
2 Power Administration. It has the authority to
3 borrow funds from the Treasury to execute its
4 capital programs, and usually the Congress
5 will authorize that funding in lumps of money
6 so that it's not annually done, but perhaps
7 every three to five years Bonneville has to go
8 back to Congress for a reauthorization of
9 funding, and it provides an opportunity to
10 review a multi-year plan.

11 TVA has something not quite
12 analogous. They have a cap on its borrowing,
13 and so if they operate within that cap, they
14 have flexibility, but if they were to engage
15 in a very large new capital program where they
16 would need to borrow more money, they would
17 have to go back to Congress for an
18 authorization for that, but, again, neither
19 one has to go through an annual appropriations
20 cycle.

21 On the -- on the policy side, I
22 would -- I would take a little bit of a

1 difference with my colleagues here about the
2 need to completely insulate this from policy
3 control, because, again, having worked on the
4 Executive branch side, there is some merit to
5 having the ability for a President and an
6 administration to have some policy oversight
7 over what activities this organization is
8 going to be conducting.

9 Again, the example that I cited in
10 my presentation was the Synthetic Fuels
11 Corporation. It was completely insulated from
12 the executive branch, and it was given a
13 legislative mandate to produce a certain
14 amount of synthetic fuels in a particular
15 point in time.

16 Then what happened was there was a
17 change of administrations and a drastic change
18 in the market where, instead of expecting
19 prices of oil to double, you know, they went
20 down by 50 percent, and it was impossible at
21 that point for the President to, in effect,
22 change course, absent going back to Congress

1 and abolishing the corporation, which
2 eventually happened.

3 So I think there needs to be some
4 kind of a policy review. One, again, one
5 example -- and I'm not very familiar with it.
6 I'm sure General Scowcroft can speak to it --
7 is the Quadrennial Defense Policy Review,
8 where you would have every so often a periodic
9 major policy review in the administration as
10 an opportunity to kind of revisit what this
11 entity is doing, and that way it would provide
12 some policy oversight and direction but not on
13 a day-to-day or year-to-year type of a basis.

14 DR. KETTL: If I could raise just a
15 couple of cautions on this, these are
16 incredibly hairy problems, but there are a
17 couple things we need to be very careful
18 about. One is that our experience about the
19 management of nuclear waste storage is close
20 to zero, because we've been hung up so much on
21 the problem simply of trying to deal with
22 siting.

1 What I worry about is that we try
2 to draw conclusions about the operation of the
3 storage facility from our difficulty trying to
4 solve the siting problem, and what we don't
5 want to do is to draw conclusions about the
6 siting issue for the management of the
7 operation of the --

8 MEMBER SHARP: If I could interrupt
9 you, I think part of that confusion comes
10 about because DOE does manage the DOE sites.
11 It may not -- it may or may not be under his
12 office, but the point is --

13 DR. KETTL: That's absolutely
14 right.

15 MEMBER SHARP: That gets all
16 confused.

17 DR. KETTL: And I think in the long
18 haul separating the two makes a lot of sense,
19 but it gets to my second point, which is that
20 it would be also -- I also want to raise a
21 caution about the fact that for many, many,
22 many people, once you get outside this room,

1 the government's the government.

2 One of the most fascinating
3 conversations you can have is with a state
4 legislator who talks about the number of
5 citizens who call in complaining about
6 problems with Social Security, and they want
7 their state legislators to clear up the Social
8 Security problems.

9 We're not very good at trying to
10 sort out exactly who's in charge of doing
11 what, and the finer we try to slice the
12 organizational form question, the more we risk
13 getting away from the core kinds of issues on
14 top of that, which gets to the --

15 I want to make two other quick
16 points on that. One is that, so getting back
17 to your question on the Coast Guard, the BP
18 question was actually an area of incredible
19 scientific uncertainty.

20 We just didn't even know how much
21 oil was coming out of the bottom of the Gulf,
22 and the model there of trying to figure out

1 how to engage tremendous scientific
2 uncertainty to devise a solution that was
3 trustworthy is, I think, important, because it
4 suggested that in the end the organizational
5 form is probably less important than the way
6 in which the people in it actually behave.

7 The last point, again, one more
8 caution, is that I think it's tremendously
9 important not to try to insulate the system
10 from politics, running the risk of problems of
11 accountability that blow up later, that then
12 create an incredible whiplash, that make
13 everything worse in the long haul.

14 If you look at what's about to
15 happen as a result of the financial
16 regulation, you could make an argument -- and
17 I'm not sure whether I buy this, but just an
18 argument by way of metaphor that's worth
19 keeping in mind for this, you can make an
20 argument that we just didn't do a very good
21 job of regulating the financial industry
22 during the 1980s and during the 1990s and

1 during the 2000s, and, in fact, we had a lot
2 of quasi-independent organizations that we
3 turned loose that then created lots of
4 financial mischief, because they were
5 unaccountable.

6 So then we ended up having to
7 crack down, and the public reaction to that in
8 the form of the Tea Party and elsewhere is
9 just, "What in the world are we doing?" and
10 the public is not separating very clearly who
11 created TARP, from who it is administered.

12 There are a lot of political
13 implications that are -- that come rooting
14 into that, and there are tremendous political
15 warnings about the risk of trying to insulate
16 a process from politics that's inherently
17 political, not overseeing it very well, and
18 then reaping the whirlwind of what comes out
19 of that, that in the end creates even more
20 difficulty in the longer haul.

21 It's more important to get back to
22 first questions and trying to make very sure

1 we're not trying to solve the wrong problem by
2 simply resorting to organizational forms,
3 because in the end this is -- we need to
4 create a solution that is not going to be
5 whiplashed by political changes in the short-
6 term, but we can't make what's inherently a
7 political problem non-political.

8 CHAIR HAMILTON: Mr. Barron and Mr.
9 Sproat want to respond, also. I'm not sure
10 whose light came on first, but --

11 MR. BARRON: Thank you.

12 CHAIR HAMILTON: Mr. Barron, yes,
13 all right.

14 MR. BARRON: Just very quickly, the
15 one function we have not talked about that I
16 want to mention is about nuclear safety. This
17 organization will be responsible for meeting
18 nuclear safety standards but not for
19 establishing them. Within a lot of the DOE
20 site work, not within OCRWM but within the
21 site work, DOE is both the regulator and the
22 complier.

1 I think it's very important that
2 the independent agency that Dick Meserve once
3 chaired maintain accountability for defining
4 what is safe, what is adequate security, and
5 sets the standards. This organization that's
6 proposed would be accountable for meeting
7 those standards.

8 MR. SPROAT: Just to make one quick
9 point to close -- to follow up on Joe's
10 comment about how should policy affect or
11 influence the process, my only point is we
12 need to be clear about which process policy
13 should influence and which it shouldn't.

14 My recommendation is the siting
15 process and site selection process, as I said
16 before, being a technically informed political
17 process, absolutely needs to be open to
18 influence from administration policy, and --
19 it's a political process.

20 However, once the site is
21 selected, that's done. It's now, "Go operate
22 it and operate it well." I'm advocating that

1 process be insulated from a change of
2 administration, policy-changing dynamic.

3 MEMBER SHARP: Mr. Chairman, if I
4 could just make two comments, one on that, my
5 only problem with that, which I fundamentally
6 actually agree with, is that, however, the
7 ongoing operation is going to be the political
8 issue.

9 If we were going forward in Nevada
10 with this, it may be important to Nevada
11 citizens to be able to get through to
12 political leaders to say, "You know, in their
13 operation they're suddenly not doing what they
14 said they would do, which was listen to us,
15 hear from us, and keep the process open."

16 They had begun to insulate
17 themselves from the outside world, as most
18 institutions do. So, there has to remain some
19 capacity, but I think that it doesn't have to
20 be --

21 MR. SPROAT: And in that case,
22 WIPP, I think, is very good model to follow in

1 terms of the advisory council and community
2 involvement. It is set up in a way --

3 MEMBER SHARP: Right.

4 MR. SPROAT: -- in community
5 involvement and its oversight and oversight of
6 its operations, and that's what I would
7 recommend, something like that.

8 MEMBER SHARP: I do think we've
9 actually learned a lot, even in Nevada and in
10 Hanford and these other places about community
11 relations. It is years, light-years ahead
12 where it was 20 years ago. I just want to
13 make one comment, because we want to ask them
14 questions, but the Board of Directors of this
15 institution is separate.

16 It sounds as if the Voinovich
17 thing is a stakeholder Board in which you try
18 to have representatives from different
19 stakeholders on that, and that may be a smart
20 political way to go, but it's like Don Kettl
21 said on these other institutions. There is no
22 perfect example.

1 We just had a great deal of new
2 experience in the electric utility industry
3 with the independent ISOs, the independent --
4 what are the darn things called? -- kind of
5 thing, and some states went with or some
6 regions went with stakeholder boards, which
7 became absolutely paralyzed, because they were
8 so politically engaged with each other. Now,
9 they may have had different kind of reasons to
10 be so politically engaged, where on others
11 they made the decision, "No, this board has to
12 be genuinely independent."

13 Most corporate boards have a high
14 degree of independence from wherever these
15 people come from and in theory have a very
16 explicit responsibility only to the fiduciary
17 responsibility of those stockholders and not
18 to whom I represented back here, which is what
19 a stakeholder Board tends to get in.

20 So it's just, again, I don't think
21 there is an answer to it functioning well. I
22 just would not jump to the conclusion that a

1 stakeholder board necessarily somehow advances
2 your capacity to decide.

3 MR. BARRON: The legislation as it
4 is currently crafted is very much intended to
5 more represent a shareholder board, again,
6 with a majority of those representing those
7 who are actually funding the operation of the
8 corporation, as well as using the services of
9 the corporation to meet its liabilities to
10 dispose of fuel.

