

UNITED STATES
NUCLEAR WASTE TECHNICAL REVIEW BOARD

TRANSPORTATION STRATEGIC PLANNING CONSIDERATIONS
PANEL ON THE WASTE MANAGEMENT SYSTEM

Wednesday, January 21, 2004

Crown Plaza Hotel
4255 South Paradise Road
Las Vegas, NV 89109
Tel: (702) 369-4400
Fax: (702) 369-3770

BOARD MEMBERS PRESENT

Dr. Mark Abkowitz, Chairman of the Panel Meeting
Dr. Daniel B. Bullen
Dr. Thure Cerling
Dr. Norman Christensen, Chairman, Panel on Waste Mgmt. System
Dr. David Duquette
Dr. Ronald Latanision
Dr. Priscilla P. Nelson
Dr. Richard R. Parizek

SENIOR PROFESSIONAL STAFF

Dr. Carl Di Bella
Dr. Daniel Fehringer
Dr. Daniel Metlay
Dr. Leon Reiter
Dr. David Diodato
Dr. John Pye

CONSULTANTS

Robert Luna

NWTRB STAFF

Dr. William Barnard, Executive Director
Joyce Dory, Director of Administration
Karyn Severson, Director, External Affairs
Linda Coultry, Management Assistant
Alvina Hayes, Office Assistant

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1 Thure Cerling is Distinguished Professor of Geology
2 and Geophysics and Distinguished Professor of Biology at the
3 University of Utah in Salt Lake City. He is a geochemist
4 with particular expertise in applying geochemistry to a wide
5 range of geological, climatological, and anthropological
6 studies.

7 Norm Christensen is Professor of Ecology and Former
8 Dean of the Nicholas School of the Environment at Duke
9 University. His areas of expertise include biology, ecology,
10 and ecosystem management. Norm chairs the Board's Panel on
11 Waste Management Systems.

12 David Duquette is Department Head and Professor of
13 Material Engineering at Rensselaer Polytechnic Institute in
14 Troy, New York. That's also where summer is one day in July,
15 having lived there myself for several years. His expertise
16 is in physical, chemical, and mechanical properties of metals
17 and alloys, with special emphasis on environmental
18 interactions. David is the Chair of the Board's Executive
19 Committee.

20 Ron Latanision recently retired from his position
21 as Professor at MIT to pursue a senior position with
22 Exponent. Ron retains a position as Emeritus Professor at
23 MIT. His areas of expertise include materials processing and
24 corrosion of metals and other materials in different aqueous
25 environments. He chairs the Board's Panel on the Engineered

1 System and perhaps, more importantly, has been designated by
2 the Board as its Social Chairman. We're doing a performance
3 monitoring of that function this week, by the way.

4 Priscilla is Senior Advisor to the Directorate for
5 Engineering at the National Science Foundation. Her areas of
6 expertise include rock engineering and underground
7 construction.

8 And, Richard Parizek is Professor of Geology and
9 Geoenvironmental Engineering at Penn State University and
10 he's also President of Richard Parizek and Associates,
11 Consulting Hydrogeologists and Environmental Geologists. His
12 areas of expertise include hydrogeology and environmental
13 geology.

14 Also with us today is Bob Luna who has helped the
15 Board follow developments in transportation for the last
16 several years.

17 Turning to today's agenda, it consists primarily of
18 presentations by invited speakers with just a short period of
19 time designated for questions and discussion after each
20 presentation. At the end of the day, we have scheduled a
21 period for comments by members of the audience. If you would
22 like to comment at that time, please, enter your name on the
23 signup sheet at the table near the entrance to this room.
24 Alternatively, you may submit written comments at any time
25 during the day and we will try to present them to the

1 speakers or otherwise work them in as time permits. Please,
2 give any written comments to our support staff at the sign-in
3 table to the back left of the room and they will collect the
4 comments and give them to us at the front table.

5 I might point out that because today's schedule is
6 so ambitious, on the formal agenda, we have scheduled just
7 one comment period which is at the end of the day. However,
8 if your schedule requires you to be somewhere else at that
9 point in time, please, notify the folks in the back and we'll
10 make every effort we can to create another opportunity to
11 speak right before lunch if, at all, possible.

12 Speaking of the support staff, those of you who
13 have been to previous Board meetings will recognize Linda
14 Coultry who is at the sign-in table. She's usually the one
15 that has a Starbucks in her hand. The other staff member at
16 the table is a new employee who has recently joined the Board
17 staff. I'd like to introduce Alvina Hayes who we are very
18 glad to have as a staff member and who will likely be seen
19 more frequently at future Board meetings.

20 I'd also like to ask all of you to turn your cell
21 phones either off or to vibrate so as not to disrupt the
22 presentations and discussion. In other meetings that I've
23 been at when this question comes up, there's an unwritten law
24 that if your phone goes off during the session, you have to
25 buy everyone in the room a drink afterwards. So, that's a

1 pretty expensive proposition today, it looks like.

2 As I mentioned a short time ago, today's meeting
3 will review strategic planning considerations for developing
4 a transportation system for a potential Yucca Mountain
5 repository. This morning, we will hear from representatives
6 of those industries and organizations likely to be involved
7 in operating the transportation system; specifically,
8 utilities, cask vendors, truck and rail operators, and the
9 operator of the surface facilities at a Yucca Mountain
10 repository.

11 This afternoon, we will hear from representatives
12 of the state and local governments who also would have
13 important roles to play if a transportation system is to
14 operate including issues such as route selection, emergency
15 planning, permitting, and inspections.

16 The third major segment of today's agenda will
17 consist of four lessons learned presentations by speakers who
18 have previously been involved in transportation of spent fuel
19 or similar materials.

20 The final presentation today will be by the
21 Department of Energy and has the tentative title Status of
22 DOE Transportation Planning. We hope this talk will cover
23 not only the DOE's planning, but also provide an opportunity
24 for the DOE to respond to other information that's presented
25 during today's meeting.

1 I'd now like to briefly go over some Power Point
2 slides to elaborate on the Board's goals for the meeting
3 today.

4 Just to kind of cast the landscape for the
5 discussion that we're embarking on today, I think it's
6 important to recognize that the transportation activity is
7 expected to be a very complex operation. And, it also is
8 complex not only in the scale of the network that we're
9 talking about. This happens to be just kind of an
10 illustrative map of the locations of many of the shipping
11 origins and, of course, the proposed shipping destination
12 here at Yucca Mountain. And, you see here some of the routes
13 that are being considered for movement of those waste
14 shipments. I'm not sure, I believe this may be--it looks
15 like possibly the rail network, but there's obviously
16 highway, rail, barge, and inter-modal issues that really
17 compound the question of safety and security and logistics.

18 At the more sort of microscopic level, if you will,
19 we also have issues that, in addition to being a corridor
20 state, are unique to the State of Nevada because it's the
21 destination state and then, as you get down closer to the
22 proposed repository site, you're involving individual
23 counties and other locales. As you are also probably aware,
24 there's been recent indication from DOE that it has honed in
25 on two different rail car options coming in, one here from

1 the north and the other coming in along here, known as the
2 Caliente and Carlin corridors. So, there are issues not only
3 in terms of managing within the existing infrastructure, but
4 also what kinds of improvements to the existing
5 infrastructure and new infrastructure may be required. And,
6 this involves in the entire transportation gambit a number of
7 different organizations and individuals with different
8 interests and different geographical locations and so forth
9 and so on.

10 If I could have the next slide, please? Overlaid
11 on the consideration of the scale of the project and all the
12 players that are involved, there are all the issues that
13 intersect with these players in different ways. This is not
14 meant to be an exhaustive list of transportation issues, but
15 just to give you a sense of what's on the table and what's
16 likely to be discussed as the transportation planning effort
17 moves forward. This is not in any kind of rank order and,
18 like I said before, it's not exhaustive. But, we've heard a
19 lot about mode and route types of questions. We heard a
20 little bit yesterday about waste acceptance in terms of
21 what's happening at the origin, what products are moving
22 first, and what types of packaging they're going to require.
23 There are issues in the operations about permitting and
24 inspection and carrier selection and maintenance, tracking
25 and notification, security issues. In the unlikely event of

1 an incident, we have emergency response situation and then we
2 have a variety of other issues, such as contingency planning,
3 be it weather or accident, security, safe parking, what have
4 you. So, we're hoping to use today as an opportunity to
5 start to better understand all the interrelationships in both
6 the technical and perceived considerations that will be
7 driving the whole issue of moving these products safely and
8 securely.

9 If I can have the next slide, please? The only way
10 that we as a Board have been able to get comfortable with the
11 transportation subject--and we're certainly encouraging the
12 DOE to think about it this way, as well--is to address the
13 transportation activity as a holistic, systematic process.
14 So, as a result, our lens has focused not only on the in-
15 transit portion of the trip, but also what happens at the
16 loading end and what happens at the unloading end. And then,
17 furthermore, what happens when you go from the surface
18 facility to the emplacement of the wastes inside Yucca
19 Mountain itself. So, from looking at this from a holistic,
20 systematic process, one can kind of think about analyzing and
21 evaluating the situation as a set of sequential activities.
22 And, the reason the agenda is structured the way it is today
23 is to be able to hear from individuals that have roles and
24 responsibilities or oversight activities that are associated
25 with different components of what we consider to be the

1 transportation function.

2 Next slide, please? So, to try to sum up the
3 objectives for today, we want to hear directly from those who
4 have the operational and oversight responsibilities. This is
5 an important day today to gauge exactly where you think your
6 issues are with regard to safe and secure transportation of
7 spent nuclear fuel and high-level waste and to be able to
8 help the Board understand what you need in the way of
9 information or resources in order to move forward to be in a
10 position where you're comfortable that you can fulfill your
11 responsibilities as part of a stakeholder in the
12 transportation activity.

13 Next slide, please? The last two slides of this
14 presentation are just kind of a summary of the, I guess for
15 lack of a better word, the guidance or instructions that we
16 gave to panel participants in discussing with them their
17 willingness to be part of the program today. And, you'll
18 notice from this series of questions that it's really kind of
19 a fact-finding mission with the idea of being able to collect
20 our arms around all the issues that need to be profiled to
21 get an understanding of the sequencing of events that need to
22 take place and to start to sort of lay out sort of a
23 strategic view of how transportation planning needs to evolve
24 in order to satisfy the safety and security requirements.
25 So, in the early sessions today where we're hearing from

1 individuals that would have direct operational
2 responsibilities, the framing questions are what are your key
3 Yucca Mountain transportation, safety, or security concerns?
4 How have you been able to address these concerns based on
5 the information and resources provided by DOE to this point
6 in time? What concerns have you been unable to address and
7 what does DOE need to provide to allow that to happen? And
8 then, once you are enabled in that capacity, how long will it
9 take you to address these concerns? And, in framing the
10 questions this way, we're hoping to sort of elicit an open
11 response from these participants, but focused on the question
12 of exactly how they're going to get from today to being able
13 to support a successful transportation operation.

14 Last slide, please? And then, this afternoon with
15 the program switching to the state and local participants--
16 well, actually, I take that back. The state and locals will
17 still be focusing on the previous questions. When we get to
18 the lessons learned portion of the program, our guidance for
19 those speakers were to try to take the experiences that
20 they've had in other campaigns and to kind of share the
21 background and some of the issues that they had to deal with
22 both in terms of problems faced and ways to overcome those
23 problems. But, most importantly, to converge their thinking
24 on those activities to be able to kind of distill for the
25 Board the experiences and lessons learned that may actually

1 be transferrable to the Yucca Mountain transportation
2 scenario.

3 So, that's our goal for today. It's a very
4 ambitious day. We want to hear from a lot of people, and yet
5 at the same time, we want to make sure that everyone has
6 their opportunity to speak and still maintain a schedule.
7 So, one of my jobs today will be to act as the bad cop and, I
8 guess, I need to start with myself since I'm about to run
9 over here.

10 Our first speaker today in the section on
11 preparation of waste shipments is Steve Kraft. That's a
12 change from the program where John Vincent is identified at
13 the moment. Steve was so excited about talking yesterday
14 that he asked for a repeat performance. Actually, John has
15 had some other issues come up and was unable to attend today.
16 But, most of you know Steve quite well. He's with the
17 Nuclear Energy Institute in Washington, D.C. NEI is a policy
18 organization of the nuclear energy industry and membership in
19 NEI includes firm that operate in all phases of the nuclear
20 fuel cycle. We have invited Steve to give an overview of the
21 nuclear industry views on transportation planning.

22 Steve?

23 KRAFT: Well, thank you, Dr. Abkowitz. Good morning,
24 everybody. John sends his regrets, as Dr. Abkowitz said. A
25 personal matter came up and he is unable to be with us which

1 is truly unfortunate because he is one of the very, very few
2 people in this country that has actually moved commercial
3 spent fuel. When I talked yesterday about the experiences of
4 returning the fuel from West Valley to Oyster Creek, that was
5 John's project. It was John who walked the route. He spoke
6 to that school system I talked about. That story I told you
7 was something he has related to me. So, he will continue to
8 remain involved and we'll be seeing him in the future, I'm
9 sure.

10 What I was really doing here is responding to
11 Bullen's request. He had more questions for me and I warned
12 him this morning that you ask them and you get your answers
13 at your own peril. So, we'll see how that goes.