11 MEMBER SHARP: Well, I can
12 understand that. Excuse me, Per. The issue
13 I think that that might raise politically over
14 time is as you articulate it, as people become
15 suspicious of what the corporation is doing --
16 I assume some people will be, not everybody --
17 then they will have this, you know, saying,
18 "Well, we know what they are doing. They are
19 only serving the interests, the financial
20 interests of the other." Now, that allegation
21 may be unfair and unclear, but it is one of
22 the risks inherent in this.

1 CHAIR HAMILTON: Yes, sir, Dr.

2 LaPorte.

3 DR. LAPORTE: Yes, I'd like to pick
4 up this point. Ask yourselves the question.
5 You're in the community where this sort of
6 thing is going on, and the first set of board
7 members that you knew and trusted are
8 retiring, and now that you're in the fourth --
9 you're out about 50 years or less, a little
10 bit less.

11 Ask yourself the question how
12 would you think about assuring the next set of
13 representatives that they know enough about
14 what the rather complex technical aspects and
15 institutional histories are with regard to
16 this site and the transportation thing so that
17 the next generation has as much confidence in
18 the new board as the last one?

19 That's a problem that comes up
20 only when time's arrow stretches as long as
21 this one does, and we really don't know how to
22 answer that question. There's just too many

1 examples of distortion of representation
2 either through targeting of special interest -
3 -

4 I mean, you know all the stories.
5 It's not a -- it's not really a new idea, but
6 it's a continual process or continual
7 phenomenon, okay. In the -- in the -- one
8 could imagine anticipating this occurring at
9 the beginning and asking yourself the
10 question, and I don't know how to answer this,
11 because I think this is a novel question.

12 There are situations in
13 institutions that you begin to see they're
14 doing things that begin to elicit distrust.
15 That can be exactly the sort of things you
16 were talking about.

17 You could imagine an activity in
18 that organization where they try to compensate
19 for certain changes that lead to distrust,
20 which is the deficit of trust, to getting a
21 surplus of trust doing other things that
22 balance this off.

1 That kind of a conversation, I
2 don't -- I've never heard of a conversation
3 like that to go on in a situation like this,
4 but yet that's the phenomenon that's likely to
5 occur.

6 I would put this as sort of a -- I
7 don't know what, sort of a design challenge to
8 you all as you see, is there a way of crafting
9 whatever it is you need to craft to anticipate
10 this sort of thing as an important element of
11 the sort of constitution of whatever this
12 organization is that you're describing.

13 CHAIR HAMILTON: Okay, I have three
14 Commissioners, Dick next, then Jonathan, and
15 then Susan. Dick?

16 MEMBER MESERVE: Thank you. Thank
17 you very much. It's been pleasant to be here
18 this morning to have nice things said about
19 the NRC. I guess my experience isn't always
20 along those lines.

21 I have a question I'd like to
22 direct in particular to Brew and Ward that

1 goes somewhat beyond your testimony. Several
2 people who have testified before the
3 Commission have talked about a future in which
4 we might undertake reprocessing or recycling
5 as being part of a back end of the fuel cycle
6 activity.

7 We've also heard some testimony
8 that if that is ever undertaken, we ought to
9 make sure that it is -- the responsibility for
10 undertaking that is completely insulated from
11 the disposition of used fuel and particularly
12 that the Nuclear Waste Fund should be
13 protected from being diverted for purposes
14 other than an ultimate disposal facility.

15 This does relate to the issue of
16 the functions of this entity that you both
17 described, and I wonder if you have some views
18 or perspectives on the issue of what the
19 relationship of that entity should be with any
20 future reprocessing or recycling activities.

21 MR. BARRON: There have been
22 several studies done around the economics of

1 recycling fuel. You wouldn't -- I don't
2 believe that you would recycle fuel purely for
3 that purpose.

4 The reason you would want to
5 recycle fuel is to -- is to change the waste
6 form, get the waste form into one which you
7 could feel is going to be stable for 10,000
8 years without having to put it in additional
9 containers and casks, maybe, inside of a
10 mountain.

11 It's a way to a technical end, and
12 within that context the fact that it is
13 producing usable fuel, which does have a
14 market value, is a way to offset the cost of
15 getting to that different waste form, if my
16 logic makes sense to you.

17 So within that context, were there
18 the desire, the intention to go to a different
19 waste form than direct disposal and the
20 removal of fissile material and it's recycled
21 back into the reactors, was a part of that,
22 then that would fall within the context of the

1 fees that are paid by the -- by the utility
2 operators, but the charge of that Board of
3 Directors would be to make sure that within
4 that context those fees are being used
5 appropriately for their -- for their intended
6 purpose.

7 The notion that the fees would be
8 used to just rob the cookie jar, if you will,
9 which I think has already been robbed, but
10 were there anything left in the cookie jar,
11 the extent to which an accountable,
12 responsible Board of Directors would elect to
13 go off and spend those funds that are intended
14 for the ultimate disposal of used fuel in a
15 manner that doesn't lead to the ultimate
16 disposal of used fuel just does not reconcile
17 with me.

18 So I would -- to answer your
19 question simply, were that the path taken
20 forward, I would see that as an integrated
21 part of the path and the use of the waste fees
22 as they're being paid by the utilities.

1 CHAIR HAMILTON: Mr. Sproat?

2 MR. SPROAT: I would like to make a
3 -- I got this question asked of me a number of
4 times while I was in my position at DOE, and
5 I just want to make sure the Commission
6 understands the relationship between recycling
7 and the disposal options for spent nuclear
8 fuel and high-level waste. They're not
9 related.

10 Regardless of whether or not the
11 country finds that there is a business case or
12 a other rationale for moving forward with
13 reprocessing of spent commercial nuclear fuel,
14 we will still have a high-level waste issue in
15 the country.

16 There are a number of waste forms
17 from the defense programs and from naval
18 nuclear reactors where recycling -- you can't
19 recycle, or even if you can, it doesn't make
20 any economic sense whatsoever.

21 So we have a large backlog of
22 inventory where the recycling issue is not

1 applicable. It has to be disposed of anyway.
2 So that's point number one I want to make sure
3 all the Commissioners understand.

4 Secondly, if recycling does go
5 forward, if there is a business case
6 eventually for doing it, when we took a look
7 at this at DOE, a couple things emerged.
8 First of all is that if it was to start, we
9 would not make all of the existing spent,
10 commercial spent nuclear fuel inventory
11 available for recycling, because the older
12 fuel as it's decayed has much less energy
13 content in it.

14 It just -- we would probably end
15 up recycling the newer fuel first, and the
16 older fuel that's been sitting around for 20
17 years, 30 years, 40 years, we wouldn't touch.
18 It would be disposed of directly anyway, so
19 now you're talking about a relatively small
20 part of the current inventory and future
21 discharges.

22 But the other thing is that the

1 waste form coming out of the recycling
2 process, much higher volumes of low-level
3 waste, so while the volume of high-level waste
4 can be reduced, the volume of low-level waste
5 is substantially increased, and as I mentioned
6 in my remarks, we don't have a solution in the
7 country for ultimate low-level waste
8 disposition, so it's not a solution at all.

9 MEMBER MESERVE: Let me make clear
10 I was -- I understand the technical issue
11 here. I guess I was trying to ask the
12 question of the relationship of whatever
13 entity that were created to deal with the used
14 fuel what connection it would have with the --
15 with any recycling or reprocessing option.

16 I understand Brew to say that
17 there has to be some connection, and your
18 testimony, Ward, would be along the lines
19 that, no, keep them completely separate.

20 MR. SPROAT: I would recommend
21 keeping them completely separate other than,
22 obviously, whoever owns spent nuclear fuel,

1 which now is the utilities, when the
2 government picks up the fuel per the standard
3 contract, the government takes title and
4 possession of that fuel.

5 So the economic value of that
6 spent fuel as a feed stock for a future
7 reprocessing process has economic value, and
8 who reaps the rewards of that economic value
9 would be something that would have to be
10 determined of how that would work given
11 whatever entity was put in place to do that
12 reprocessing.

13 I highly recommend, though, that
14 is a separate issue, separate entity, and not
15 to be confused with what we're talking about
16 here.

17 CHAIR HAMILTON: Mr. Hezir.

18 MR. HEZIR: If I can just add to
19 these two comments, I can't speak to the
20 merits of recycling or not, but I would just
21 offer two observations. I think, first, to
22 pick up on the point that Brew made, I would

1 think that this entity would want to be able
2 to look at the totality of the fuel cycle and
3 look at ways of optimizing, and I use the
4 example of solid waste.

5 I think if we look at solid waste
6 today, recycling of aluminum is a economic
7 proposition. Recycling of paper and glass is
8 not, but nonetheless, because of the disposal
9 impacts, as Brew said, to use the analogy,
10 there is some merit in changing the waste
11 form.

12 So while this entity -- and,
13 again, it at least should be able to have the
14 ability to look at those tradeoffs. Now,
15 whether you might want to place some limits on
16 what it could do in the way of implementation,
17 that's another question.

18 And I think that may be the way to
19 address this, at least to allow these studies
20 to continue and to perhaps come back at some
21 future date and make a decision on that. Even
22 if you look at what the, you know, the MIT

1 report suggested, that in the meantime there
2 may be some further advances in the research
3 and development area that may change the value
4 proposition.

5 MEMBER MESERVE: If I could just
6 ask one quick question, it's on a somewhat
7 different point. Joe, you in your discussion
8 had described an entity that's sort of inside
9 the tent in some very important respects and
10 outside it in others that, you know, in close
11 connection to the Secretary of Energy and
12 interagency processes on the one hand but
13 independent in terms of legal and a lot of the
14 financial elements. I wondered if there were
15 any model that you have for such an entity
16 that has all the characteristics that you
17 described.

18 MR. HEZIR: Yes, the part of the
19 presentation that I didn't get to is that if
20 you look at that grouping of functions, I
21 think they probably work best outside the
22 tent, and so the model, I think, that one

1 might look at would be either the current
2 Tennessee Valley Authority or the proposed
3 corporation that's in the Voinovich Bill.

4 I think the functions could work
5 inside the tent if it were a semi-autonomous
6 organization within the department, and
7 probably the best analogy there would be the
8 Bonneville Power Administration. The NNSA or
9 the National Nuclear Security Administration
10 is another model, but it does not have the
11 capabilities that I described, but Bonneville
12 does move more in the direction that I
13 described.

14 MEMBER MESERVE: Is there any one
15 that has all of the functions that you
16 described?

17 MR. HEZIR: I don't think so,
18 because I think one of the things that I found
19 in doing some of the research in this area is
20 each one is unique, and there's a unique
21 combination, and there is no -- there is no
22 standardized definitions. Even if you -- even

1 if one were to say government corporation,
2 there is no standardized definition of what a
3 government corporation means.

4 CHAIR HAMILTON: We're beginning to
5 face some time constraints. We have about ten
6 minutes to go, and we have four Commissioners
7 who want to ask questions. Jonathan, Susan,
8 Vicky, and John. Jonathan?

9 MEMBER LASH: Thank you, Mr.
10 Chairman. I will try to be crisp. This
11 question is first to Dr. Kettl but I think
12 also to Mr. Sproat.

13 We've had a list of agencies that
14 are at least a model of some kind of success,
15 the Coast Guard, the FDIC, NRC, TVA, and I
16 might add CDC to that list, and as you were
17 making that list I was thinking what stand out
18 as explanations for the effectiveness, and it
19 seems to me one aspect is the clarity of the
20 mission.

21 The Coast Guard has one clear
22 mission. The FDIC, we know what it's supposed

1 to do, and associated with the clarity of the
2 mission is the strength and appropriateness of
3 the culture.

4 So I have never heard anyone
5 explain NRC's culture as not including
6 technical excellence, the admiration of the
7 world in terms of technical excellence and
8 modeling capability and so forth, but being
9 excellent at one thing doesn't mean being
10 excellent at everything.

11 TVA was fabulously successful at
12 bringing power to a huge underserved
13 population, not so good at assuring that it
14 did so in an environmentally sound way. For
15 each of these agencies I think we could make
16 similar explanations.

17 So how do we construct an entity
18 that has the broad responsibilities that
19 you've been describing for choosing an
20 approach, identifying a site, and managing it
21 that has the culture of both technical
22 excellence and public credibility and

1 engagement?

2 DR. KETTL: Let me start first by
3 underlining the importance of the last piece
4 that you said, because it's the ability to
5 create an internal organizational culture that
6 engages the public in a way that the public
7 believes and trusts that's crucial -- but
8 maybe disagree with the initial premise on the
9 clarity of mission, because if there is
10 anything that the Coast Guard is not, it's an
11 organization with a very clear sense.

12 In fact, it got the job of trying
13 to do something with New Orleans, because
14 nobody else knew how to do anything about it.
15 And after FEMA had failed. It got the job of
16 trying to deal with BP after the organization,
17 the Minerals Management Service, that was in
18 charge of the regulatory piece, had failed,
19 and it got it because nobody else knew how to
20 do it.

21 MEMBER LASH: Wasn't that crisis
22 management?

1 DR. KETTL: It was crisis
2 management, but it was its skill at being able
3 to consistently succeed at crisis management
4 that succeeded in making sure that it
5 continued to get the jobs, and it's a very
6 interesting internal story about how its own
7 evolutionary culture got itself in the
8 position of being able to deal with that.

9 So it's the Ghostbusters of the
10 federal government, because it has figured out
11 how to do what other people don't know how,
12 and it's because it doesn't focus single-
13 mindedly on mission.

14 In fact, one of the principal
15 reasons why FEMA failed in New Orleans is that
16 it proved incapable of adapting fast enough to
17 the new mission that it faced, because it was
18 constrained by the way in which it came into
19 the problem. So I think that has important
20 implications for this case, I think, because
21 it is exactly the issue of culture and strong
22 leadership with a focus on results.

1 If you get an organization with a
2 strong leader who says, "We're going to focus
3 on getting this job done. We're going to
4 understand that getting the job done means
5 engaging the public but also engaging the best
6 science we can get and finding a way of
7 weaving those together in a way that's
8 mutually supportive, and we're going to make
9 sure that in the end we produce results," and
10 that's in the end what each of these, I think,
11 has in common.

12 To try to insist on clarity of
13 mission is in many ways for most of these
14 organizations that face either lots of
15 uncertainty or lots of dynamic change a way of
16 hamstringing it in being able to adapt
17 effectively to the issues that it faces.

18 MR. SPROAT: I would just -- I
19 would just like to add, and I recommend to the
20 Commission, don't try and over-engineer this.
21 What I mean by that is you are not -- with
22 what you're going to do with your

1 recommendations, you're not going to be able
2 to dictate or direct or have a direct
3 influence on the culture and the performance
4 expectations within whatever organization is
5 put together.

6 We have numerous examples of
7 organizations -- I'll just speak in the
8 nuclear industry, because that's what I'm
9 familiar with -- where we've had
10 organizations. The organizational corporate
11 structure never changed, but we had --

12 We have organizations where their
13 performance in the nuclear fleet operations
14 area was abysmal, and within three years they
15 became industry leaders, and the corporate
16 structure never changed. The people changed,
17 and the focus of the people that led the
18 organization changed, and the oversight of
19 that organization focused on high performance
20 expectations.

21 So don't try to -- don't -- I
22 personally would recommend don't worry about

1 trying to over-engineer whatever
2 recommendations come out of the Commission to
3 assure that the organization has got the right
4 culture. That's the job of the people who end
5 up trying to run it.

6 CHAIR HAMILTON: Susan?

7 MEMBER EISENHOWER: Yes, thank you.
8 Boy, I thought this was a terrific set of
9 presentations this morning and extremely
10 helpful. Mr. Hezir, in your presentation you
11 named three options for an enhanced function
12 authority, and then a few slides later, I
13 think you talked about PAYGO and the obstacles
14 that it would bring to establishing or re-
15 establishing a unified trust fund.

16 Could you say something, help us a
17 little bit here with the interrelationship
18 between these three options, and would any one
19 of these three options make it easier to
20 overcome these obstacles? Maybe this is a
21 highly political question. I don't know, but
22 I think this financial piece is pretty

1 important.

2 MR. HEZIR: I have two
3 observations. First of all, one of the things
4 that was implicit in what I said about PAYGO
5 is that PAYGO only applies to legislative
6 changes, so obviously if there are -- if there
7 is a set of changes that can be implemented
8 administratively, PAYGO would never even be
9 triggered, although those would be hard to
10 fathom what they might be, given what we
11 currently have and probably the need to amend
12 the Nuclear Waste Policy Act.

13 I would say, though, in terms of
14 the PAYGO obstacles, it's there, regardless.
15 I think in order to make a more compelling
16 case to the Congress, I think something like
17 a new structure would probably help to provide
18 a stronger justification for overcoming the
19 barriers that would be posed by PAYGO.

20 CHAIR HAMILTON: Vicky?

21 MEMBER BAILEY: Thank you. I, too,
22 was quite interested and very impressed with

1 all of the presentations, and I will direct
2 this to the panel, but I'll actually start
3 with something that Ward Sproat said just a
4 few minutes ago and the idea that we would get
5 too involved in the culture and trying to
6 dictate too much as to what this entity would
7 do.

8 I guess I have to back up and say
9 that's not so much my concern. My concern is
10 that my responsibility on this Commission is
11 to try and put forth recommendations that I
12 feel will enhance trust and confidence and
13 will provide for transparency, efficiency, and
14 all of that.

15 So, if you understand where I'm
16 going, I'm saying I understand what you're
17 saying, but I have to ask these questions in
18 order to make sure that what I am going to
19 maybe advocate or recommend are things that I
20 think will actually promote trust and
21 confidence, so therefore my questions go to
22 public involvement.

1 I've not heard too much about
2 that, a little bit there a few minutes ago
3 from the Dean, but, you know, there are
4 different kinds of publics. We've got state
5 commissions. You've got governments.

6 You've got -- and, you know, I
7 don't see how politics is ever not involved,
8 and I'm not -- I mean, I can go to church, and
9 I have politics, so I'm saying that's not a
10 bad thing, okay. Okay, the Lord is with me
11 there, but, you know, maybe not here. Let's
12 keep religion and government separate. Right.
13 Okay.

14 But the fed-corp, it's, you know,
15 it sounds good, sounds good for managing money
16 and management and all of that, but I'm not
17 sure that I'm achieving anything, and I need
18 you to talk to me about that. Am I achieving
19 anything from the standpoint of efficiency of
20 the time it takes to make decisions? Am I
21 achieving anything?

22 You know, to me it could be so

1 self-absorbed and such a stakeholder process
2 that I've complicated it even more. I'm not
3 sure I'm achieving something, and please don't
4 take from my comments that I am not for this
5 idea. I'm just trying to probe a little bit
6 further here.

7 You know, the other issue, I'm
8 trying to understand, obviously, DOE is
9 involved in some legal procedures as it
10 relates to the actual taking title of spent
11 nuclear fuel, and my questions go out -- you
12 know, as a member of the subcommittee I've
13 visited different communities.

14 I'm concerned about those
15 communities and what I've been hearing, and to
16 the extent of, you know, how would this help
17 me deal with the current orphan sites and the
18 different queues and how things actually get
19 taken and disposed of, so if I could hear a
20 little conversation on that.