14 I'd like to have the first slide, please? I talked
15 a great deal yesterday about how we saw at the national level
16 the responsibilities that both sides to the movement of fuel
17 have in the terms of the contract and I referred to that
18 contract a lot. I'll refer to it again. This is it. 10 CFR
19 Part 961 is the generic form of the contract. Individual
20 utilities signed their own. If you're ever interested in a
21 truly stirring read, I would suggest that--although, it might
22 fit in with what I understand now to be the TRB's situation.
23 I mean, you come to Las Vegas on a regular basis and you sit
24 in dark rooms with the lights down talking about nuclear
25 waste. You need a new morale officer. I've got news for

1 you.

2 Okay. So, DOE is obligated to take all the used
3 nuclear fuel and the word "all" is important. We talked a
4 lot yesterday about how they might phase that in. What types
5 of fuel move first, second, third, oldest fuel first.
6 Standard fuel and nonstandard fuel is defined in the
7 contract. Failed fuel, is the cladding intact, not intact,
8 all those kinds of questions. One of the important things
9 here is that the DOE is responsible for the full
10 transportation system. I'm sure Gary will talk about that
11 later today.

12 Title transfer, that's an interesting question
13 about title transfer. Title transfers, according to the
14 contract, at when the used fuel crosses the plant gate. So,
15 as soon as it leaves our utilities, Part 50 licensed
16 facility, it's DOE's fuel. But, the law says something a
17 little different. The law says in 302 A and B that they have
18 to take the fuel January 31st, 1998, which they didn't do and
19 that's what the law suits are about, but title doesn't
20 transfer until the repository is operating. And, I think
21 that's one of these little legal conundrums that have to get
22 worked out. Title transfer is important because it drives
23 liability insurance more than anything else. You could
24 possess something and you could have control over it, but if
25 you don't own title to it, it kind of clouds up the insurance

1 situation. And, the standard form for the Price Anderson
2 liability insurance the utilities have to have to hold their
3 Part 50 licenses also includes shipments to and from the
4 plant, in addition to the insurance that the carriers have to
5 have. So, that becomes a complicated point.

6 DOE is the shipper of record. DOE is the
7 organization in the jargon of transportation that presents
8 the package of transportation and there are lots of
9 responsibilities that fall on that individual. Utilities pay
10 all the costs. That's pretty clear through the Nuclear Waste
11 Fund. We are responsible to provide at reactor storage.
12 Steve Edwards from Progress can talk about what they're doing
13 in that regard, I'm sure. And, DOE must by law provide a
14 utilized private sector to the greatest extent practical.
15 That's something that was written into the law. Every
16 version of the WWPA in the late 1970s and in the beginning of
17 1980s had that provision in it. So, there must have been
18 some understanding on the part of the Department of Energy at
19 the time and certain transportation interests that DOE would
20 not use its own forces to move this material. So, I just
21 thought I'd point that out that that seems to be a long-
22 standing activity.

23 Okay. Individual signed, individual contracts, I
24 talked about that a lot yesterday. Annual shipping
25 allocations based upon discharge dates and quantities.

1 Utilities can select the used fuel. Again, it's a contract.
2 There's room for discussion, there's room for negotiation to
3 determine what that would be. And, of course, let me just
4 stop and use that as a point to say something that I thought
5 DOE was doing over the years. And, it's a question that I
6 have now. If you think about the system, the point of origin
7 and the point of receipt, and everything that has to happen
8 on those two ends to move the fuel, it's sort of always
9 struck me that transportation is not just the movement of the
10 material from A to B, but is also the mechanism by which you
11 can force integration of the system. You cannot have a cask
12 that leaves one of our sites that is incompatible with the
13 receipt with the transporter, with the receiving facility,
14 and it cannot be inconsistent with what they do at the
15 receiving facility. And, if you back up a little bit into
16 the beginning, it can't be inconsistent with what you do
17 before you load the cask. So, transportation can serve that
18 function. I've not seen a lot of evidence lately that DOE is
19 using it that way, that DOE is thinking that transportation
20 does that. Maybe, I'm missing something. It just may not be
21 clear to me that that's what's happening. It was very clear
22 about 10 years ago when they were promoting the idea of the
23 regional service contractor because the contractor had those
24 responsibilities.

25 Next slide, please? DOE has a lot of

1 responsibilities here, as do the utilities or the purchasers
2 as they're called in the contract. The waste acceptance is
3 pretty obvious. Waste acceptance is not simply receiving the
4 fuel. I know we use the term a lot. Dr. Abkowitz had it as
5 the very first issue on his non-ordered slide there and I
6 disagree that is the most important, but that's just me,
7 maybe. Waste acceptance is a myriad of things that has to be
8 done in terms of not--it's scheduling, it's planning, it's
9 providing the right kinds of casks, it's making sure that
10 you're doing the verification inspections correctly. It's
11 how you allocate. It's a whole series of activities that is
12 caught up in the rubric of waste acceptance.

13 Take title transport, as I've discussed. They have
14 to move a certified NRC cask. That is a provision of the
15 law. Now, just so there's no confusion here, let me explain
16 how this works legally, as far as I can understand it.
17 Because DOE is a Federal agency, they are not obligated to be
18 licensed by the NRC for anything unless Congress so says
19 because when they split up the two agencies in actually 1974
20 when DOE wasn't created until '77, but ERDA (phonetic) was
21 created, is that the way Congress wrote that law is that DOE
22 or then ERDA would simply follow the same provisions of the
23 Atomic Energy Act that led to the licensing and safety of
24 commercial facilities, but they would simply impose it on
25 themselves and that's where this environmental safety and

1 health program comes in DOE. So, Congress has to specify
2 whether NRC licenses anything that DOE does. And, of course,
3 it says so very clearly about the repository. It gives EPA a
4 role, NRC a role. But, in transportation, it only says two
5 things; certified casks and notification of the governor
6 before you ship according to NRC rules. It says nothing
7 else. And, that's an important factor because it's not
8 really clear to us and I'm sure it's not clear to many of the
9 stakeholders what set of rules DOE is going to use for what
10 phase of the program. There was a large transportation
11 meeting that DOE held mid-last year, a group they call the
12 Transportation External working group or something like that
13 and there was a lot of discussion about asking about that
14 factor and asking DOE to, at least, from our part, to simply
15 publish a matrix that says here's all the things we have to
16 do and here's the rules we're going to follow. In this case,
17 it will be NRC; in this case, it will be DOE; this case will
18 follow, you know, this procedure, that procedure; we use
19 these rules; we use whatever they are so people have an
20 understanding as to what they are. And then, there was a lot
21 of discussion about how you would have enforcement in that
22 area which was not clear other than in the NRC areas.

23 And, what's really interesting about this is that
24 when you think about security and safeguards, NRC has a fully
25 developed system of security and safeguards for nuclear

1 facilities and shipments. They do not by law apply to DOE.
2 DOE may very well just use its own program or some
3 combination of the programs. That needs to be defined. That
4 came out in the Senate hearing on the Yucca Mountain
5 resolution in June of 2002. NRC was requested by one of the
6 members of the Senate on that question and they wrote a
7 letter that said, no, all we regulate are the two things I
8 said and it was surprising to some people. I think people
9 had forgotten what--it had been so long, people had forgotten
10 what the law said.

11 DOE has to select shipping routes and coordinate
12 with states and tribes. There's a lot of coordination. You
13 had that map that was up there at the very beginning that
14 sort of tells you how complicated that's going to be. They
15 have to provide security. As I said, to what regulations,
16 we're not sure. And, emergency response training and
17 assistance and funding through the states and tribes pursuant
18 to Section 180(C) of the Act. Again, 180(C) says you have to
19 provide funding and training. It doesn't say whose
20 regulations or whose procedures you have to use.

21 If I can have the next slide, please? It's a lot
22 of responsibilities on the purchaser side. Provide notice
23 for DOE for location of the used fuel and required mode of
24 transportation and waste. Mode is a big issue. You all may
25 remember from the debates on the Yucca Mountain resolution

1 how much interest there was around the Great Lake regions as
2 to whether there was going to be barging or not. I take no
3 position on barging mainly because I think it's as safe as
4 rail and safe as truck and anything else. So, you know,
5 really, to me, it's an efficiency question, but there's a lot
6 of people who feel very strongly about that. I pointed out
7 yesterday and I'll say it again. When the utilities notify
8 DOE and say here's the material that we want you to move off
9 the site by when, there's a little box you check off that
10 says whether you want it moved by truck, rail, or barge.
11 Right now, the utilities have the right to say how they want
12 that moved. Some utilities do not have heavy loading
13 facilities available other than barging, particularly those
14 plants, you know, that don't have a rail spur coming in may
15 have barging, whatever.

16 Again, the utilities and DOE need to be talking
17 about these subjects. And, of course, utilities can swap
18 allocations and I went back to look. I said five years
19 yesterday. I went back to look at the contract. I think
20 it's a year notice on that. Now that really will confuse the
21 system in terms of what DOE is designing for especially in
22 the early years. Again, they have to start talking and
23 working these things out. Avoid scheduled outages when they
24 do the shipping and DOE has--and they have to select the fuel
25 to be loaded and shipped. Those are the things that the

1 utilities have to do.

2 If I could have the next slide? These other
3 considerations, when we were putting this discussion together
4 last week, John and I had a very long talk about how we were
5 going to lay this out in terms of getting the points across
6 and we decided that the DOE and purchaser responsibilities
7 were the hard things that were in the contract that we
8 understood them to be, but these are other things that we
9 think ought to be looked at and perhaps done. We think DOE
10 should agree to comply with all the other applicable NRC and
11 DOT transport regulations. I think that just makes sense
12 because those are regulations that--remember, this is
13 something that the commercial sector is going to carry out.
14 By law, the utilities have to interface with it and a lot of
15 stakeholders along the transport route. I think the NRC and
16 the DOT transportation regulations are probably the things
17 that the folks I just mentioned are most familiar with and
18 can use the best. They are an integrated set of rules and
19 regulations that provide for the utmost safety of these
20 shipments. The legal question that comes to mind is
21 enforcement. If you're going to follow someone's rule, but
22 you're not regulated by that entity, I don't know how
23 enforcement occurs, and that's something that has to be
24 thought about.

25 Used fuel transportation benefit greatly from

1 advanced coordination and planning. Well, that's sort of a
2 motherhood statement, but it's a lot harder to do than you
3 might think and I was asked yesterday a little bit about
4 utilities working with the localities on that. Now, let me
5 give a firmer answer because I went back and I've thought
6 about it overnight when Dr. Abkowitz asked me about that.
7 Back about 10 years ago when DOE was working on this thing
8 called the regional contract servicing contractor and we
9 commented formally on all those versions of that draft RFP,
10 we did tell DOE time and again when you work with the
11 utilities don't just look at the physical part of the plan.
12 Take advantage of what the utilities have already built in
13 into their locality in terms of their relationships with the
14 community. Don't just roll in there and sort of take over
15 the job, so to speak. And, I think that's the way DOE will
16 do it, although in that strategy that they published, that
17 kind of detail wasn't in there. So, we were a little more
18 firm as to how that should be done.

19 And, that the utility site review for compatibility
20 with technical licensing requirements of the reactor plant
21 site, that's extremely important. That what the DOE shows up
22 with in terms of a cask, in terms of training, in terms of
23 procedures has to be compatible with what goes on at that
24 facility and it's not cookie cutter. Not every facility is
25 the same as every other facility. There are unique

1 circumstances. Everyone follows the same regulations, but
2 how they do it might be different. So, the DOE has to do a
3 tremendous amount of work individually. Some of the earlier
4 plans that DOE had published a number of years ago seemed to
5 indicate that there were going to be these interactions with
6 individual utilities to get that stuff sorted out.

7 Next one, please? Needs to assure transportation
8 program will support 2010 operations. They announced the
9 decision for Nevada and those are going to be rail corridors.
10 So, they need to confirm their preference for mostly rail
11 out of the EIS and we understand they announced they're
12 working on the record of decision. One would imagine that
13 that's what they're going to do. That's what they're going
14 to say because of what they did in Nevada. They need to get
15 on with system procurement. On that, maybe Gary will lay
16 some of that--I don't know, maybe Gary will say something
17 about that later.

18 We think that there's a need to use dedicated
19 trains. Now, before Bob Fronczak jumps up and shoots me for
20 saying that, the issue of dedicated trains for us goes like
21 this. It's that our experience is when shipping these
22 materials that you have a far greater chance of controlling
23 the situation, providing emergency response, etcetera, if you
24 have a train that's moving only this material. And, Bob is
25 the rail expert. He can talk about what that does in terms

1 of complicating the rail system or not which I think is
2 important to keep in mind. And, I know that that's not
3 always universally accepted by people who do this in
4 government, but we firmly believe our experience is the
5 dedicated trains is the way to go. And, I think that we're
6 hoping DOE will agree with that. They haven't said one way
7 or the other.

8 The private fuel storage facility which is
9 scheduled to be constructed in Toole County in Utah if it
10 ever gets through NRC licensing--and that proceeding is going
11 far longer than anyone expected--has done a tremendous amount
12 of work in terms of rail planning and shipping. They're
13 going to build a rail spur about 25 miles from the main line
14 down to the site. They developed their own rail car in
15 coordination with the Association of American Railroads,
16 etcetera. And, the DOE should take advantage of all of that.
17 DOE should take advantage of any number of aspects of that
18 including transportation development, transportation
19 planning. They also should pay serious attention to that
20 licensing proceeding for the repository itself. That's not
21 exactly on point for this discussion, but that's an important
22 learning experience for everyone involved. And then, they
23 also have their own shipping campaigns that we know that
24 they're looking at and that's the WIPP and the Foreign
25 Research Fuel.