21 MR. SPROAT: If I could start on
22 your first question regarding community

1 involvement and stakeholder participation,
2 when I got involved with the program, I spent
3 a week a month, during my two and a half
4 years, in Nevada, so I got a very good
5 understanding of the communities at the county
6 level, at the community level.

7 We actually held once a quarter a
8 informal meeting, day-long, where the counties
9 and their consultants and representatives
10 could come in, and we just talked, whatever
11 they wanted to cover.

12 I learned a lot. They learned a
13 lot, and over time I think they would tell you
14 their level of understanding and trust at
15 least didn't get worse. It may have gotten a
16 little bit better, but one of the --

17 As a result of that, which I found
18 extremely useful, I wanted to establish some
19 sort of formal advisory committee for the
20 Yucca Mountain project, you know, with a
21 formal charter to do that, because I found the
22 informal process extremely helpful, but I felt

1 a formal process would be more helpful in
2 terms of legitimizing the process we had.

3 And I immediately ran into --
4 there's a -- there's the Federal Advisory
5 Commission Act, which I think was under which
6 this Commission was formed. It just became --
7 it just seemed like it was more of a stumbling
8 block and more difficult to make that happen.

9 So whatever recommendations the
10 Committee comes up with regarding this, I
11 would highly recommend, number one, that there
12 is some sort of formal community
13 oversight/participatory board that's involved
14 absolutely, positively, but at the same time
15 allow whoever is running the program the
16 ability to work on an informal level with the
17 people who are most directly affected by the
18 project, because I found that extremely
19 helpful.

20 CHAIR HAMILTON: Mr. Barron.

21 MR. BARRON: Yes, I think for
22 clarification we've talked a lot about

1 politics. Within my remarks, they were really
2 completely focused on federal political cycles
3 within the U.S. and what happens at the
4 federal level that has had the impact in a
5 number of cases to try and trump what is
6 important at the local level.

7 This is about local politics.
8 It's about local community outreach. It's
9 about the need for local community input into
10 whatever is happening within that community,
11 and the problem we've had in a number of times
12 in the past is that whether it's Congress or
13 an administration gets involved at a federal
14 level, that becomes more important than what
15 is happening at the local level, and the
16 intent here is to isolate what's going on from
17 federal political cycles.

18 Every new Secretary of Energy has
19 got a new approach they want to take with the
20 -- with the waste program and to get us past
21 the federal cycles and get it back to
22 implementing projects at the local level with

1 a clear accountability for support of the
2 local community.

3 CHAIR HAMILTON: Dr. Kettl, and
4 then we'll go to the final question from John.
5 Dr. Kettl.

6 DR. KETTL: I'm mindful of the fact
7 that time is short, but in trying to get to
8 the first question that you raised about
9 public involvement, I do think that going back
10 and looking at the Coast Guard's involvement
11 with the whole range of constituencies on the
12 BP case is incredibly instructive, a case of
13 enormous technical uncertainty, of very
14 complex public-private interactions, highly
15 charged politics.

16 The Coast Guard's basic policy on
17 who to talk to was anybody they needed to talk
18 to and anybody who wanted to talk to them.
19 That process engaged the constituencies, built
20 support, and one of the things that you could
21 sense palpably as they went through that
22 process is the air going out of the tension in

1 that.

2 Part of it had to do with the fact
3 that they were making technical progress, but
4 the engagement process itself enormously
5 supported their ability to be able to solve
6 the technical problems in the case, and their
7 strategy on trying to figure out how to work
8 the public engagement process is incredibly
9 instructive for your work here, as well, I
10 think.

11 CHAIR HAMILTON: Final question,
12 John.

13 MEMBER ROWE: Yes, just a short
14 comment. We have heard much ill of the DOE
15 management of the process to date. I think on
16 the whole that is convincing, although
17 probably unfair to a lot of very fine
18 individuals within DOE.

19 But I have to comment that in all
20 of that we've heard almost nothing but
21 compliments for Ward Sproat's integrity in his
22 administration of his job. I just think it

1 only fair that we not let him leave this
2 without some reflection of the fact that he
3 seems to have earned honor in an unhonorable
4 plan.

5 MR. SPROAT: Thank you, John.

6 CHAIR HAMILTON: Okay. Well, as
7 you can tell from the questions and the
8 interest of the Commissioners, you've sparked
9 a lot of interest and given us much to think
10 about.

11 We appreciate very, very much your
12 contributions to the Commission's tasks. We
13 stand now in recess for ten minutes. Thank
14 you very much, gentlemen.

15 (Whereupon, the above-entitled
16 matter went off the record at 10:56 a.m. and
17 resumed at 11:11 am.)

18 MR. FRAZIER: Congressman, General,
19 I don't know -- General Scowcroft?

20 CHAIR SCOWCROFT: Yes. Well,
21 let's get started now. After our panel
22 discussion this morning, we would now turn to

1 a discussion of the schedule for the full
2 Commission meetings for the next several
3 months.

4 We plan to hold our next meeting
5 on November 15 and 16 in Washington, and at
6 that meeting we will hear from representatives
7 of other nations so we can learn more about
8 their policies regarding the back-end of the
9 fuel cycle. We will also hear from a series
10 of speakers who could tell us more about how
11 nuclear waste policy came to take its current
12 form.

13 In January of next year, we will
14 arrange visits to Southeastern New Mexico to
15 visit the Waste Isolation Pilot Plant and to
16 Georgia and South Carolina to learn more about
17 the Vogtle Nuclear Power Plant and the
18 Savannah River Site.

19 As we have said before, we believe
20 it's important for the Commission to hear from
21 communities that have a large stake in solving
22 the waste problems, and, of course, we started

1 with that at Hanford. We look forward to
2 these visits.

3 With that, we will now open the
4 floor for comments or matters the
5 Commissioners wish to discuss. Are there any?
6 Yes, Per?

7 MEMBER PETERSON: Thank you. I
8 would like to again emphasize the fact that I
9 believe that the information that we heard
10 today, and also, although I was not able to be
11 here, the information yesterday is very
12 important and helpful in thinking about the
13 nature of the new institution or entity that
14 we would potentially want to develop to take
15 on the mission of managing the used fuel and
16 high-level waste that the country has.

17 I do think that we need to think
18 about some important high-level elements of
19 what this entity would be charged with, and so
20 I'd just like to make sure that those are on -
21 - that we're aware of them.

22 One set of questions is the set of

1 functions that it should perform or should be
2 authorized to perform, and some of the
3 discussion will relate to the question of
4 whether that might include advanced fuel cycle
5 activities such as reprocessing.

6 In thinking about that question, I
7 do think we want to consider the question of
8 whether or not those types of activities would
9 be considered to be natural monopolies,
10 because that really would relate to whether
11 they should be treated as monopoly activities
12 or treated as something that should be perhaps
13 done competitively driven by price signals.

14 Then the other question is a
15 higher level philosophical question, which is
16 really who should own this corporation. Now,
17 we're thinking about the idea that it would be
18 desirable to have volunteer communities or
19 volunteer process to have communities step
20 forward potentially to host these types of
21 facilities.

22 It might be that indeed those

1 communities and those states that would take
2 on these responsibilities should also be the
3 owners of the activity, and this would then
4 relate to the question of really who should be
5 responsible for appointing people who would be
6 directors on this sort of corporation.

7 So I think that this is also an
8 important set of questions, because are
9 utilities that generate used fuel customers
10 for this corporation or are they owners for
11 this corporation is another high-level
12 question that merits some thinking about,
13 because if ownership is transferred to the
14 communities and states that are taking on
15 these responsibilities, that might actually
16 provide a greater level of trust and
17 confidence that the activities will be
18 conducted in a way that benefits and takes
19 into account the interests of all of the
20 different people.

21 These are high-level questions,
22 but I think they merit our consideration.

1 Thank you.

2 CHAIR SCOWCROFT: Yes, John?

3 MEMBER ROWE: As I listened
4 yesterday to a very large number of people say
5 that democracy implies the need to get the
6 consent of all the differing communities
7 concerned in the siting of waste, I was both
8 impressed by the profoundness of what they
9 were saying and troubled by the implications,
10 because, after all, we have this waste problem
11 to solve. Whether everyone consents to solve
12 it or not, they will be much worse off if we
13 fail.

14 It occurred to me as I listened to
15 the structure of the federal corporation
16 discussion that it's possible that one way to
17 sort of bridge that problem might be to
18 authorize and empower the federal corporation
19 to proceed only with consent, leaving, of
20 course, in the Congress its ultimate
21 sovereignty if the federal corporation can't
22 proceed in a consensual way or within the

1 amount of money given to it.

2 It may be that the federal
3 corporation would have instant credibility to
4 some degree if its powers were confined to a
5 consensual process and yet not having the
6 government abandon the ultimate responsibility
7 to deal with this if consent doesn't work.
8 I'm not at all sure that's a great step
9 forward, but it struck me as a possible
10 bridging mechanism.

11 CHAIR SCOWCROFT: Thank you, John.
12 Others? Yes, Jon?

13 MEMBER LASH: John, I wanted to
14 jump in and follow up on what you just said,
15 because I do think that is a key issue for us
16 and that we've heard both in terms of the
17 experience of communities and interests in the
18 United States and also those outside of the
19 United States the profound difference between
20 a consent-based process and one that allows
21 comment but isn't consent-based.

22 I found myself thinking often as

1 we listened to testimony how different it
2 would be if these were people who assumed that
3 future activities would be consent-based and
4 that they could trust the system not to
5 overrun them.

6 But if we -- if we do ultimately
7 agree on the kind of concept that you've
8 suggested, we still have a great deal to work
9 out in terms of what constitutes consent, by
10 whom, and how often it has to occur, and those
11 are issues that I hope we'll have time to look
12 into as a Commission so that we can define a
13 feasible and workable consent-based system.

14 CHAIR SCOWCROFT: Thank you. Al?

15 MEMBER CARNESALE: Yes, I just want
16 to make an observation that we may be learning
17 too much from the Yucca Mountain experience,
18 and we should be careful here. Imagine that
19 we had had a site that everybody agreed upon,
20 and it was going along fine and we put waste
21 in there, and it turned out it was technically
22 unsound and dangerous.

1 Then the lesson we would have
2 learned was what matters most is technology
3 and science, and what matters not necessarily
4 least but not nearly as much is that everybody
5 agrees that that would be a good place for it
6 to go. You paid them enough money, and they
7 wanted to have it there.

8 We're going to have to find some
9 right balance here. Acceptability is
10 important if you can't put it there without
11 acceptability. Democracy does not mean that
12 everybody agrees. Very few votes in Congress
13 are unanimous on anything of importance.

14 When it's politically expedient,
15 they're unanimous, so I think we have to be
16 very, very cautious here as to not take this
17 pendulum and suddenly switch it to the other
18 end and come up with a process that either
19 might put the site in what turns out to be the
20 wrong place but we didn't -- we won't -- no
21 one here will pay the price for that. That
22 will come later -- or select a process that

1 simply doesn't converge.

2 It would be like insisting that in
3 Congress we're not going to pass any laws
4 unless there is a unanimous vote, in which
5 case we would have no laws of any utility, so
6 mine is simply a word of caution.

7 I am a firm believer in democracy.
8 I don't think I have to establish my
9 credentials on that side, but democracy is not
10 the same as lowest common denominator.

11 MEMBER LASH: Chair, may I ask a
12 follow-up question to Al?

13 CHAIR SCOWCROFT: Yes.

14 MEMBER LASH: Point well taken. I
15 understood Ward Sproat in telling us that the
16 objective should be a technically informed
17 political process to be trying to accommodate
18 the fact that there are some technical truths
19 that no matter what we want to believe will
20 always continue to be true. This shouldn't be
21 a magical thinking process.

22 Consent is not the same as

1 consensus, and if we understand that we're not
2 looking for everybody to agree, but we are
3 looking for a technically sound solution that
4 communities are willing ultimately to accept
5 because they see the advantages, I don't see
6 how we move forward without that.

7 MEMBER CARNESALE: I agree with
8 that. A political process is certainly what
9 it will be. I'm saying that it is not --
10 technically informed is not sufficient to
11 describe it that way, right, technically
12 informed. "Well, we know this is a bad place,
13 but it's the one where we were able to get
14 most people to agree," is a technically
15 informed bad decision.

16 So I do think it's a bit more
17 complicated than that. I certainly am not
18 advocating that you simply take the best site
19 and you put it there. I'm disturbed by what
20 I hear over the last day and a half that, "I
21 know how to avoid that problem," and that is
22 go to the other extreme.

1 By the way, I doubt that we would
2 put it in a place where it really would be
3 dangerous. I think what's far more likely is
4 it would be the Red Ribbon Commission 20 years
5 from now trying to figure out, "How do we
6 solve this problem that we don't have a place
7 to put the waste?" simply that the process
8 would not converge.

9 CHAIR HAMILTON: Brent, I think
10 it's probably time to begin to think about our
11 report, and one of the questions that comes up
12 is who is the audience, and I think members of
13 the Commission here need to begin to think
14 about that.

15 I think we have to write a report
16 that is -- that addresses several audiences.
17 One is the technical professional audience,
18 and in that respect the report has to be sound
19 in its science and acceptable to the
20 professional community, whatever those terms
21 might mean.

22 Secondly, it's important to keep

1 in mind that we have to address this report to
2 the policy-makers, whoever they may be in the
3 executive and the legislative branches.

4 Almost certainly we will have some
5 recommendations that will require legislative
6 action and maybe several that will require
7 executive action.

8 That means that the report has to
9 be persuasive. At some point, the
10 Commissioners and certainly Brent and I will
11 be required to go before congressional
12 committees to talk about the recommendations
13 of the report, and, of course, Brent and I
14 will need a lot of help from those of you who
15 have a depth of understanding of a lot of
16 these issues.

17 A third -- a third audience, not
18 unimportant, is the public, and when you try
19 to put these audiences together, you've got a
20 formidable task of writing. It is my view
21 that you cannot make a report too clear or too
22 simple, and I am impressed with the witnesses

1 that we have, their depth of understanding,
2 the analytical capabilities they've brought to
3 these problems, and really the very large
4 number of excellent recommendations that we
5 make.

6 We're going to have to think in
7 terms of how to sort through all of this and
8 make a report that is in the end addresses
9 each of these audiences and maybe some I
10 haven't identified but does it in a very
11 clear, direct way. That's one point I want
12 Commissioners to begin to think about, the
13 audiences and how you address them.

14 The second point I ask of the
15 Commissioners is that you begin to think about
16 what subjects need to be covered and what
17 subjects need to be not covered. Maybe the
18 latter is as tough as the former.

19 I would suggest for you that we
20 have heard an awful lot about process, and I
21 think all of us have been impressed how
22 important process is. In a sense, how we

1 reach a decision in this management of the
2 fuel cycle is as important as the decision
3 itself. At least, that's the way I understand
4 a lot of the testimony we've had.

5 It's certainly true that how we
6 carry out the decision is as important as the
7 decision itself, so both the process and the
8 implementation have to be addressed. So,
9 obviously, a major part of the report I think
10 has to be addressed to process questions.

11 Another -- I don't tend to -- mean
12 to be all-inclusive here, but some thoughts
13 come to my mind. We certainly have to address
14 the question of governance. That came up
15 frequently this morning, and then we have
16 specific things to cover like disposal and
17 transportation, storage, the fuel cycle
18 development, and all the rest.

19 So I invite the Commissioners at
20 this point to begin to think about not just
21 the content of the report, obviously
22 important, but also the audiences that we

1 address it to and the style of it.

2 I've had enough experience with
3 reports, and some of you have, as well, that
4 go to difficult topics that it's very, very
5 easy to get deeply immersed in a lot of the
6 detail, but at the end of the day you want a
7 report that has impact, and in this town
8 impact is better achieved, I think, if you
9 don't have too much complexity.

10 So the challenge, in a sense, is
11 to take a subject that so far as I can see is
12 inherently very, very complicated and try to
13 figure out how to write a report that will
14 have impact.

15 Just some very general
16 observations there, Brent, because I think
17 we're at a point now in the deliberation of
18 the Commission when we have to begin to think
19 about these things, and we've got time to do
20 it, obviously, but we've also got a formidable
21 challenge to meet the requirements.

22 CHAIR SCOWCROFT: Well, I agree

1 completely, and I think those are useful
2 admonitions, especially the two about we can't
3 make it too clear or too simple. I think we
4 can make it too simple, and that's part of our
5 real problem.

6 This is inherently complex, and
7 how you make it complex and still -- how you
8 deal with the complexities and still make it
9 understandable and readable is going to be a
10 major task for us. Allison?

11 MEMBER MACFARLANE: Thanks. Let me
12 give a couple of reactions to what's been said
13 so far in the discussion between Per and
14 Jonathan and Al. I'd just like to add that I
15 think that it's not too complex an issue to
16 add some basic criteria, technical criteria,
17 to a siting decision, and there are examples
18 out there already. We don't have to reinvent
19 the wheel on this.

20 But I think Al gives us -- makes a
21 good point that I think we may want to think
22 carefully that if we design a process, we may

1 want to think about -- which has not really
2 been done before, and that's maybe part of the
3 reason why we're sitting at this table.

4 But we might think about also what
5 happens if the process that we design fails?
6 What's the Plan B? And think about what that
7 might look like, or maybe that's too hard, I
8 don't know, but something to consider.

9 So that's my first point, and the
10 second point is that we've been meeting since
11 the end of March and, you know, since
12 basically the beginning of summer on a much
13 more regular basis, and I think it's a good
14 time to pause and take our temperature, so to
15 speak, and say, you know, "Are we doing a good
16 job, and what can we do better? You know, are
17 we being effective?"

18 And, you know, that's sort of a
19 very broad way of looking at it, but one more
20 specific suggestion I'd like to make is that
21 we've been getting a lot of information, and
22 it's not just information that we've been

1 getting from the formal witnesses.

2 We've been getting a lot of
3 public, oral public testimony. We've been
4 getting a lot of written public testimony. I
5 especially feel that we shouldn't let that
6 public testimony get lost, and so I think
7 maybe our staff can help us collate some of
8 that information so that we can incorporate it
9 into our deliberations and into our
10 understandings. I don't want this to be
11 the usual exercise of, you know, public
12 comment and the agency, you know, just lists
13 the public comments at the end of their report
14 and maybe, you know, makes a few responses but
15 ignores the vast majority of them. I think we
16 need to go beyond that.

17 CHAIR SCOWCROFT: Thank you,
18 Allison. Susan?

19 MEMBER EISENHOWER: Yes, I just
20 wanted to go back to what Chairman Hamilton
21 said and some of the other comments that were
22 made about who our audience is for this report

1 and how do we produce a report that
2 acknowledges the complexity of the issue but
3 still helps us move the ball forward.

4 I think who the audience is and
5 how we should approach this is implied by who
6 has been selected by the White House and the
7 Department of Energy to sit on this
8 Commission. We have a wide array of people
9 here on this Commission that represent
10 different parts of the public policy space,
11 and I think this suggests that whoever
12 appointed us, and that would be the Secretary,
13 of course, is really looking for broad
14 strategy.