1 If I could have the next slide, please? The
2 strategic plan that came out issued in November, it was
3 really an institutional plan for stakeholder interactions of
4 which the utilities are one. Utilizing regional groups, we
5 think, is a positive step. Get along with the states and
6 tribes is a very positive step in terms of organizing how
7 you're going to approach the problem so you're not in a some
8 sort of free for all. I mean, there needs to be some
9 hierarchal approach to this problem. We'd like a lot more
10 detail. I think everybody would. The detail we need in
11 answering the questions at the top of the meeting here not
12 one by one, but just to say what we need to know is when,
13 how, procedures, what training we have to provide our people,
14 things along those lines. We're ready to go otherwise. I
15 mean, we're comfortable and confident that this can be done
16 right. We realize there are others that are not that DOE
17 needs to do a lot of work with. But, our needs are more on
18 the procedural and technical side, all the things I've been
19 talking about. Talking to the utilities about how they'll
20 interface, making sure they're not doing anything that cuts
21 across the facility license, stuff like that. We can update
22 plant information whenever we're asked. I mentioned
23 yesterday those two updates that they're going to be doing on
24 the facility capability assessment and the near-site
25 transportation infrastructure.

1 Can I have the next slide, please? We think that
2 the naming of Caliente was a good thing. It was a good thing
3 from a lot of perspectives. It was a good thing from our
4 perspective because you're getting this program moving
5 forward. It's a good thing from DOE's perspective. You
6 know, it's pretty obvious there are people in Nevada who
7 don't think it's a good thing, but we think it's--that's our
8 statement. We think it's good news.

9 It's very encouraging because they need to get on
10 with allowing rail construction after license issuance. I
11 found that was really very interesting, that discussion
12 yesterday, about what really amounted to how much
13 preconstruction can they do? It was better than some of the
14 comments. This year's appropriation bill has a paragraph in
15 the House Report that tells DOE they need to do
16 preconstruction planing and preconstruction to get on with
17 it. It's in the House Report. It was not discussed in the
18 Senate Report and it was not countermanded in the Conference
19 Report. That means that report language stands. DOE needs
20 to figure out how they're going to respond to it. DOE is
21 responding to other language in that report. The whole
22 transportation decision is based on language in that report
23 that survived the--it didn't survive in the statute, but it
24 survived in the report language and DOE is moving forward.
25 So, I don't see where that would not be a problem and they

1 need to explore that and they need to work with NRC as to how
2 they're going to do that. So, that is encouraging.

3 We think they need to publish the ROD as quickly as
4 possible which they said they would. Hopefully, they'll get
5 that out fairly soon. And, that they need to get on with the
6 EIS for the rail alignment for the Caliente route, the
7 specific rail alignment. They have to have their scoping
8 hearings. That's a multi-year process.

9 And, Caliente corridor is consistent with our
10 transport policy which I believe we provided at the last
11 meeting where we talked transportation. If you don't have
12 it, we can provide that to the Board. But, it's consistent
13 because it stays away from downtown Las Vegas and it's a rail
14 system. Those are the two things that make it consistent
15 with our views.

16 If I could have the last slide, please? So, we
17 need to have a transportation system that will support waste
18 acceptance by 2010. We think the plan and the corridor
19 announcement are good things. DOE can benefit from the
20 private fuel experience; not just PFS, but all the private
21 experience we've had over the last 30 or 40 years. They need
22 to get involved. It's extensive planning and coordination.
23 Use of comprehensive and uniform regulations and then, we
24 believe, that transport will be safe and secure if all those
25 things are done.

1 Well, thanks very much. That's what we came to
2 say.

3 ABKOWITZ: Thank you, Steve. Board members with
4 questions? Dan?

5 BULLEN: Bullen, Board. Steve, I want to thank you
6 personally for coming back since I obviously had questions
7 that weren't answered yesterday or I didn't ask them and to
8 take the microphone again and to field them.

9 I actually had one that is a followup from
10 yesterday that you touched on today and that deals with the
11 fact that the utility site review is going to be updated,
12 basically, the infrastructure report that's necessary to get
13 to and from the working facilities that need to ship waste.
14 The question that I have, since title to the fuel is
15 transferred at the gate which is what we talked about today,
16 who is responsible for the infrastructure upgrade to the gate
17 and then obviously the utility would be responsible inside
18 the gate. Is it going to be DOE's responsibility to take a
19 look at the bridges and the infrastructure for the shorter
20 long spurs to individual sites?

21 KRAFT: Well, I guess, the general answer to that
22 question is yes, but if you're going to contract with the
23 railroad and they tell you they can get to a site and move a
24 load 125 ton, then--I mean, maybe it's a better question for
25 Bob--then the railroad needs to go make sure that a bridge is

1 going to be okay. And, if it's not okay, to go back to the
2 shipper and say we can't do that until we fix the bridge and
3 here's what's that's going to--I mean, Bob, you may want to
4 comment on that, but I would imagine that there's a service
5 provider in between there somewhere that needs to get
6 involved in that.

7 BULLEN: Bullen, Board. But, maybe the important point
8 I wanted to ask was who pays?

9 KRAFT: Oh, it's out of the Waste Fund.

10 BULLEN: Okay. So, DOE would be responsible for the--

11 KRAFT: Oh, yeah. I don't--I mean, I said that rather--
12 I don't see how that's not. I mean, but I guess that goes to
13 the contract that someone is going to have with whoever is
14 driving that train as to how that's going to work.

15 BULLEN: Okay.

16 KRAFT: But, having said that, the Nuclear Waste Fund is
17 not going to be responsible for upgrading every bridge and
18 every overpass in the country. There are certain
19 infrastructure responsibilities that the general government
20 has as its responsibility. But, if you asked immediately
21 outside the plant--because what I thought you were getting
22 at, Dan, was immediately outside the plant--there could be
23 what was once a dedicated rail spur that came down from the
24 main line to the plant for the purposes of hauling in the
25 heavy gear, the steam generators, the switch gear, whatever,

1 for that plant, that had since been abandoned and may have
2 decayed. That spur may be something that needs to be worked
3 on, but I would guess in the rail network itself--I mean, the
4 railroads are responsible for maintaining their networks.

5 BULLEN: Bullen. I understand that. The second
6 question I have basically deals with something that you also
7 said yesterday and that is you mentioned the utilities and
8 DOE really should be talking and I couldn't agree more. The
9 problem is that elephant in the room of the pending
10 litigation. Is there a mechanism that you see whereby they
11 could actually undertake these discussions and not be
12 influenced by that litigation or--

13 KRAFT: Well, yes, there is a mechanism that we've
14 thought of no one has seen fit to bite though and that's to
15 use a third party. NEI is not suing DOE over anything. You
16 know, we're kind of a neutral third party that holds the
17 interests of the industry. It's entirely possible that there
18 is a group of individuals, a set of consultants, you know, an
19 organization--I used NEI as an example, an organization--who
20 could do that and kind of insulate that. We've mentioned it
21 to DOE. There's been--you know, I think that's a very
22 complicated legal question for them. John Arthur mentioned
23 yesterday that he had a team of people come in and look at
24 their designs. You know, maybe that's a way that can be
25 done.

1 The real question comes down to--I mean, I don't
2 mean to take up all our time on it, but I want to make sure
3 we understand the question. Okay? John Arthur said
4 yesterday that--he talked about phasing the facilities. And,
5 Paul Harrington showed Phase 1 and Phase 2. If you looked at
6 what he had in Phase 1, I think it's pretty clear that's a
7 very ambitious construction program to have that first dry
8 fuel transfer building built during Phase 1. And, I took
9 from what John said that maybe there will be a Phase 1A.
10 Maybe there will be kind of an early thing kind of
11 constructed. Maybe it will be the cask. Let's just assume
12 it's the cask handling facility. Let's just make that
13 assumption. Well, that suggests that utilities have to be
14 willing to do certain kinds of packaging on their sites.
15 Okay? I know from talking to the utility people no one at
16 DOE has asked whether or not you are willing for the sake of
17 moving fuel in 2010 or beginning of 2010, I should say, that
18 you'd be willing to handle these kinds of casks of these
19 dimensions with this amount of fuel in it to move. That's
20 not occurred. And, that's the kind of discussion that I'm
21 talking about. And, you know, John Arthur is doing a great
22 job and I think he's trying his hardest to discern what that
23 is, but these lawsuits do--I'm sorry, they just do simply get
24 in the way. And, I will have to stop talking about it
25 because I will be executed by our General Council if I go any

1 further with it.

2 BULLEN: Thank you, Steve.

3 ABKOWITZ: Priscilla?

4 NELSON: Nelson, Board. I'm trying to get back to the
5 questions about key concerns that you would have as a
6 stakeholder involved in this overall process. What becomes
7 fairly clear is that this is 2004 and between 2004 and 2010
8 there's an awful lot apparently to be accomplished. Are you
9 tracking this process enough to know, for example, what you
10 don't know what your key concerns are early, a choke point in
11 the schedule, more or less, and by which time if something is
12 not kicked, the schedule is really in question?

13 KRAFT: Immediately following the approval by Congress
14 of the Yucca Mountain site, we prepared our own--you know, if
15 we were DOE, what would we do in transportation and it was
16 just, you know, a page or two of words, but the key point was
17 a Gant chart of steps that we would go through. And, we
18 offered that to DOE and said here's some ideas what you need
19 to do next. And, we have then revised that once. It's all
20 very formal. We revised that once to reflect that they were
21 not moving very quickly. And, then the question that we
22 tried to get at is, okay, what things could you do early
23 versus later given some of the political realities that seem
24 to be applying. From doing that, we've not identified any
25 particular choke point that we thought we were going to hit

1 between now and 2010 in the sense of if they don't get X done
2 by X date, they're not going to get forward except that it's
3 pretty obvious that they've got to get that rail line built
4 starting at a certain point. It takes, you know, so much--
5 Bob can tell you how much it's going to take to build that
6 railroad. That's the one issue that we see and it's not
7 whether the railroad is built or not, it's whether if you're
8 not going to get the road done in time what you work around.
9 Those things have yet to be identified. Now, I can't
10 exactly tell you that they have to be done by a year certain
11 yet. We haven't done that kind of study. But, in light of
12 where DOE is now that they've issued some of these decisions,
13 we're re-looking at that and we may identify something. But,
14 to date, we really haven't come up with some particular, you
15 know, if these things don't happen by this date, it's too
16 overwhelming to get to 2010. We still think they can get
17 there.

18 NELSON: Nelson, Board. Well, in followup, I was struck
19 by your bringing up the language that relates to
20 preconstruction or pre-licensing activities. And, it seems
21 as though what you were saying was that there are some things
22 that should be done on that basis that must be done perhaps
23 on that basis.

24 KRAFT: Thanks for asking the question. Let me clarify.
25 What I thought the preconstruction language was going after

1 was not the building of the specific surface facilities for
2 waste, but there's a lot of preconstruction that has to take
3 place. They've got to get heavier duty power lines in to
4 support construction, not for operations. They have to get a
5 road in to support the heavier equipment that needs to come
6 in. I mean, Paul described clearing the pad and doing
7 certain backfill and I think that there's a bunch of
8 preliminary work that we call preconstruction that has to be
9 done before you start the actual construction of building the
10 plant. And, when I read that language, I thought that's what
11 they were getting at, that Congress had heard somehow from
12 DOE or someone that there was some need for that preliminary
13 construction. The reason I think you can't get to the
14 "actual" construction is the safety grade aspects of some of
15 that. Until you have that construction authorization from
16 NRC, you are on particularly shaky ground building anything
17 that has to be--you know, you may think it's not a Q grade or
18 safety grade, important safety system, and you find that
19 you're wrong in the license. And so, that becomes important.
20 So, I actually thought it meant the preliminary stuff, the
21 heavier duty power lines and those sort of things.

22 ABKOWITZ: Ron?

23 LATANISION: Latanision, Board. You'd suggested that
24 DOE should incorporate some benefits from the PFS planning
25 and experience. Could you elaborate a bit on that? What

1 kinds of things do you have?

2 KRAFT: Well, PFS learned a great deal about, for
3 example, very large dynamic loads on trains. PFS spent a lot
4 of time with AAR, but Bob told the story from their side when
5 he speaks, as to what it was that would cause problems in
6 rail transport handling heavy loads and what leads to
7 derailments, you know, brake problems, control problems,
8 dynamic loads in terms of how the car is actually designed,
9 things like that. And so, PFS's contractors working with AAR
10 and through the facility that they have in Colorado where
11 they do a lot of the dynamic testing, they designed a car
12 that they think and AAR believes is going to help remove some
13 of those problems. And, what it was really aimed at is that
14 there was a policy that AAR had on transporting used fuel
15 that required no more than 30 miles an hour and standing
16 passes and--I don't know what the right terminology is--but
17 you had to stop if another train came by or passed you which
18 the way our rail network seems to be operating these days is
19 that we haven't built any main line rail of any consideration
20 for a very long time. And, again, I keep referring to Bob
21 because he's the expert. You know, they have a derailment in
22 Kansas City and trains stop in Florida. So, that's the kind
23 of thing we are hoping to avoid by developing this additional
24 rail car technology. And so, there's braking technology and
25 whatever. So, that's one part of it.