15 A broad strategy can be written in
16 a hard-hitting way, and it's got to be backed
17 up intellectually by technical and political
18 realities, but that doesn't mean we have to
19 write a report that, you know, covers
20 absolutely every one of those details.

21 We have to come up with some very
22 specific, possibly rather simple

1 recommendations that are feasible based on the
2 testimony we've heard since we have begun and
3 the testimony we'll hear before it's all over.
4 So I actually have a high degree of confidence
5 that we can meet your objectives, Chairman
6 Hamilton, if we remember that people are
7 looking to us for a strategic direction.

8 By the way, this is not -- this is
9 an extremely important subject, since to do
10 something or not do something are very, very
11 big questions in certain technical and
12 political areas, so much so that it has tied
13 up the system in knots, because we have, you
14 know, reached an impasse here.

15 So I think if we remember that we
16 are a Commission tasked with a strategy for
17 going forward, this will help us know what to
18 put into the report and what not to, all
19 based, of course, on solid technical and
20 political realities. Thank you.

21 CHAIR SCOWCROFT: Thank you, Susan.

22 Are there other comments? If not, we will

1 turn now to oral statements from the public.

2 We have eight people who have asked to speak.

3 We will allot four minutes each,
4 and for the speakers we have a little light
5 system. At three minutes, the orange light
6 will come on and at four minutes the red
7 light, at which time we will ask you to cease.

8 The first speaker is Brian
9 O'Connell, the National Assessment of
10 Regulated Utilities Commission. Brian? Thank
11 you for coming. You may proceed.

12 MR. O'CONNELL: Thank you very
13 much. I appreciate the opportunity to make a
14 few comments. I did provide for the record a
15 letter or a statement on governance, and I
16 found this morning's session very stimulating.

17 When our witness, Commissioner
18 Greg White, spoke to you on May 25, he made
19 the point that the Nuclear Waste Fund is a
20 mess, and he got some very positive feedback
21 that you all recognize that, and that came
22 through in the subsequent presentations.

1 The document that Ward Sproat
2 referred to on organizing and managing the
3 program had two parts. He spoke mostly to the
4 organizing, but the financing also had some
5 very good recommendations, and they were
6 largely ignored by Congress, primarily because
7 the system seems to weigh against further
8 reform, because the Congress got to spend that
9 money, anyhow, and left a series of IOUs, and
10 that certainly needs to be fixed.

11 On organization, since de facto
12 the OCRWM has been disbanded, we're going to
13 be talking about a new organization, whether
14 it's in or out of the tent in government or
15 not. We think that the Fed-Corp Bill that
16 Senator Voinovich produced has got some very
17 good features to recommend.

18 One that we're very concerned
19 with, though, is this -- I think the language
20 is transfer as an unfunded asset of the corpus
21 of the Fund. That means that the \$25 billion
22 supposedly in the Fund does not convey.

1 So it would be a strong
2 recommendation that we would make that you be
3 quite specific in terms of keeping things
4 simple is that that money needs to come back
5 to this program, whoever manages it.

6 There were some points raised
7 about whether -- Joe Hezir made some excellent
8 dissecting of the bill, and as I read the
9 bill, it is a federal agency. It has got
10 compliance with certain provisions of law and
11 not others. For example, NEPA does apply.
12 For example, Price Anderson does apply, so
13 there's a lot of detail there.

14 I guess the only concern I have
15 with the bill, besides the uncertainty of the
16 financing, is the transition of who will stand
17 up this new organization and guide it through
18 its initial phases. It doesn't simply appear
19 because it's in legislation. There needs to
20 be a transition element to it. So I
21 appreciate the opportunity to make some
22 additional comments and thank you very much.

1 CHAIR SCOWCROFT: Thank you. Are
2 there any questions? The next speaker we have
3 is Tom Cochran from the Natural Resources
4 Defense Council. Mr. Cochran?

5 MR. COCHRAN: Thank you, General.
6 Yesterday you heard a presentation, Ernie
7 Moniz and Charles Forsberg, on the MIT fuel
8 cycle study, which was a nuclear industry-
9 funded study, and I wanted to give some
10 critique of that study.

11 They began with a presentation of
12 historical constant dollar minerals costs
13 including uranium but about 12 minerals that
14 it shows over a period of 100 years that the
15 constant dollar cost of mineral extraction
16 doesn't increase.

17 They mentioned that they had an
18 economic model that showed there would be a
19 modest increase if you had a major increase of
20 use of nuclear power, a modest increase in the
21 cost of uranium, 50 percent over 100 years.

22 What they -- that's consistent, by

1 the way, with another study, and that analysis
2 is unavailable, because the report is not
3 available and won't be available for two more
4 months and, in fact, hasn't been completely
5 written.

6 That uranium analysis is
7 consistent with the analysis by Clifford
8 Singer and his co-author -- Clifford's at
9 University of Illinois -- that there would be
10 only a modest increase in uranium cost with
11 major increase in demand of uranium.

12 So there are three, I think, more
13 or less independent studies that come to the
14 same conclusion that the cost of uranium is
15 not going to increase significantly over the
16 next -- the remainder of this century.

17 What they did not include, though,
18 was the other factor that affects the cost of
19 light water reactive fuel, namely the
20 enrichment cost, which in constant dollars has
21 gone down in the last 40 years and is likely
22 to go down in the next 100 years, because

1 there is a huge availability of improvements
2 and efficiency of spinning centrifuges and
3 going to laser enrichment and so forth.

4 The take-home message from all of
5 that is the cost of nuclear fuel for light
6 water reactors on the once-through fuel cycle
7 for the next 100 years will be what it is
8 today. It isn't going to change
9 significantly.

10 What they did not mention, though,
11 was the projections or the historical growth
12 in constant dollars of reprocessing costs.
13 AEC was indicating in 1968 that reprocessing
14 would cost \$34 a kilogram, and by today it
15 would be down to \$22 a kilogram. In fact,
16 it's several thousand dollars a kilogram.
17 It's gone up by an order of magnitude.

18 MOX fabrication in real terms has
19 gone up by an order of magnitude. The cost of
20 building nuclear power plants, AEC estimated
21 in 1970 \$150 -- in '68 \$150 a kilogram -- I
22 mean, \$150 a kilowatt for a cost of a new

1 nuclear plant.

2 It's gone up by at least a factor
3 of five, and therefore the cost of advanced
4 fast reactors relative to light water reactors
5 has also in real terms gone up by more than a
6 factor of five, because the cost differential
7 has gone up by more than 20 percent to
8 something like 50 percent or more.

9 The bottom line is these advanced
10 fuel cycles are no longer economically
11 attractive. There is no foreseeable way to
12 make them attractive, and all you can do is,
13 as Ernie did yesterday, was wave his hands and
14 say, "There's a lot of uncertainty here, and
15 we don't know what's going to happen, and we
16 think we ought to do a billion dollars a year
17 worth of R&D to see what we -- what we can
18 find out."

19 My view is you're wasting money
20 doing R&D on advanced fuel cycles. You've got
21 one that's good for another 100 years, and
22 you're investing as the Department of Energy's

1 Nuclear Energy -- Office of Nuclear Energy.

2 Historically, they've boxed
3 themselves in where their mission is really
4 only to look at the back end of the fuel
5 cycle. They don't look at the front end of
6 the fuel cycle anymore, and they don't look at
7 -- they don't get involved themselves heavily
8 in developing -- lowering the cost of new
9 nuclear plants.

10 So I think the message, the take-
11 home message and the message this committee
12 ought to impart is that in terms of R&D, it
13 ought to be focused on reducing the capital
14 cost of nuclear power plants, not on spending
15 money developing advanced fuel cycles and the
16 back-end of the fuel cycle.

17 Now, one last -- yes, sir -- one
18 last thought. They did not talk about
19 proliferation. If you're concerned about
20 proliferation as it relates to civil nuclear
21 power, it comes not just from the availability
22 of the material but from the availability of

1 the R&D programs on these advanced fuel
2 cycles.

3 At Oak Ridge, we have now four
4 facilities with hot cells. In one hot cell in
5 one of those facilities, the Advanced Fuel
6 Cycle Initiative conducted the entire
7 demonstration of taking spent fuel and turning
8 it into a MOX pellet.

9 That's in one hot cell with one
10 set of manipulators with a cadre of people who
11 are experts in actinide chemistry and
12 plutonium chemistry and metallurgy. So if you
13 want to address the proliferation issue, you
14 need to look at the R&D program and not just
15 the availability of materials.

16 I point out just for Per
17 Peterson's sake when Alan Hanson came before
18 your committee and argued about the fact that
19 La Hague reduces the proliferation risk
20 through reprocessing, he failed to mention
21 that La Hague was, in fact, a weapons facility
22 for separating plutonium for the French

1 weapons program, and it was only later that
2 they tacked on the civil separations
3 capability and ran them alongside. Thank you.

4 CHAIR SCOWCROFT: Thank you, Mr.
5 Cochran. Any questions? Thank you.

6 The next comments will be by Irene
7 Navis of Clark County, Nevada. Thank you for
8 coming.

9 MS. NAVIS: Thank you for having us
10 again. Thank you, Mr. Chairman and Commission
11 members. I'd like to thank you first of all
12 for the July 7 meeting where you allowed John
13 Gervers to speak on Clark County's behalf.
14 I'm sorry I was out of the country that day
15 and couldn't attend the meeting, but I
16 appreciate you having us on that panel.

17 I also wanted to let you know that
18 the speaker that you had yesterday, Claudio
19 Pescatore from OECD, his study that he, I'm
20 sure, discussed with you about value-added and
21 stakeholder involvement, Clark County was a
22 participant in that study, and we appreciate

1 all of his efforts in that regard and hope
2 that you'll be able to review that study, as
3 well.