1 The other part of it is because they're putting in
2 that rail line and had to work very closely with the Federal
3 Rail Administration and local authorities on that, there's a
4 big learning experience that PFS went through they could help
5 DOE with.

6 ABKOWITZ: Dave Diodato?

7 DIODATO: Yeah, Diodato, Staff. Thanks for the
8 presentation. I noticed on your Slide 8 that you had a
9 phrase there. You said one of the things that was important
10 was the institutional plan for stakeholder interactions.
11 Now, what I'm interested in first would be who you view as
12 stakeholders in this process? What's your list of
13 stakeholders?

14 KRAFT: Well, what I was saying here is that the
15 strategic plan is an institutional plan. That's what it is.

16 DIODATO: Right.

17 KRAFT: It's not a strategic plan that tells you all the
18 things you need to know as a strategic plan for moving.

19 DIODATO: That's not my question. My question is who is
20 your list of stakeholders?

21 KRAFT: Well, I think in this instance we thought of the
22 stakeholders as the regional groups, the states, the tribes.
23 The industry and utilities are stakeholders to be sure, but
24 we didn't mean that. For purpose of the discussion, we
25 separated the industry from that group because I think the

1 interactions and information needs that the regional groups,
2 the states, the tribes, localities, the local sheriff's
3 departments need is different than the information needs that
4 we have. That's how we were separating.

5 DIODATO: Okay. Let me be more specific. Do you view
6 citizens as stakeholders?

7 KRAFT: Individual citizens?

8 DIODATO: Yes, individuals?

9 KRAFT: Absolutely. But, individual citizens seem to
10 rely on their elected and appointed officials in their
11 localities and states to--

12 DIODATO: Well, actually, we've heard from the public
13 that the citizens don't view themselves as stakeholders, in
14 fact, in this process. It's just for your information. You
15 wouldn't necessarily view all citizens as willing
16 stakeholders as a part of the process. You talked about--

17 KRAFT: Well, wait, you added another word, "willing"
18 stakeholder. What's that?

19 DIODATO: Well, as a self-identified stakeholder, let's
20 say.

21 KRAFT: Oh, okay.

22 DIODATO: But, you talked about John Vincent's
23 experience and you valued--this was what was really a
24 substantial community outreach effort, it sounded like to me.

25 KRAFT: Yeah.

1 DIODATO: So, what I'm wondering is how is that level of
2 effort consistent with the pre-selection of this rail route?
3 I mean, how much community outreach have you seen the
4 Department doing? I mean, is it a consistency or an
5 inconsistency--

6 KRAFT: No, I think it's consistent. I think DOE had--
7 they identified those rail routes a long, long time ago.
8 They had many interactions, both formal and informal with
9 groups from in and around Nevada, with those counties;
10 Lincoln County, City of Caliente self-identified a long time
11 ago in their interest. In fact, the City of Caliente is said
12 if you're not going to get that rail line built on time, we'd
13 be happy to host an inter-modal facility. Nye County, they
14 just got a grant and I think they're ready to issue a report
15 on their views on rail transportation. During the EIS, I
16 don't know how many hearings they had. I mean, short of
17 going door-to-door and interviewing people, I think they've
18 done about as much as you can expect them to do given the
19 size of the problem here.

20 DIODATO: So, from your perspective, there's been
21 community buy in of the--

22 KRAFT: Oh, yeah--no, don't put words in my mouth. I
23 didn't say community buy in. You asked me about
24 interactions.

25 DIODATO: All right.

1 KRAFT: And, I described what I thought with the
2 interactions. No, the community buy in is another story and
3 you're going to have some representatives of those
4 communities here this afternoon. Ask them whether they buy
5 in, don't ask me.

6 DIODATO: Thank you.

7 KRAFT: But, I will tell you that what John Vincent did
8 in that Oyster Creek, that was not the first time that was
9 done. A very, very long time ago, Duke Power Company was
10 considering transshipment from Oconee Plant to McGuire Plant
11 where they had more storage capability. They never did that
12 shipment. Dry cask storage was not available as technology
13 back then, and when it became available, that's what they did
14 instead. And, the people that did all that planning, they
15 literally drove all the routes and met and they stopped at
16 every firehouse, they stopped at every sheriff's department
17 and talked. you know, what do you need to know? You know,
18 here's our information. So, the utilities have done that.
19 Now, you know, you're talking about a nationwide network.
20 You know, that's another step in the scale and I think that's
21 where I said that given that scope and you're starting with
22 the regional groups or the states and on down, I think is the
23 right way to do that.

24 DIODATO: Thank you.

25 ABKOWITZ: Okay. We have time for just two more

1 questions, Bob Luna and then Dave Duquette.

2 LUNA: Steve, on your Slide 3, you talk about how the
3 fuel is going to be shipped and how it's going to be
4 selected. It seems like there's a couple of different
5 interpretations here. One is--and I heard you say yesterday
6 --is the oldest fuel first and then your third point seems to
7 suggest that oldest fuel is not necessarily the case. They
8 can ship anything that they want. And then, I've heard some
9 other statements yesterday that suggested that you would
10 expect to see negotiations between DOE and the utilities on
11 what was actually going to be shipped. Which one of these is
12 correct and/or are they all correct and we're going to select
13 from them when the time comes?

14 KRAFT: Well, they're all correct, Bob, but let me just
15 work through it again. Oldest fuel first, globally, is the
16 way the shipping allocations are determined in the annual
17 priority ranking which is a document DOE issued a long time
18 ago. That creates in the utility and the purchaser a right
19 to a certain amount of fuel in a certain year. That's all it
20 does. That utility has discretion either shipping those
21 elements that created that right, other elements it owns, or
22 they can sell that shipping right to some other utility who
23 can ship whatever elements they please provided that they
24 meet the requirements of the contract, a minimum of five year
25 cold fuel can go into cans, etcetera, etcetera. Okay?

1 That's that. That, I think, is two of the things you asked
2 me about, the allocation and DOE--and you can select.

3 The discussions, the negotiations that I talked
4 about was aimed at the very, very first step of the program
5 in that--let's call it for sake of argument the Phase 1A.
6 Get the program operating in 2010 before you have the full
7 blown facility constructed where you're going to be phasing
8 in facilities. And, what you will have to do is talk to the
9 utilities about, okay, you've got this allocation and you've
10 got the right to give us any fuel you want, but if--I'm now
11 thinking like DOE--if you want us, DOE, to move your fuel and
12 your allocation, we can only do that if you give us this
13 characteristic fuel. Now, what's it going to take to do
14 that? What consideration do you want to do that? And,
15 that's how those three things all fit together.

16 LUNA: Thank you.

17 ABKOWITZ: All right. Dave?

18 DUQUETTE: Duquette, Board. I know that Mark wants to
19 stay on schedule and I'm a little late with this, but also
20 someone in the audience apparently owes us all a drink. Just
21 briefly, I know you prefer rail transfer. I'm going to be
22 naive and indicate that I suspect that some of the plants
23 don't have spurs in them at the present time, some of the
24 ones in the east I can think of, in particular. What
25 fraction of the used fuel do you think will have to be

1 transported by road or by barge or by something other than
2 rail?

3 KRAFT: That's dealt with in the EIS. The mostly rail
4 scenario that we support involves a certain percentage of
5 truck shipments at 20%, something like that. It's not only
6 rail. It's mostly rail.

7 DUQUETTE: And, that would be transported all the way to
8 the surface facility? It would not be transferred in route
9 to rail and then moved on?

10 KRAFT: It could very well do that, go all the way.
11 But, those facilities do not have the heavy rail capability
12 coming into their plant. Maybe that's 14 or 19 plants. If
13 you look at the rail maps that are in the EIS, they're not
14 terribly far from a rail head. So, they could perhaps load a
15 heavier cask and haul it over to that rail head, but that
16 means they have to have the ability in the plant for the
17 heavy cask because a lot of those older plants that had no
18 rail connection to start with didn't have the heavy duty
19 crane either. So, there has to maybe either be a crane
20 upgrade or they have to ship smaller casks. In terms of how
21 barging might work, well, you know, I'm no geographer, but I
22 don't think you're going to barge into Nevada. Well, now,
23 wait, there is a contractor out there that's got a plan, but
24 I don't know that it's going to work. But, facetiousness
25 aside, those facilities that have the barging capability

1 might want to barge off the site to where there's a rail
2 head. When mildly spent fuel, 5% burned fuel, got taken out
3 of the (inaudible) facility and went to Limrick Plant in
4 Pennsylvania, they couldn't transport by rail or truck
5 through New York City. New York City has a got a ban that's
6 never been resolved one way or another. And so, to avoid the
7 fight, they barged down along the Delaware River somewhere
8 and then trucked in the rest of the way. It was a very
9 successful transport. So, we've had those experiences. And,
10 there are people who talk about barging, you know, east coast
11 to somewhere on the west coast and then trucking in. There's
12 lots of plans like that that are kicking around. I don't
13 know what DOE is going to want to do.

14 DUQUETTE: Duquette, Board. Finally, I have some
15 experience with the rail system in the United States and the
16 infrastructure is in pretty bad shape at the present time.
17 Do you think the Federal government should step up to the
18 plate and improve the infrastructure so that we can ship
19 fuel?

20 KRAFT: Well, I said before the Nuclear Waste Fund is
21 not intended to be sued for improving the main line rail
22 system. I think that the railroads have that obligation. If
23 they're going to warrant that they can move this fuel in a
24 safe secure situation, they've got to look at their own
25 infrastructure and do what they have to do. Now, whether the

1 railroads want to do some deal with DOE in some way, you
2 know, that's subject to contract. You know, more power to
3 them. Ask the question of Bob about that, but we maintain
4 our facilities in a safe and secure manner every day and we
5 can handle these materials and we expect other industries
6 that we work with to do the same.

7 ABKOWITZ: Okay. Thank you, Steve.

8 KRAFT: Okay, thank you.

9 ABKOWITZ: Well, I think that Steve got us off to an
10 excellent start in terms of focusing on the objectives of the
11 panel.

12 And, I'd like to continue in that vein with these
13 preparation of waste shipments not so much now from an entire
14 industry perspective, but to hear more directly from a
15 particular utility. In this particular case, we've invited
16 Steve Edwards from Progress Energy to present that
17 perspective. Steve is supervisor of spent fuel management
18 for Progress Energy. He's responsible for all aspects of
19 spent nuclear fuel within the company including strategic
20 planning for interim spent fuel storage, on-site spent fuel
21 storage projects, and the spent fuel shipping program which
22 regularly transports spent fuel from the Brunswick and
23 Robinson Plants to the Harris Plant near New Hill, North
24 Carolina. The spent nuclear fuel shipping program which Mr.
25 Edwards manages has been in place since 1989 and currently

1 transports over 300 spent nuclear fuel assemblies each year.
2 As I mentioned before, Mr. Edwards will continue to give the
3 utility perspective on transportation planning.

4 Steve?

5 EDWARDS: Thank you. As has been alluded to a couple of
6 times, I think there is experience already, both domestically
7 and worldwide for transportation of spent nuclear fuel which
8 will have direct implications in our planning for the Yucca
9 Mountain site. I think we can take advantage of the
10 experiences and the lessons learned that we have already
11 gained to make that a much more successful effort.

12 So, what I wanted to do today was review with you
13 kind of why we ship spent nuclear fuel. As we mentioned, we
14 have shipped pretty much continuously since 1989, but we
15 actually first started shipping in 1977. We have maintained
16 an active shipping program over the years. We typically do
17 about 12 to 15 shipments per year. We have about 16, I
18 think, planned for this year as is currently laid out. So, I
19 wanted to go through with you some of what we do in terms of
20 insuring the safety, security of those shipments, and what we
21 have found is an effective way to implement that shipping
22 program.

23 First slide, please? So, what I wanted to go
24 through is some of our transportation history with you which
25 includes why we are in the shipping business and why we

1 continue to be in the shipping business and will be in the
2 future. Talk a bit specifically about some of the things we
3 do to insure the security of the spent fuel shipments as we
4 talk about what is important for implementing a shipping
5 program. I think I wanted to go through some of the things
6 that we have found are very important. There will need to be
7 considerations put in place such as the organization. It
8 does require a pretty significant organizational structure in
9 order to carry it out. It's much more than just a couple of
10 escorts. It may be identified in 10 CFR 7337. And, the
11 people that are involved with some of the skills and training
12 that are required in that area. The procedures that have to
13 be developed for every step along the way, both in the
14 loading, the unloading, and the transportation. The
15 coordination and notification working with all the various
16 states, counties, cities, organizations, local law
17 enforcement. Emergency planning between the shippers, the
18 carriers, etcetera. What we have gotten into there, I know
19 that one of the comments yesterday afternoon about the--the
20 lady brought up about the radio system they had gotten in
21 their county. They had a radio system, but they couldn't
22 communicate with some of the others. I mean, that's a
23 legitimate logistical issue that we have faced, as well, in
24 terms of you've got all these states, counties, communities,
25 the shippers, the carriers and it's important you're

1 maintaining continuous communication throughout the shipment.
2 And, things like compatibility of radio frequencies and such
3 is a legitimate logistical issue that has to be addressed.
4 And, finally, some of the emergency response. Even though we
5 take great pains to insure that every shipment is planned
6 safely and is executed safely, it's important that you have
7 in place a plan for providing emergency response in the
8 unlikely event that anything does occur.

9 Next slide, please? For those of you that may not
10 be aware, Progress Energy is a public utility in the
11 southeastern United States. We have service territory in
12 North Carolina, South Carolina, and Florida. We have five
13 operating nuclear units at four different sites. We
14 transport, as I mentioned, from Robinson Plant which is
15 located in South Carolina and our Brunswick Plant located in
16 southeastern North Carolina to our Harris Plant which is
17 located in central North Carolina. Our rail routes run about
18 200 miles or so.

19 Next slide, please? So, why are we in the shipping
20 business? The main reason is that it's necessary to maintain
21 the operating reserve at all of our nuclear units. The
22 Robinson and Brunswick Plants are both older design and
23 constructed units. Our Robinson Plant went into commercial
24 operation in 1971 and the Brunswick Plants went into
25 operation in 1974 and '76, respectively. As such, because of

1 the early vintage of the designs, they have very small spent
2 fuel pools. They were designed under the assumption that the
3 fuel would be reprocessed and would really only be staying at
4 the plant long enough for it to cool down and to be shipped
5 off site. So, we do not have adequate space at the sites to
6 store 40 years or more worth of spent nuclear fuel.

7 So, that's the reason we initially got into the
8 shipping business. We own a fleet of GE Model IF300 shipping
9 casks. We have four of them, as well as all the rail cars,
10 cabooses, and ancillary equipment necessary to maintain that.
11 So, we ship to maintain our inventories at the Brunswick and
12 Robinson Plants. We are able to do that because the Harris
13 Plant, being a somewhat newer vintage plant, went into
14 commercial operation in 1987, was originally designed as a
15 four reactor site, had an integral fuel handling building for
16 all four units. So, we have four pools even though we only
17 have one reactor. So, we have the capacity to hold
18 additional fuel beyond what the Harris Plant needed. And,
19 I'll say because we are shipping to reduce inventories,
20 maintaining our operational focus, that's one of the reasons
21 that from our perspective whenever we do begin shipping,
22 shipping directly out of the pool makes the most sense in
23 terms of you want to keep the inventories down so you can
24 continue to operate and off-load. So, the fuel that's in the
25 pool is the fuel that you need to do that. So, from our

1 perspective, shipping directly out of the pools would be the
2 top priority.

3 Next slide, please? Over the years that we've been
4 shipping, we have conducted a total of 173 shipments which
5 has covered about 30,000 rail miles and we have transported
6 approximately 4,000 spent fuel shipments during that time.

7 Next slide? During this time, we feel we have an
8 excellent operational record. We've had no radiological
9 events. We've had no spills, releases, and in fact, we do
10 monitor the radiation exposure of all of the personnel
11 involved in the plant. We've never even had anyone on the
12 shipping train even pick up any measured radiation dose, in
13 addition to no dose to the public. And, we have
14 significantly increased our security in response to the
15 lessons that have been learned after September 11th.

16 Next slide, please? In order to have a successful
17 spent fuel shipping program, I think there are certain things
18 that are critical as the base of that and I wholeheartedly
19 agree with a couple of the comments that some of the Board
20 members and the staff made yesterday afternoon about making
21 safety a primary part of your objectives. The way we
22 perceive it, nuclear safety is the utmost top priority at all
23 times. Even though we routinely ship spent fuel, shipping of
24 spent fuel is never a routine activity. From our
25 perspective, you have to have the same nuclear safety focus

1 that you have on any reactor operation activity. And so, we
2 view it just as importantly and it receives just the same
3 amount of management attention, organizational focus,
4 financial resources, etcetera, as anything in the reactor
5 operation side. I think that's an important point in order
6 to be successful moving forward.

7 I think also you have to have clearly identified
8 accountabilities. We are the shipper of record. We have a
9 carrier. We use CSX as our carrier, but we also interact
10 with local law enforcement, state organizations, emergency
11 management organizations, communities, etcetera, and
12 everybody has to know exactly what their accountability is at
13 all times. In order to have a successful spent fuel
14 shipment, it's important that it leave on time, that it
15 arrive on time, that you have no unscheduled stops, and that
16 any scheduled stops, over minimal duration. And, in order to
17 accomplish that, absolutely everybody has to know what
18 they're supposed to do and when they're supposed to do it,
19 they have to have the resources to do it, and they have to be
20 there on station to carry it out. So, I think everybody has
21 to know their role in it.

22 In addition, I think something that's important is
23 to having a continuous improvement in culture. We've never
24 had any two shipments where we've done them exactly the same
25 even though we've done 173 shipments. The way we view it is

1 every shipment there is something that occurs that we can do
2 better the next time. So, for that, we have multiple pre-
3 shipment briefings where we involve all of the people who are
4 going to be involved directly in the shipment. We'll get
5 together days in advance, the morning of, etcetera, and we
6 also have post-shipment critique and lessons learned where we
7 go through the entire route and what worked and didn't work
8 and what we can change for the next shipment. So that you're
9 always looking for ways that you can make the next shipment
10 more efficient and safer.

11 Next slide, please? We do use a dedicated train
12 for our shipments. Slide #8 which appears not to be on the
13 overhead here does talk about security. So, I wanted to
14 touch base on that. You should have it in the hard copy. We
15 do use dedicated rail shipments and I have here our typical
16 lineup. As Steve alluded to earlier, the industry is pushing
17 for dedicated shipments. We definitely use them and favor
18 them. We got into it not because of any safety issues, but
19 it does make the logistics much easier. We have escorts that
20 ride the train. We have people that are involved with the
21 shipment. We want to know what's on the shipment that is
22 going directly from origin to destination. And, from our
23 perspective, a dedicated shipment does that.

24 There are also security aspects of the shipment, as
25 well, that have to be maintained. There's a lot of

1 safeguards information in terms of the time and date of
2 shipment, the specific armory of any escorts, the actual
3 number of armed escorts. We do work pretty closely in North
4 Carolina and South Carolina with the North Carolina State
5 Highway Patrol Department, in South Carolina with the State
6 Law Enforcement Division for providing additional security
7 support. We maintain a certain level of security. They
8 maintain a certain level of security, as well.

9 In addition, we feel from a security standpoint
10 that having a continuous monitoring of the shipment is
11 important. We have a remote satellite monitoring system so
12 that we know at any time not only where the shipment is, but
13 what direction it's headed in, what the speed is, if it slows
14 down when it shouldn't be, if it makes an unnecessary stop,
15 etcetera. So, in addition to maintaining communication with
16 the people on the shipment itself, we do maintain continuous
17 monitoring of the shipment, as well.

18 Next slide, please? And, this is where we use the
19 --in terms of the dedicated train lineup which we think is
20 effective. And, as I say, we own two cabooses which we
21 deploy, in addition to housing any escorts that accompany the
22 shipment, any equipment necessary for emergency response, and
23 other such things.

24 Next slide? The next area I wanted to get into
25 that I think is important is the people that are involved in

1 the shipment have to be highly trained and qualified. For
2 the most part, we have much of the same core team that has
3 been involved in all of our shipments since 1989. We have a
4 fairly extensive training and qualification program that we
5 use for them. We use people at the sites for the loading and
6 unloading operation and some of those same people are also
7 used to accompany the shipment. So that we have people that
8 understand the package, that understand how it works, what's
9 normal, what's not normal, and can accommodate it. So,
10 having people that fully understand what their roles and
11 responsibilities are, as well as what they should expect to
12 see, is an important aspect.

13 Next, please? Next, I want to talk a little bit
14 about the organization. As I mentioned, if you look at the
15 specific CFR requirements, it's going to talk about an escort
16 or two. Don't get lulled into thinking that those are the
17 only people necessary to make a shipment successful. We have
18 a fairly formal organization that we put in place during any
19 shipment and these are folks that are, in addition to their
20 normal roles in the organization, they then take on these
21 roles during a shipment itself. We have a shipment manager
22 who is really responsible for the overall implementation of
23 the shipment. He actually rides in a shadow vehicle
24 accompanying the shipment so he is close to it at all times,
25 can respond to the shipment if there is any duress or any

1 issues that need to be addressed. He stays in constant
2 contact with local law enforcement, with the carrier, with
3 escorts on the train, communicators in a remote facility.
4 So, he maintains an oversight and management of the shipment.

5 We maintain two escorts in the caboose which you
6 see a picture of one of our cabooses, one of this is a
7 radiological expert. He has the equipment with him so that
8 if anything did happen along the route, he would be the first
9 on the site that would manage any radiological event until
10 any external response personnel, as well as--we actually
11 maintain multiple mechanic experts. We maintain one in the
12 caboose and one in the engine up front. They know how to
13 operate the equipment and can respond to any equipment issues
14 that may occur.

15 Next, please? In addition, we maintain
16 communicators at a remote facility. They are the ones that
17 actually make notifications, communicate with state, federal,
18 local officials, stay in contact with the escorts, with the
19 shipment manager, and company personnel. They're at a remote
20 facility. They're also the ones monitoring the GPS system.

21 We have a response coordinator and teams. We
22 actually have multiple teams, one from the shipping and one
23 from the receiving site, that are on standby to proceed to
24 the site if there is any accident along the route. They
25 would be the first one. They would be immediately dispatched

1 to assist any local emergency personnel in the management of
2 the event.

3 And, finally, we maintain a response manager who is
4 responsible for maintaining senior management within the
5 company, corporate communications, monitoring the overall
6 aspects, and communicating outside the shipping organization.

7 Next? Next, an important factor we have found is
8 to have very detailed procedures in place that go through
9 exactly what we do. We have them for loading, unloading, for
10 shipment preparations. So, we have procedures we go through
11 so that all notifications to state and federal organizations
12 are made in a timely manner so that all communications occur,
13 as well as the equipment is prepared. We also have separate
14 procedures we use during the transportation route itself and
15 we have routine and emergency. So, within the procedures, we
16 have all the various scenarios that we would anticipate along
17 the route and exactly what kind of notifications would be
18 made, what responses would be made, etcetera.

19 Next? And, finally, in terms of the coordination,
20 this is something I know you guys have touched on on some of
21 the other presentations. One of the things that we've found
22 was very effective is that prior to establishing the shipping
23 program, we did hold meetings in various towns and counties
24 along the route. We had a communication plan and actually
25 identified who some of the key stakeholders were all along

1 the route which included local elected officials, emergency
2 management personnel. It included newspaper reporters,
3 etcetera. So that whether they bought into it or not, they
4 at least were informed of what was going to happen along the
5 route.

6 We also maintain a regular exercises with our state
7 and county emergency personnel. We did two of these last
8 year. We typically do them on at least an annual basis where
9 we bring in everybody from the communities along the route
10 and do a tabletop exercise so that everybody has a chance to
11 interact, to respond to what's going on.

12 In addition to the ongoing communication, we talk
13 pretty regularly with most--at least, the key organizations
14 that we work with. We maintain an ongoing dialogue for what
15 their needs are, what our needs are, what's coming down the
16 path, etcetera.

17 Next? Along the route, there are certain
18 notifications that are required by regulation. In addition,
19 we work with the local organizations for what they feel
20 comfortable with in terms of knowing. The regulations are
21 going to require notifications for the governor or the
22 governor's designee. In both our cases, in North Carolina,
23 that falls within the North Carolina Highway Patrol, and in
24 South Carolina in the State Law Enforcement Division, of
25 federal to the NRC. And, prior to commencing a shipment,

1 just following shutdown, and periodically during the
2 shipment, we also maintain updates to the state and county
3 personnel.

4 Next? And then, finally, in the area of emergency
5 response, one of the things we find that's important is
6 you've put everything in place you can to insure that you
7 have a safe, smooth trip, and at the same time, you have to
8 be prepared for any event however unlikely that could occur
9 along the route. So, we identified a number of scenarios
10 which we, through events along the way, build on this so we
11 have bomb threats, terrorists, intervenors, derailments, bad
12 weather, changes in Homeland Security threat levels,
13 etcetera, a lot of predetermined scenarios and then exactly
14 what we do if we have a shipment in route when one of these
15 occur. What kind of notifications we make, who responds, who
16 makes decisions, etcetera.

17 Also, as I mentioned, we have the caboose. We
18 insure that we have all the radiological and hazard
19 information readily available so that any personnel
20 responding to an incident in route have all the equipment
21 they need. We also have shadow personnel who are not
22 directly on the train so that if for some reason the train
23 itself--the people on the train itself were to become
24 incapable of responding, we also have people that within a
25 minute or two could be on site. And, we have dedicated and

1 trained response personnel who are on standby any time a
2 shipment is in place in order to respond.

3 And, in summary, I think we have within Progress
4 Energy, as well as within the rest of the utility industry, a
5 significant amount of successful transportation experience
6 which could be directly applied to the planning for the Yucca
7 Mountain transportation and it is a very coordinated effort
8 between the utility, federal, state, local organizations,
9 carriers, etcetera, and is something that is going to require
10 a lot of work between now and then, but it's definitely
11 something that can be successfully accomplished.

12 That concludes my remarks and I'll be glad to take
13 questions.

14 ABKOWITZ: Thank you, Steve. We'll start with Dick
15 Parizek.

16 PARIZEK: Yeah, Parizek, Board. That's a very
17 impressive story and I guess one question is what would it
18 take to ramp this up to a national scale because you've been
19 going in the southeast to the Harris Plant, but could you
20 imagine what it would take to sort of nationalize this? I
21 mean, your company could do it, it sounds like.