4 I want to thank you for today's
5 panel in particular, including Ward Sproat.
6 We had an excellent working experience with
7 Mr. Sproat, and he did, in fact, increase the
8 credibility and stakeholder involvement during
9 his tenure, and it was a very valuable
10 experience for us.

11 I think one of the key things that
12 you've been hearing about today is trust and
13 relationships and the interplay of governance
14 in those two aspects, and I think that those
15 really are the keys to a successful program,
16 so I hope that your report spends a lot of
17 focus in that area.

18 Clark County has a study on
19 stakeholder and trust issues that we will
20 provide to the Commission for your -- for your
21 information. We will also provide you with
22 socioeconomic studies and any transportation

1 studies that are relevant to tomorrow's
2 discussion, as well, and we want to just make
3 one key point today about the enabling
4 legislation that you may be considering.

5 We hope that the enabling
6 legislation provides clear direction and
7 allows also for some flexibility to
8 accommodate changing conditions and that it
9 does not tie the hands, unduly tie the hands
10 of those responsible and accountable and at
11 the same time does not set the bar too low in
12 terms of accountability and performance by all
13 governing bodies and stakeholders. I think
14 that's one of the problems that we've seen
15 with the Nuclear Waste Policy Act.

16 In terms of organization and
17 government -- governance, the point we want to
18 make is that stability and long-term
19 commitment and clarity of mission and goals
20 are the keys there.

21 I think part of DOE's problem with
22 the nuclear waste program to date is that

1 they've at times had an appearance of a
2 conflicting mission or conflict of interest
3 and perhaps undue advocacy at times for their
4 programs that have impacted their ability to
5 meet their obligations and has contributed to
6 the erosion -- excuse me -- of trust and
7 stakeholder involvement in their process, and
8 I look forward to the transportation
9 discussion tomorrow and hearing more about
10 these issues. Thank you.

11 CHAIR SCOWCROFT: Thank you very
12 much. Questions? Our next commenter is Arjun
13 Makhijani from IEER. Mr. Makhijani? You
14 might tell us what IEER is.

15 MR. MAKHIJANI: It is the Institute
16 for Energy and Environmental Research,
17 General. Thank you. Thank you for giving me
18 this opportunity.

19 First, let me appreciate what Dr.
20 MacFarlane said, and I hope the Commission
21 will take up her suggestion, because you've
22 heard a lot of things, and I hope it'll give

1 confidence in your product, certainly, with
2 the public if you accept that suggestion and
3 follow through with collating those comments
4 and take them seriously into account. Thank
5 you.

6 The -- a couple of comments
7 regarding reprocessing. It's going to cost
8 \$100 billion to reprocess existing spent fuel.
9 There is no business case for it. Industry
10 doesn't want to pay for it. You've heard them
11 that they don't want to pay for it, and there
12 is no business case for it.

13 You're going to separate 1,000
14 tons of plutonium if you do that. You're
15 going to create more waste, and you heard the
16 former DOE person to say you're going to
17 create more low-level waste.

18 There -- whether you do advanced
19 fuel cycles or not, this is very iffy, and you
20 heard Tom on that. I won't repeat what Dr.
21 Cochran said. I think if you really want to
22 get on with the job and do the job that we

1 failed to do -- and there is a real merit in
2 the Nuclear Waste Policy Act.

3 The real merit in the Nuclear
4 Waste Policy Act and the reason I support and
5 I've always supported a repository program,
6 for the last 20 years, anyway, is its non-
7 proliferation merit. You're locking up that
8 plutonium in spent fuel without separating it.
9 Please do not lose that most important merit
10 of the Nuclear Waste Policy Act.

11 Since there is no foreseeable
12 business case for reprocessing, I really think
13 the MIT report suggestion that somehow we
14 ought to keep options open for 100 years and
15 then figure out what to do is going to be very
16 diversionary, and it is going to encourage
17 proliferation from paths in other countries.

18 The "Do as I say and not as I do"
19 days are over. The United States doesn't have
20 the deep pockets to make it happen, as it
21 might have in the 1950s and 60s.

22 You've heard -- my second point is

1 about the technically informed political
2 process. Actually, what we have had so far,
3 we had the technical information to avert this
4 Yucca Mountain problem, but we didn't use it.

5 The Department of Energy
6 commissioned -- requested the National Academy
7 to do a study, and they produced a report in
8 '83, and I think I alluded to it last time,
9 and I hope that you will all look at it.

10 In that report in the fine print,
11 as well as in the background report prepared
12 by a member of that panel, said that Hanford
13 was a dangerous site to mine, and we should
14 try to find a better one.

15 If you read the charts, it will
16 tell you that Yucca Mountain would have had
17 the highest radiation doses of any site,
18 because there is very little groundwater
19 there. It would have gotten very polluted.

20 This was 1983, and yet in 1985, I
21 think, the DOE selected Hanford and Yucca
22 Mountain as two of the top three sites,

1 because it was politically convenient. Then,
2 of course, it was all abandoned.

3 Yucca Mountain was not a
4 technically informed political process. It
5 was a politically driven process in which the
6 technical information was there, and it was
7 not used.

8 I take the suggestion that was
9 made earlier that we can't just select a
10 community and then say -- and then find it's
11 a bad site. How are you going to generate the
12 technical information?

13 I suggest that a two-step process
14 would be very useful. If we go directly from
15 your Commission into a new siting process, the
16 existing loss of trust and confidence because
17 of the poor way in which the whole process was
18 carried out, despite a lot of competent
19 science that was part of it, is very likely to
20 result in another Commission in 10 or 20
21 years.

22 You don't want to go into a siting

1 process right away. I have suggested and I
2 will suggest again that you need ten years of
3 solid scientific work. What types of rocks?
4 What has been done? How do those rocks marry
5 with the packages? How do the packages marry
6 with the sealing process?

7 The scientific process will then
8 be detached from a specific set of sites, and
9 then you will know how to site. If you have
10 confidence and trust and transparency and
11 sound science, all of those things, before you
12 start talking about sites, there's a ghost of
13 a chance you might have -- you might have a
14 process that the public will have confidence
15 in.

16 My last comment is on your
17 institutional structure. I am very
18 uncomfortable with the suggestion that somehow
19 the shareholders are the rate payers and
20 utilities, and there is nobody else.

21 There is a party that can't vote,
22 and there's a party that doesn't have the

1 money, and there is a party that's not
2 present. That's the most important party,
3 because everybody knows this is a very long-
4 term problem, and we're really talking about
5 our kids either if we talk about proliferation
6 and certainly if we talk about environmental
7 impact.

8 So I think you have to have an
9 institutional structure that doesn't have
10 overwhelming or large weight to a set of
11 parties whose attitude is, "Get it out of my
12 backyard."

13 So it's the opposite of NIMBY.
14 "Don't put it in my backyard," but you can't
15 give it over to a set of parties that says,
16 "Get it out of my backyard," and I'll close
17 with this following story.

18 Secretary O'Leary once had a
19 roundtable on nuclear waste. I was part of
20 that. It was a not-for-attribution
21 roundtable, but we could say what had been
22 said.

1 So I'll tell you that a nuclear
2 utility executive told Secretary O'Leary, "You
3 have to get this out of our sites, and I don't
4 care where you put it," and that's what you
5 will be putting in the driver's seat if you
6 give the nuclear utilities the main seat at
7 the table. I don't, you know, I don't think
8 other rate payers are likely to count for much
9 in that process. Thank you.

10 CHAIR SCOWCROFT: Thank you very
11 much, Mr. Makhijani. Our next commenter is
12 Michael Hardy, the National Society of
13 Professional Engineers. Mr. Hardy? Thank you
14 for coming.

15 MR. HARDY: Chairman Hamilton,
16 Chairman Scowcroft, my name is Michael Hardy.
17 I am the President of the National Society of
18 Professional Engineers, an organization that
19 represents approximately 45,000 licensed
20 professional engineers across all disciplines,
21 structural, nuclear, mechanical, electrical.
22 I appreciate the opportunity to comment before

1 the Commission today.

2 NSPE believes that the United
3 States should lead the world in the
4 advancement and use of nuclear power. Green,
5 clean, renewable nuclear power systems will be
6 an important component in our efforts to
7 reduce the nation's reliance on foreign oil
8 and the release of harmful pollutants.

9 The nuclear energy industry has an
10 excellent safety record, thanks in part to
11 strict regulation, comprehensive safety
12 planning, and rigorous training and
13 qualification standards for employees.

14 Nuclear power's great potential,
15 however, is accompanied by a risk of disaster.
16 The unlikely accident at a nuclear facility
17 would cause serious harm to people and their
18 livelihoods and the environment for
19 generations to come.

20 Improper storage of spent
21 radioactive fuel would also endanger the
22 public health and safety. NSPE believes that

1 licensed professional engineers should have
2 direct supervision over all engineering
3 design, operations, and maintenance decisions
4 at a nuclear facility.

5 Professional engineers are
6 licensed by the government, which requires
7 them to meet and maintain an acceptable
8 standard of competence. Professional
9 engineers are also bound by a code of ethics
10 to make decisions only in their area of
11 expertise.

12 Most critically, even while
13 striving to achieve a technical solution to
14 very complex problems, professional engineers
15 are ethically obligated to protect the public
16 health and safety above all other concerns.
17 Safety can be compromised when employees feel
18 compelled to put loyalty to their employer
19 before ethics.

20 Professional engineers are unique
21 in two ways. First, professional engineers
22 are accountable to the state they're licensed

1 in, ensuring that a professional engineer's
2 loyalty is to the public, not an employer.

3 Like doctors and attorneys,
4 professional engineers depend on the license
5 to practice. Losing the license could ruin
6 the professional engineer's reputation and end
7 its career. Continued licensure carries more
8 weight than continued employment with one
9 company.