22 EDWARDS: You know, clearly, our duration is much
23 shorter than what you have, but I think the components would
24 be the same. So, I think it is something that definitely
25 could be replicated. One of the things we have found is that

1 both the North Carolina and the South Carolina folks
2 coordinate with us very well. We have developed over the
3 years an excellent working relationship both at the state and
4 the local levels with those folks. You know, that's not
5 something that necessarily happens on Day 1. It's something
6 you have to cultivate as you go forward. But, I think
7 there's no reason that this type of process could not be
8 replicated across the nation.

9 PARIZEK: Right. Parizek, Board. What's new since 9-11
10 that may change in terms of, you know, your protocols to the
11 extent that you can answer?

12 EDWARDS: Sure. Well, we have put in some plays, some
13 specific things, to insure our comfort level. In addition,
14 the Nuclear Regulatory Commission has issued certain
15 advisories and interim compensatory measures. I guess, the
16 sum total of those are there is greater armed presence both
17 on the shipment, as well as accompanying the shipment. There
18 is greater security available to the shipment for fairly
19 rapid response. I think there is a more closer monitoring of
20 the shipment status and location. Increased communications.
21 Those are probably kind of in summary. Unfortunately, the
22 specific--I think, citizens would be pleased to hear, at
23 least, in terms of what--in particular, in North Carolina
24 and South Carolina, some of the specific security measures
25 that they have in place for either accompanying a shipment or

1 in direct response. I think it's pretty impressive what they
2 have available and, unfortunately, the safeguards and
3 restrictions prevent specific discussion of those so that any
4 perpetrator wouldn't know exactly how to respond to it.

5 PARIZEK: Parizek, Board. About weather, do you pay
6 attention to weather, tornadoes, hurricanes?

7 EDWARDS: Absolutely. What we do is we schedule our
8 shipments obviously well in advance, but one of the things we
9 do is we formally do it the day before shipment. We actually
10 sit down in a group conference call and what is the weather
11 forecast, what is the national security threat level, you
12 know, what sort of chatter are we hearing from the FBI, from
13 our internal security. So, we do that formally the day
14 before shipment. We also do it the day of a shipment. We
15 again sit down before we release the shipment and say, okay,
16 what is the weather in route, what is the security situation,
17 and we make a conscious--those are two conscious decision
18 points on whether or not a shipment proceeds.

19 PARIZEK: You're saying no two shipments are the same.
20 What sort of surprises or differences have occurred that make
21 you state that?

22 EDWARDS: Well, we'll get into working with the rail
23 system. We typically use main rail routes. So, one of the
24 areas you get into is what is the ideal time to go so that
25 you don't have other interferences? That's one. We've also

1 had some incidents. We had one that actually got some press
2 out here back in March of 2001 where we had a couple of
3 escapees from one of these boot camp road crews which we
4 encountered along the way. So, you know, that got some press
5 from the standpoint of from the negative side of, well, folks
6 said, hey, this proves how easy it is for folks to--could be
7 to attack a shipment. But, we looked at it from the opposite
8 point of we knew exactly who these guys were, we knew they
9 were not armed, we knew exactly where they were. You know,
10 had we chosen to take more evasive action, we could have. It
11 was not necessary in that case. But, what we found from that
12 was not so much the security aspect of it, but the
13 communication aspect of it was an area where we found some
14 improvement opportunities.

15 PARIZEK: Thank you.

16 ABKOWITZ: Okay. I've got Dan Bullen followed by Thure
17 Cerling and then Ron Latanision. I'd like to ask each Board
18 member to keep it to one question, please.

19 BULLEN: Okay. Bullen, Board, just a quick question.
20 First, thank you very much for the presentation. It was very
21 informative and we learned a lot with respect to your success
22 in transporting spent fuel. My question is how do you convey
23 that success or your lessons learned to a group like DOE?
24 What types of communications do you think would be necessary
25 for DOE to learn from your successes?

1 EDWARDS: We had one initial meeting, at least, with
2 some of the Bechtel folks where they came in to discuss with
3 us, at least, what procedures we have in place. We've also
4 talked to the GAO and a couple of other folks, as well. From
5 my perspective, we'd more than happy to maintain a dialogue
6 and meet with them, share with them both our lessons learned,
7 procedures, those type things. So, you know, we're more than
8 happy. We've had some very preliminary discussions to this
9 point, but we'd be more than happy to engage in more detailed
10 dialogue and information sharing.

11 BULLEN: Thank you.

12 ABKOWITZ: Thure?

13 CERLING: Well, I was going to ask a similar question,
14 but I'll go to a different one. Well, what mechanism is now
15 in place for you to share your experiences with the other
16 utilities that might be doing similar sorts of experience and
17 how much communication is there for all of the industry to
18 learn from each other?

19 EDWARDS: We work with NEI, we work with EPRI. You
20 know, we have various meetings that occur throughout the year
21 where we have opportunities to share information. Obviously,
22 within the nuclear plants, we have operating experienced
23 systems, where any time we--which we monitor pretty closely,
24 other utilities monitor pretty closely, so that we can see
25 what someone else has done that maybe worked or didn't work.

1 In addition, we have maintained professional contacts with
2 our counterparts in other utilities. You know, obviously,
3 there could be a more formal process for that, but that's at
4 least the way we do it now.

5 LATANISION: Latanision, Board. I missed the plate of
6 what evolves after a shipment arrives at Harris.

7 EDWARDS: Okay.

8 LATANISION: What's the--

9 EDWARDS: What happens when a shipment arrives, once it
10 gets into the plant protected area, our shipping organization
11 really shuts down and you go into the plant organization.
12 The plant actually takes ownership of it. The way we do it
13 is the shipment begins and the shipment ends when the CSX has
14 connected to the rail car and we've turned over the shipping
15 paperwork and then it ends when we actually take possession.
16 They disconnect their engine and we take possession of any
17 shipping paperwork. At that point, the shipping organization
18 really shuts down because you're within the protected area of
19 the plant within the security and the procedures that exist.
20 You have the emergency plan that exists for the plant and
21 then we go into the--all the notifications for shipment shut
22 down for the various state and federal organizations and
23 local organizations and then we go into--we unload it and put
24 the fuel in the Harris pool and then begin preparing the cask
25 for return shipments to either Robinson or Brunswick.

1 LATANISION: Okay.

2 ABKOWITZ: Thank you, Steve.

3 EDWARDS: Thanks.

4 ABKOWITZ: Well, I think we're off to a wonderful start
5 in terms of focusing on information that's going to be very
6 helpful for the Board as it understands the transportation
7 system planning requirements.

8 I neglected to mention after Steve Kraft's
9 presentation that at the break if any Board member would like
10 to self-nominate as a candidate for morale officer, I'll be
11 handling those things. We may make it part of the social
12 chairman's responsibilities, however.

13 We're going to shift gears slightly now and get
14 into the container availability and use question. This is
15 kind of part and parcel with the preparation of waste
16 shipments because obviously if you don't have the right
17 container available, then you have an interface problem with
18 product that can't move even though it may be ready to move
19 because you don't have the right equipment to deal with that.
20 So, we're very interested in understanding that issue.

21 And, speaking to us today on that subject will be
22 Ian Hunter from Transnuclear Incorporated. Ian has more than
23 25 years of mostly international experience in the nuclear
24 industry. His expertise includes all aspects of transport
25 planning; cask design, licensing, and fabrication;

1 transportation logistics; cask operation fleet maintenance;
2 emergency planning; and outreach programs. Effective about
3 three weeks ago, he was appointed Vice-President of
4 Government Operations at COGEMA, Inc., where his
5 responsibilities include developing COGEMA's corporate
6 strategy for supporting DOE's future needs to ship spent fuel
7 and high-level waste to Yucca Mountain. Although we invited
8 Mr. Hunter to give us the perspective of a cask vendor
9 regarding transportation planning, I think it's fairly
10 evident from his biography that his expertise is much broader
11 than that.

12 Ian?

13 HUNTER: Thank you, Mr. Chairman, and good morning to
14 members of the Board and members of the public. It is a
15 pleasure to be here today.

16 I should mention one corporate issue. You'll see
17 on the slides the name Areva. I will be talking today mainly
18 about COGEMA, Inc. and Transnuclear, Inc., U.S. companies.
19 We are part of the Areva group which is a worldwide group
20 with interest in energy and connectors employing 75,000
21 people worldwide. In the U.S., we have about 7,500
22 employees.

23 Next slide, please? I've repeated the questions
24 which I read in the invitation to come here. At the end of
25 the presentation, I will attempt to answer some of these

1 questions.

2 Next slide, please? I took the liberty to stray
3 into this afternoon's session on lessons learned and I will
4 also attempt to answer some of these during the presentation.

5 Thank you. I want to start by talking about the
6 broad experience of COGEMA. More than three decades of safe
7 spent fuel transportation. A comprehensive experience in all
8 aspects of the transportation business. A well-established
9 presence in the U.S. It's interesting if you look back into
10 the history of Transnuclear, Inc., it was formed back in
11 1965. That's almost 40 years ago. Specifically, with the
12 intention of having a company dedicated to shipping spent
13 fuel. That was at a time when people expected the nuclear
14 industry in the U.S. to go for a closed cycle with
15 reprocessing. We all know that hasn't happened, but still
16 there is a need for transportation. Within the Transnuclear,
17 Inc., organization, there's about 100 engineers dedicated to
18 the safe design of packaging and the safe transportation. I
19 noted a few words that we used this morning; holistic
20 approach and integration. I would certainly mirror that as a
21 sentiment of COGEMA and the way in which we organize our
22 transport.

23 Just an example of one of the Transnuclear end
24 products, this is the TN 68 dual purpose cask. It's for
25 storing and transporting BWR fuel licensed in both Part 71

1 and Part 72. This kind of cartoon picture shows you a
2 cutaway illustration. It's a metallic cask with a bolted
3 lid. It contains 68 BWR assemblies. I'll show you a
4 photograph of it in service later on.

5 Next slide, please? In addition to shipping spent
6 fuel, we also ship high-level waste which is in glass
7 containers. The photograph on the left, you'll see the
8 operation of loading the containers, and on the right hand
9 side, you'll see actually a high-level waste cask and the
10 shipping operation where the cask is being transferred to a
11 shipping frame.

12 Looking back at the history of Transnuclear, Inc.,
13 in the early days of the foreign research reactor fuel,
14 Transnuclear was involved in a lot of the shipments to both
15 Savannah River, a total of over 250 shipments were
16 successfully undertaken. And, I think, this afternoon,
17 you'll be touching on the experience of foreign research
18 reactors. So, I won't say any more about that.

19 Also, we've been involved in shipping fuel--
20 actually, I think there's an error on the slide here. I
21 think it was from West Valley. Is anyone from West Valley
22 here? Yeah, apologies for that. Again, I was probably in
23 high school when that took place. We also own some TN8 and
24 TN9 casks which are clusters, overweight truck casks, and
25 they've been used for internal movements. And, we've also

1 been involved in post-radiation examination shipments.

2 Moving worldwide, COGEMA group is safely shipping
3 spent fuel as we talk today. That experience runs over three
4 decades from countries as far away from Europe as Japan which
5 involves very long sea distances, typically a six week
6 voyage, and also across the European continent spanning many
7 countries from Spain, Sweden, Italy, Germany, Holland, and
8 many others, as well as shipping 30,000 metric tons of spent
9 fuel during that period. More recently, the high-level waste
10 which has been produced from reprocessing has been converted
11 into a vitrified residue and those have been shipped back to
12 the customers. Up to now, we've shipped almost 1,000 tons of
13 high-level waste in similar packaging.

14 We are experienced in cask fleet management.
15 COGEMA logistics which is based in France manages the COGEMA
16 fleet for shipping spent fuel to COGEMA La Hague. They own a
17 fleet of 50 heavy transport casks, special heavy haul
18 trailers, and dedicated rail cars. They also operate on
19 behalf of other owners; people such as Electricity De France,
20 EDF, and PNTL, casks on their behalf for shipment to COGEMA
21 La Hague.

22 Just a few words about cask maintenance. This
23 photograph shows a COGEMA owned maintenance shop. This
24 particular shop is dedicated to the maintenance of heavy
25 casks. It has a throughput of around 150 casks per year.

1 One of the important things to remember about maintenance, if
2 you're operating a spent fuel cask which probably has an
3 operating life of well-over 20 years, there is a significant
4 amount of maintenance which is required not because the cask
5 itself wears out, but it's subject to minor bumps and
6 scrapes. And, within the provisions of the safety analysis
7 report, there is periodic maintenance required. This
8 maintenance needs to be carefully managed, it needs to be
9 carefully controlled. It's an integral part of the transport
10 operation. And, one thing I would recommend is that those
11 who are responsible for design in the holistic approach take
12 some note of that. We do have a lot of experience in
13 maintenance. I note there are a number of consultants
14 working for DOE in this area, but to my knowledge, no one has
15 consulted COGEMA or Transnuclear, Inc., to date, on cask
16 maintenance.

17 Thank you. Multi-modal transports, you'll see
18 photographs there of rail cars, dedicated ships, special
19 heavy haul trailers. When you've moving from long distances,
20 not every facility has a rail link, and therefore, there are
21 multi-modal shipments involved.

22 Next slide, please? This photograph shows the
23 Valognes terminal in the north of France. This is about 20
24 miles from COGEMA La Hague reprocessing plant. Strange as it
25 may seem, there is no rail link into the plant. There wasn't

1 one when the plant was conceived and they performed many
2 studies and deemed it was economically unattractive to
3 install a rail link. So, in effect, every single spent fuel
4 assembly which is shipped to COGEMA La Hague goes by truck
5 for the final 20 miles. This terminal was built specifically
6 to do a safe transfer from rail to truck.

7 Our previous speaker, Steve, mentioned the
8 importance of tracking the shipments. COGEMA Logistics was
9 one of the pioneers in developing satellite tracking for
10 radioactive package shipments. It now becomes a regular part
11 of our operations. I wouldn't use the word "routine". Using
12 the word "routine" implies that we perhaps still pay
13 attention to things. That's not the case. All of the
14 shipments from COGEMA Logistics are tracked in a real time
15 basis. You'll see a photograph there of the control room or
16 the operations people, but, in fact, actually duals as an
17 emergency response center in the event of an incident.

18 Next slide? Careful planning, preparation,
19 training, procedures, all very important. Emergency
20 exercises are held regularly. They do involve stakeholders,
21 people like firefighters, police. I've participated in many
22 of these exercises. A lot of lessons learned both for the
23 people involved at the site and those remotely trying to
24 control the operation. What you see in the photograph on the
25 right is a recovery exercise where a 100 ton empty cask has

1 been placed as if it's run off the highway and the emergency
2 teams are charged with the task of recovering it safely. We
3 do take these exercises very seriously and we go as far as
4 involving media personnel. We will actually employ
5 professional journalists to act as real time press people and
6 test the response of our own media people; very interesting.

7 Part of the holistic approach without mentioning
8 public outreach, there was a question about stakeholders
9 earlier on. I would go as far as to say that everybody is a
10 stakeholder including members of the public. A lot of us who
11 have spent time in the nuclear industry have been behind
12 closed doors, inside nuclear plants with nice high fences.
13 It's very easy to get complacent and forget about the public
14 in some instances. If you're in the transportation business,
15 you are out there in the public domain. There is a
16 responsibility to go out and talk to the public, listen to
17 their concerns, and to give them what information is
18 necessary to allay those concerns. We do have dedicated
19 teams of people working on this and we couldn't have
20 successfully shipped large quantities of fuel over large
21 distances without going out and talking to people on a
22 regular basis.

23 A few statistics to give you. Group together the
24 spent fuel shipments, high-level waste, plutonium oxide, and
25 MOX shipments, together with low-level waste. I don't have

1 any numbers for 2003, apologies. Those numbers are just
2 being compiled. But, basically, we're talking around 1,000
3 shipments per year on a regular basis going to the COGEMA La
4 Hague Plant, either in or out. Typically, about one per day
5 spent fuel casks arrives at the plant.

6 Coming closer to home in the U.S., I'll just
7 mention very briefly that COGEMA is involved in the DCS MOX
8 Project to convert weapons grade plutonium. It's a mixed
9 oxide fuel. There is a transportation element to this.
10 Obviously, the plutonium itself needs shipping and the MOX
11 assemblies and we are assisting the DOT with this
12 transportation. Within the not too distant future, the lead
13 test assemblies will be fabricated in Europe and shipped over
14 to Duke for radiation in one of their reactors.

15 Even closer to home just down the road, the Yucca
16 Mountain design teams are working on the surface facility on
17 behalf of Bechtel. If there's any questions on the COGEMA
18 part of that, I'd be pleased to answer them.

19 Next slide, please? Just digressing slightly to
20 other areas of packaging and transport, trans-uranic waste.
21 There's a subsidiary of Transnuclear called PacTec who
22 designed and supplied packaging to the DOE for trans-uranic
23 waste. This is the RH72B cask. And, we are currently
24 working on TRUPACT-III again for trans-uranic waste. This is
25 being developed on the European TN Gemini cask.

1 I think there's a speaker this afternoon on West
2 Valley. No doubt, they'll go into more detail on their
3 experience. The two casks which recently shipped spent fuel
4 out of West Valley were the TN REG and TN BRP casks designed
5 by Transnuclear.

6 Okay. Nice map of the U.S. showing the locations
7 of the ISFSIs where Transnuclear is serving customers to
8 provide dry storage. The initial dry storage, we supplied to
9 customers was for site-specific on-site storage only. More
10 recently, there's been a trend for people to go to dual
11 purpose systems. You'll see we have quite a wide extensive
12 spread. I would say we're in an ideal position, Transnuclear
13 and COGEMA, to assist the DOE in interfacing with a large
14 number of the U.S. utilities.

15 I'm not going to go through all the numbers. We
16 don't have time. This is just a breakdown of the dry storage
17 customers from Transnuclear. On the right hand side, there's
18 a pie chart. Approximately, two-thirds of all spent fuel
19 that's in dry storage today is in Transnuclear systems. Two
20 main systems, the NUHOMS canister system where the fuel is
21 placed in a welded canister and the TN metal cask system
22 where it's in a bolted metal cask. We offer both
23 technologies.

24 Just some examples of the metal cask deployment.
25 For Dominion, we supply metal casks TN 32 model to both Surry

1 and North Anna, you see in the photographs there.

2 Next slide? And, for (inaudible) at Peach Bottom,
3 we supply the TN 68 cask. That was the cutaway illustration
4 I showed you earlier. 44 casks on order, 20 loaded. I made
5 a rather bold statement there, they are ready to ship to
6 Yucca Mountain. What I mean by that is this is a Part 71
7 licensed cask. All you would need logistically is a heavy
8 haul trailer and a pair of impact limiters and within a few
9 hours, TN 68 casks could be on the road and rolling towards
10 Yucca Mountain. They are licensed for it today. That
11 photograph was taken, I think, pre 9-11. I expect if one of
12 our staff tried to take it today, they may risk getting shot
13 with the security arrangements.

14 Next slide, please? TN 40, one of the earlier
15 casks we supplied, site-specific storage cask only out in
16 Minnesota, a beautiful picture of that with the snow on the
17 ground and on top of the containment building. Last week, we
18 attended a meeting with the NRC and NMC, the operators of the
19 dry storage fleet for Prairie Island, and we had preliminary
20 discussions about how we could introduce a transportation
21 license for the TN 40 casks. The technology in the TN 40
22 cask is identical to the TN 68 and we're fully confident that
23 we can find a way to ultimately have these licensed so they
24 can be shipped off site.

25 Okay. Getting back to the real meat of the

1 presentation, you know, the vendor's perspective, we can
2 provide cask and transport solutions to both the commercial
3 sector and to DOE. But, more importantly, I think, with our
4 parent company and our broad experience worldwide, we are
5 offering a gateway to DOE, a gateway to look into that
6 experience and look how COGEMA apply the same holistic
7 approach.

8 Next slide, please? Moving towards some answers,
9 I've just picked out a few of the questions. What do I think
10 are the main characteristics of the Yucca Mountain shipping
11 campaign? I've listed four. One is the considerable
12 distances from the individual sites. I think there's 102
13 operator reactors in the U.S. at the moment. Not many of
14 them are close to Nevada. So, they've all got some distances
15 to travel. Not all of them have rail links. Some of them
16 may even prefer to barge, as was mentioned earlier. So,
17 there will be multi-modal shipments required. There are a
18 lot of stakeholders involved; traveling long distances, going
19 through different states, dealing with tribes, etcetera. The
20 fourth characteristic is, you know, what is the most
21 important thing, safety and security. If I compare that with
22 COGEMA's experience, same order of magnitude of the order of
23 a few hundred casks per year regularly being shipped, we do
24 address multi-modal shipping in order to ship fuel from
25 places like Japan through the Panama Canal and across

1 European countries, each of which has its own set of
2 regulations and requires its own individual cask licensing.
3 We do have experience of multiple stakeholders. So, these
4 characteristics are very similar to the challenges for Yucca
5 Mountain.

6 What works well? For me, what works well in this
7 industry is the regulations for the casks themselves, the
8 packaging and transportation regulations, the IAEA,
9 International Atomic Energy Agency, regulations have been
10 adopted into national law in virtually every country in the
11 world. They said it was a good model. They are extremely
12 close to the Part 71 regulations in this country. I think
13 also that the cask safety has been demonstrated by the
14 excellent safety record, and in many millions of cask miles,
15 there's never been an accident involving the release of
16 radioactivity. Also, what I think works well is the public
17 demonstration tests that have taken place. When there have
18 been specific concerns of stakeholders, the industry has
19 reacted. I know there's some discussion recently about
20 package performance tests. I would welcome that certainly
21 from the point of view of public confidence, but only if
22 these tests were carried out at regulatory limits or with
23 realistic, credible accident conditions.

24 Next slide, please? How shall we use the lessons
25 learned? Well, you're going to touch on that more this

1 afternoon with the domestic shipments and foreign research
2 reactor programs. But, I'm offering an open invitation here
3 today to anyone who is involved to come and talk to COGEMA
4 and learn about our experience in the holistic sense of the
5 world of transportation; everything including preplanning,
6 outreach, logistics, fleet management, emergency planning.
7 You can't just take one element and look at it on its own in
8 isolation.

9 From a security aspect, we do take this very
10 seriously. As far back as the 1980s, we performed tests on
11 Transnuclear casks with the aid of the military to determine
12 what the real threat level was in terms of being able to
13 penetrate one of these casks. Some of our customers in
14 Europe for dry storage cited in areas where there is a volume
15 of air traffic which makes them concerned about the
16 possibility of aircraft crash, even though it's a remote
17 possibility. So, the dry storage casks which we supply to
18 Belgium and also in Switzerland, these are all tested for
19 resistance to aircraft crashes. So, we have actually built
20 one-third scale models and impacted them with simulated
21 masses of F-16 and F-18 fighters and the casks do not break.

22 Again, public outreach is an industry priority. I
23 do believe we share a collective responsibility in promoting
24 safe transportation and COGEMA participates in organizations
25 such as WNTI, the World Nuclear Transport Institute.

1 Other the lessons learned for Yucca Mountain? I
2 must touch again on the work that's going on just a few miles
3 down the road here with the COGEMA teams designing the
4 mechanical handling equipment for the surface facility. I
5 think that's an example that shows how COGEMA technology can
6 help the industry and the U.S. to meet its needs.

7 What should DOE provide to vendors? Well, the
8 first thing is an opportunity to find out what we have to
9 offer. I'm pleased to see that in Gary Lanthrum's strategic
10 plan he's scheduled a series of meetings with the cask
11 vendors. In fact, Transnuclear will be meeting with members
12 of Gary's team next Tuesday. I hope this is a first of a
13 series of meeting. We do recognize that the strategic plan
14 is it's an early stage. There's a lot of detail to be added.
15 From a technical point of view, we would like to know
16 exactly what fuel specifications would be required, what
17 types of casks they're looking for in terms of big heavy
18 casks or legal weight truck casks, what are all the
19 constraints and limitations that we would have to interface
20 with at the sites to make this work? And, more importantly,
21 what is DOE's expectations in terms of standards and
22 specifications? We can only learn that through dialogue.

23 I'll just step back before saying a few final
24 words. I'm making it at a 10,000 foot observation. I know
25 that there are legal problems between the DOE and the

1 individual utilities with regard to the contracts, but it is
2 perhaps something of a shame that some of the utilities are
3 going to the extent of buying dry storage which is for
4 storage only on site without any consideration for the end
5 use. I think what's lacking in the whole system is somebody
6 taking a big picture view, a kind of life cycle cost
7 analysis. I mean, what is the real cost of spent fuel from
8 the time it comes out of the nuclear reactor? We do have
9 people at the moment in individual utilities that are charged
10 with buying dry storage as they've already paid at the Waste
11 Fund. They want to pay the minimum for the dry storage with
12 perhaps no considerations for where it's going to go in the
13 future. So, ultimately, a large quantity of our fuel may
14 have to be repackaged and I think that's a shame.

15 So, my message to the DOE is, please, continue to
16 talk to us. I will take off my corporate COGEMA-Transnuclear
17 hat now and just mention the U.S. Transport Council of which
18 we are a member, it's a group of commercial representatives
19 from the nuclear transport industry who have got together to
20 try and promote safe transportation and to bring whatever
21 resources together they can to help DOE make this work.
22 Industry does want the program to succeed.

23 Thank you.

24 ABKOWITZ: Thank you, Ian. You've covered a lot of
25 ground and I don't want to shortchange the questions and

1 answers. So, somehow, we'll have to juggle this up. As the
2 moderator, I'm going to allow myself the first question.

3 I understand that there are some wastes for which
4 we do not have certified casks to move it at this point in
5 time. I was just curious to find out what kind of time frame
6 is required to go through a design, testing, certification,
7 etcetera, etcetera, etcetera, until such time as it's
8 actually ready for use.

9 HUNTER: You mean, start from a clean sheet of paper or
10 from an existing design?

11 ABKOWITZ: From a clean sheet of paper?

12 HUNTER: Well, just to give you an analogy, we regularly
13 contract with commercial customers for dry spent fuel storage
14 and we're offering dual purpose solutions. In some
15 instances, we've started from a clean sheet of paper and
16 actually loaded spent fuel in a licensed system two years
17 later. That's a fairly fast track. But, with the commercial
18 sector and with good cooperation from the (inaudible), I
19 would say three to four years is reasonable planning, maybe a
20 bit longer with the DOE where there's more constraints and
21 more interfaces. But, certainly, now is the time to start
22 looking at it.