10 Second, when professional
11 engineers make decisions, they are taking full
12 personal accountability for those decisions.
13 Professional engineers sign and seal plans and
14 documents as individuals, and they take
15 singular responsibility for the soundness of
16 those decisions and plans.

17 The sense of personal
18 responsibility renders professional engineers
19 impervious to the outside pressures and
20 motivates them to maintain the highest
21 standards of quality. Because of the proven
22 competence and commitment to public health and

1 safety, NSPE recommends that the nuclear power
2 plants employ professional engineers to
3 supervise all engineering design, operations,
4 and maintenance functions.

5 This will help the nuclear
6 industry preserve its strong safety record,
7 minimize the potential for disaster, and build
8 trust with the public. Thank you.

9 CHAIR SCOWCROFT: Thank you very
10 much, Mr. Hardy. The next presenter is
11 Darrell Lacy of Nye County. Mr. Lacy? Thank
12 you for coming. You may proceed.

13 MR. LACY: Thank you, Chairmen
14 Hamilton and Scowcroft and members of the
15 Commission. I appreciate the opportunity to
16 make this public comment on behalf of Nye
17 County, Nevada.

18 My name is Darrell Lacy. I am the
19 Director of the Nye County office that
20 provides oversight for Yucca Mountain, and
21 we've been involved in this process now for
22 approximately 20 years. As the home of the

1 Yucca Mountain repository, we have been very
2 concerned with the decisions that have been
3 made in the past, as well as what's going on
4 here in this Commission.

5 When the repository site was
6 chosen in 2002 using a process that was
7 spelled out of the Nuclear Waste Policy Act,
8 the Nye County Board of Commissioners
9 interpreted that action as the law of the
10 land, and rather than oppose the repository,
11 they resolved to actively and constructively
12 engage with DOE.

13 The County has worked under the
14 oversight provisions of the Nuclear Waste
15 Policy Act to ensure the safety of the
16 repository, to protect the citizens of Nye
17 County, and to help encourage economic
18 development opportunities. We feel that this
19 was best done through the successful
20 development of the repository and
21 transportation systems.

22 On a broader basis, nuclear power

1 is integral to the U.S. energy policy and
2 energy security. The only way to successfully
3 encourage the development of nuclear energy is
4 with a long-term approach to taxes incentives,
5 a common sense regulatory approach, and a
6 steady hand on the tiller.

7 As you've heard several times
8 today, it's a multi-decade process, and we
9 have to make sure that we're taking a long-
10 term view of this. Local communities and
11 citizens of these United States expect the
12 federal government to recognize its
13 obligations and responsibilities here. We
14 feel like it is very important to the nation's
15 future to do so.

16 As of today, the Nuclear Waste
17 Policy Act is still the relevant law, and no
18 meaningful effort has been put forth to change
19 this law. We hope the outcome of this
20 committee here will come up with some steps
21 that will help improve it and help the waste
22 process move forward.

1 Up until now, the Nuclear Waste
2 Policy Act and its amendments have been met by
3 the Yucca Mountain project up to the point of
4 actually validating the safety and scientific
5 basis of the repository and the licensing
6 process before the NRC. It's difficult to
7 imagine a different approach that would be
8 more acceptable to the states and local
9 communities that have been most impacted by
10 this waste.

11 Whatever organizational structure
12 that you come up with should have formal
13 involvement with the state and local
14 governments through oversight and/or
15 representation on any kind of governing body.

16 To that end, we submit the
17 following formal statement that is a synopsis
18 of international consensus approach that we
19 have been involved with and think that this
20 will help to integrate government and
21 regulatory responsibilities.

22 This is not a new problem. I

1 think we can learn a lot from our experience
2 and those of other countries that are facing
3 the same problems. Thank you.

4 CHAIR SCOWCROFT: Thank you very
5 much, Mr. Lacy. Our next presenter is Judy
6 Treichel of the Nevada N WTF. Thank you for
7 coming. You may proceed.

8 MS. TREICHEL: Thank you. It's
9 Judy Treichel from the Nevada Nuclear Waste
10 Task Force. I was really interested
11 yesterday. Susan Eisenhower asked a question
12 that I have been asking for almost 30 years,
13 and that is to anybody involved at that time
14 with Yucca Mountain, but please define the
15 problem that Yucca Mountain is supposed to be
16 the solution for.

17 Susan asked the presenters as they
18 were presenting to define the problem that
19 they were speaking to, and twice she got the
20 answer. Well, I think only two people
21 answered the question, but both of those
22 answers were climate change.

1 It seems to me that waste storage,
2 waste management, or waste disposal, which is
3 what this Commission is primarily supposed to
4 be looking at, really are pretty neutral when
5 it comes to climate change. They neither make
6 it any better or make it any worse.

7 What these speakers were talking
8 about and what that problem is defining is
9 nuclear power, and I can't imagine how nuclear
10 power can be that important to everybody
11 around this table, and I hope that it's not.

12 I know that it's terribly
13 important and it's a primary -- of primary
14 importance to a lot of the people that you've
15 had present, but when you sit here and you
16 listen to the attendant problems and certainly
17 the problems of waste management and waste
18 disposal that have gone on in this country for
19 probably 40 years or 50 or 60, if you go back
20 to when waste started being produced and then
21 even get into the issues of proliferation and
22 the possibility of weapons being manufactured

1 around the world, all of the things that have
2 to go with this, I just cannot imagine that
3 nuclear power can be that important or of the
4 primary importance, and I'm hoping that it's
5 really not.

6 I know one of the presenters
7 yesterday talked about one of the first things
8 you have to tell the people in the host
9 community is how important nuclear power is.

10 Well, I don't think that that's
11 the case, and when you're listening to people
12 talking very casually about the fact that 15
13 years is going to go by before something else
14 happens, and by that time we've got 100,000
15 tons of nuclear waste, we'll never be able to
16 keep up when it comes to reprocessing, if
17 that's a decision that's made. We can't keep
18 up with emplacing.

19 I would just ask that you step
20 back and be absolutely sure that you're
21 focused on nuclear waste disposal or
22 management, and I think you can come to an

1 agreement with anybody out there, with any of
2 the public you want to talk to.

3 Everybody agrees that nuclear
4 waste now exists. There is probably 60,000 to
5 65,000 tons of nuclear waste sitting out
6 there. We can all agree on that, and we can
7 all agree that we want the public kept as
8 absolutely safe as they can be. That's where
9 everybody starts at agreement, and then you
10 can go from there.

11 You can probably build public
12 trust, public confidence if you all come
13 together and if the public is in, bought in
14 from that very basic premise that it does
15 exist. Nobody's arguing with that, and it
16 needs to be safe, and the public needs to be
17 kept safe. So thank you.

18 CHAIR SCOWCROFT: Thank you very
19 much, Ms. Treichel. Our last presenter is
20 Alfred Meyer, who is representing himself.
21 Mr. Meyer, you're welcome.

22 MR. MEYER: Thank you very much for

1 making this opportunity possible. I would
2 like to just comment on a couple of things
3 that I've heard over the past few days.

4 I particularly was taken with Dr.
5 Cragg's concept of justified trust, and I
6 thought his concept that a body such as this
7 might really be charged with asking the right
8 questions and then getting the answers, in
9 fact, from the public, and I hope that you
10 have taken that to heart.

11 I'd like to second Ms. Treichel's
12 comments about the grave concern of the
13 buildup of nuclear waste. We've heard that
14 there really at this point is no solution for
15 high-level nuclear waste or low-level nuclear
16 waste, so it brings up the question what do we
17 do in such a situation.

18 I would suggest that you will gain
19 much public credibility if this Commission
20 also considers the shutdown option of just not
21 expanding nuclear power but of trying to shut
22 it down and to deal with what we have at hand.

1 I applaud Commissioner Carnesale
2 for actually saying that nuclear waste is a
3 burden. I feel that it is. However, I must
4 disagree with his consequent statement that
5 the ethical reason to take such a great risk
6 is the solution -- is the fact that nuclear
7 power would be a solution for climate change.

8 I feel that climate change is a
9 profound and immediate problem. It needs
10 action now, and the fact is the nuclear power
11 cannot respond quick enough or in enough
12 volume to really make the changes that we
13 need.

14 I would also like to suggest that
15 the loan guaranties are not the problem.
16 There is still money on the table from 2007.
17 I think the problem really more is having a
18 viable project that can utilize the existing
19 funds.

20 Dr. Miller pointed out the
21 inherent proliferation risks of nuclear power,
22 and I think that the situation in Iran is a

1 clear example of what this is, and I think
2 that he challenged the U.S. to be a leader in
3 terms of adopting an international fuel bank,
4 that if we want other countries to be happy to
5 be dependent on some other source of fuel,
6 then I think that we need to be able to follow
7 through and do that ourselves.

8 Lastly, I'd like to commend
9 Commissioner Eisenhower for asking the
10 clarifying question yesterday of the
11 presenters what problem are they trying to
12 solve, and I'd like to invite the
13 Commissioners here today -- we probably have
14 a few minutes before adjournment -- to go
15 around the table and for each of you to tell
16 us that same -- answer that same question.

17 What problem are you trying to
18 solve here? For me, I have grave concerns
19 about public health and the need to keep these
20 very dangerous and very long-lasting elements
21 separated from the biosphere. Thank you very
22 much.

1 CHAIR SCOWCROFT: Thank you, Mr.
2 Meyer, appreciate it. Are there any comments
3 from the Commissioners? We will not go around
4 the table right now, but if any of you wish to
5 comment, you're welcome to do so. If not, I
6 will declare the meeting adjourned and thank
7 our presenters very much for appearing before
8 us.

9 (Whereupon, the foregoing matter
10 was adjourned at 12:13 p.m.)

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