23 ABKOWITZ: Thank you. Ron?

24 LATANISION: Latanision, Board. Slide 31, please? You
25 mentioned that casks have been tested for sabotage aircraft

1 crashing. What are the standards or criteria that were
2 established before these tests and what kind of results?

3 EDWARDS: Well, with respect to sabotage, there were no
4 criteria involved. That was a confidential study that was
5 done with the security agencies and the military to look at
6 things like (inaudible) charges. So, I couldn't discuss the
7 technical details of that.

8 LATANISION: This is the U.S. military?

9 HUNTER: I think, it was the French military for the
10 Transnuclear casks in France, but I assume there's some
11 cooperation agreement between the various security
12 authorities to share this data. And, if there's not, we'll
13 make sure that the data is available. With regard to
14 aircraft crash, the Swiss and Belgium safety authorities,
15 they define for us a loading curve in terms of force per unit
16 time which we have to comply with in the model tests. That
17 was representative of either an F-16 or an F-18 aircraft
18 crash.

19 LATANISION: Thank you.

20 ABKOWITZ: Dan?

21 BULLEN: Bullen, Board. Could we just go to the next--
22 actually, the previous slide, 30? You mentioned the package
23 performance tests should be at regulatory limits. The first
24 question is do you think these should be full-scale tests?

25 HUNTER: For public demonstration, yes, I think that's

1 what the public wants to see. Even though from an
2 engineering perspective, scale model testing is perfectly
3 valid, but what the public wants to see is Scale 1 testing.

4 BULLEN: Okay. Bullen, Board. I actually agree with
5 you. I think that would be the best demonstration for public
6 tests. I guess, the followon question is when you state
7 regulatory limits, it brings to mind in the United States a
8 drop test onto an unyielding surface, a drop test onto a pen,
9 throw it in a fire, drop it in the water, but a lot of the
10 public is actually interested in sort of the design basis
11 accident and maybe even beyond design basis accident. So,
12 are you opposed to them going beyond a design basis accident
13 to see what it takes to actually fail a container?

14 HUNTER: Okay. Well, I think, you have to remember that
15 the regulations where you have a nine meter drop or a 30 foot
16 drop in a half hour fire, those are actually termed as
17 mechanical tests and thermal tests. They're not accident
18 conditions. The regulations are very deterministic. There
19 have been public demonstration tests on what you might call
20 credible accidents. Like in the UK, they crashed a train at
21 100 miles an hour into a cask. In actual fact, the forces
22 imposed on the cask were less than those of a 30 foot drop.
23 What I personally would not support is testing a cask to
24 destruction simply to see what the ultimate limits were.
25 That serves no purpose other than to say to people, oh, these

1 things can break.

2 BULLEN: Bullen, Board. I'm familiar with the British
3 test of the train and I understand that, but I guess the test
4 that comes to mind would be something similar to the
5 Baltimore Tunnel fire where people are very concerned about
6 the integrity of the containers in a real scenario accident.
7 And, I know that's been analyzed to death by both the NEI
8 and EPRI and NRC, but a test of that nature is beyond the
9 design basis or is that within design basis?

10 HUNTER: Well, again, a realistic accident scenario with
11 a realistic fire situation, I think the IAEA studies have
12 shown that something like 99.9 percent of all accidents are
13 bounded by the regulations. So, I don't know if we were in a
14 realistic accident. It's very hard to engineer a severe fire
15 condition around a spent fuel cask.

16 BULLEN: Bullen. I agree. Thank you very much.

17 ABKOWITZ: Ian, thank you.

18 We're a bit behind schedule. So, we are going to
19 break. Don't worry about that. But, I'm going to ask that
20 we limit our break to 10 minutes instead of 15 minutes.
21 Thank you.

22 (Whereupon, a brief recess was taken.)

23 ABKOWITZ: The good news is we have a lot of people here
24 with interests in transportation, and therefore, the breaks
25 are an important opportunity to meet and greet. The bad news

1 is that we have a very ambitious program and we want to make
2 sure that every speaker has an opportunity to share their
3 views including accommodations for public comment periods.

4 What I wanted to mention before we get started in
5 this next session is that the people who have signed up, the
6 list of people who have signed up to speak during the public
7 comment period, is growing and we want to make sure that
8 everyone has that opportunity that has or will be signing up.
9 I would like to ask those of you that will not be able to
10 stay until late this afternoon to go back to the desk and
11 identify yourself with Linda Coultry--Linda is raising her
12 hand, both hands--so that we have better understanding of
13 that and we can try to fit you in before the lunch break.

14 We're now going to move on to the next part of the
15 program and we're shifting gears now from the folks that have
16 the waste and are developing the packaging to be able to get
17 that in preparation for shipment and the handoff of custody
18 to the folks that will be providing the in-transit operation,
19 namely the carriers. So, this next session is going to focus
20 on carrier considerations. We'll be hearing from both the
21 truck and rail industry and that's certainly not meant to
22 exclude the barge transportation or the yet to be proposed
23 Caliente Canal. Then, before we break for lunch, we'll have
24 a discussion from DOE, as well, on the receipt of the waste
25 shipments at Yucca Mountain. And, as I said, we're going to

1 try to also accommodate a public comment period.

2 So, without any further ado. let me introduce our
3 speaker representing the truck carrier. That's John Hauser
4 who is the Project Manager of the Nuclear Division for Tri-
5 State Motor Transit. John is Division Manager with over 30
6 years of hands-on experience dealing with transportation of
7 all levels of nuclear materials and radioactive products.
8 For the last 15 years, Mr. Hauser has developed and
9 coordinated projects involving relocation and temporary
10 storage of radioactive spent fuel. Prior to that, Mr. Hauser
11 assisted in the design of packaging and trailer equipment for
12 various levels of radioactive materials. And, as I mentioned
13 before, Mr. Hauser will give us a view on the trucking
14 industry on Yucca Mountain transportation planning.

15 John?

16 HAUSER: Okay. What I'd like to do is provide a view of
17 our company, Tri-State Motor Transit. We've been involved in
18 transportation of radioactive material for decades. We have
19 a CD-ROM that's interactive that shows our capabilities and
20 just exactly who we are. At the end of the presentation, our
21 web site is shown and anyone can request a copy of this CD
22 and we will send it to you.

23 (Pause.)

24 ABKOWITZ: John, you have an opportunity to tell your
25 best joke.

1 SPEAKER: John, my presentation is still up. Would you
2 like to go through that?

3 HAUSER: Okay. There we go.

4 (Pause.)

5 ABKOWITZ: Does the Board have any questions for John?

6 SPEAKER: How about them Patriots?

7 ABKOWITZ: I have one. Is Bedrock, Inc., a Fred
8 Flintstone company or--

9 HAUSER: The gentleman that bought our company just a
10 couple of years ago, he said that was his parent company, a
11 rock crushing company, that had been in business quite a
12 while and the jokes went crazy. We were going to change our
13 company slogan to yabba-dabba-do, and that didn't go over
14 very well. He takes everything very seriously. We went back
15 to painting all of our trucks green which was the old Tri-
16 State color and he's interested in maintaining us in
17 southwestern Missouri.

18 ABKOWITZ: Let me ask a question of Bob Fronczak. Bob,
19 would you be prepared to speak now, to speak if necessary?

20 FRONCZAK: (Inaudible).

21 ABKOWITZ: Okay. Would it help from a technical
22 standpoint of we stopped or--

23 FORD: Let's give it one more try.

24 ABKOWITZ: Okay.

25 HAUSER: I'd have a little bit more of an oral

1 presentation without the CD, but it's not as entertaining.

2 (Pause.)

3 HAUSER: I can go ahead and give a presentation without
4 the CD.

5 ABKOWITZ: Well, why don't we give it a try. You'll
6 hear Part 2 of John's presentation in a little while.

7 Okay. We're going to start with the rail carrier
8 considerations and I'd like to introduce Bob Fronczak with
9 the Association of American Railroads. As most of you know,
10 the AAR is a trade association that represents the major
11 freight railroads of the United States, Canada, and Mexico.
12 In fact, the AAR members are responsible for 76 percent of
13 the line haul mileage, 91 percent of the employees, and 93
14 percent of the freight revenues, and most of the intercity
15 passenger miles on those railroads. Bob is currently the
16 Assistant Vice-President of Environment and has his materials
17 for AAR and his responsibilities include the development and
18 coordination of railroad industry hazardous materials,
19 nuclear waste transportation, and environmental policy. He
20 actively participates on AAR's nuclear waste transportation
21 task force, the group of rail members that have
22 responsibility for developing railroad nuclear waste
23 transportation policy. And, he is also AAR's member on DOE's
24 transportation external coordination working group or TEC
25 which you'll hear more about as the day goes on. Bob has

1 also participated in many of the efforts the industry has
2 initiated since September 11th, 2001, in the area of
3 hazardous materials transportation security.

4 On a personal note, I wanted to thank Bob for
5 changing his schedule so that he could be with us today,
6 although I am somewhat concerned about the statement he made
7 back to me when I apologized for the schedule the way it was.
8 He said you'll hear from me later. So, I'm still wondering
9 and waiting what that will require.

10 Bob?

11 FRONCZAK: I was afraid for a second there that my
12 presentation wouldn't work either.

13 You know, having been involved in a rail
14 transportation industry for 20 some years and the fact that
15 the rail network is spread out amongst all 48 lower states
16 and North America, for that matter, I've traveled a lot.
17 I've missed anniversaries. I've missed holidays. I've
18 missed birthdays. Today, I missed a dentist appointment and
19 I'm going to miss my son getting his varsity letter in soccer
20 tonight, too. So, I missed two things for this one. But, I
21 think, all in all, this is an important event and I'm glad
22 I'm here.

23 First slide, please? What I'm going to do is I'm
24 going to address the questions that the Board addressed us.
25 One of the things I'd like to address by Board member

1 Duquette is that the rail infrastructure is in not so good a
2 shape. That's very far from the truth. I think the Class 1
3 railroad network is in the best shape it's been in its
4 history and I'm going to go through some of the safety
5 statistics that show that.

6 Now, there are issues with the transportation of
7 spent nuclear fuel into some of the nuclear reactors because
8 some of those go into reactors that don't have rail service
9 or don't have periodic rail service. The rail network into
10 coal fire power plants is excellent. Going into a nuclear
11 reactor, it may be a little different story. It might be on
12 a short line and there might be some issues there.

13 Next slide? Some background I'd like to go through
14 is I think at this point most of the shipments are going to
15 go by rail. Some of that has to do with the efficiency of
16 rail and the weight of the casks. They are very heavy.

17 We do have a very good accident record and I'm
18 going to go through some of that. Right now, we're
19 estimating that there's going to be 250 to 400, say,
20 shipments per year of rail transport when Yucca Mountain
21 comes on line. Today, we probably have an order of magnitude
22 of less than that. We probably have 20 to 30 shipments per
23 year. So, this is going to be a significant ramp up and yet
24 it's going to be a very, very small portion of our business
25 and we want this to integrate with our current business as

1 effectively as we can make it happen.

2 It's going to be a long shipping campaign. So, we
3 feel that there are some things that we can do to the
4 equipment to help reduce derailments. These shipments are
5 going to be high visibility. They're going to get a lot of
6 attention and I don't think we want to have that derailment
7 if we can prevent it.

8 We want to minimize the impact on operations and
9 insure continuous improvement and ultimately our goal is
10 incident-free transportation.

11 Next slide? We feel that there are significant
12 safety advantages to rail transportation. 99.9956 percent of
13 all hazardous materials that are shipped today arrive without
14 a release of hazardous material. There's never been a
15 release, we've heard that, of radioactive material in the
16 transportation of spent nuclear fuel by rail.

17 Next slide? Our safety record is improved
18 tremendously since 1980. And, 1980 is important to the rail
19 industry because when the Staggers Act was passed. We were
20 "deregulated". We're still very regulated industry. But, it
21 allowed us to go very much to contract rates, and because of
22 that, we've been able to invest a significant amount of money
23 in infrastructure and our safety record has shown it. Hazmat
24 accident rates have declined by 87 percent since 1980 and 34
25 percent since 1990.

1 Next slide? Derailment per million train miles
2 have dropped 70 percent since 1980 and 23 percent since 1990.

3 Next slide? One of the issues that we feel is
4 important is the issue of dedicated trains and we've heard it
5 this morning from Steve Kraft. I guess, the key reason that
6 dedicated trains are important is it reduces in our opinion
7 the probability of a derailment due to adverse train
8 dynamics. What I mean there is that a standard freight car
9 is 100 tons and that's 263,000 pounds gross weight on rail.
10 We're going to 286,000. A spent nuclear fuel car is going to
11 weight estimated well over 400,000 pounds and I'll show you
12 what the private fuel storage car will weigh. That's going
13 to weigh 476,000 pounds. Some of the Navy cars going today
14 are over 500,000 pounds. Now, that's a significant weight
15 difference than a standard freight car and that sets up
16 adverse train dynamics when you have that kind of car next to
17 empty cars in regular freight transportation.

18 We take derailments as a very serious safety issue.
19 That's how our industry is judged in the safety arena.
20 There's a lot of efficiency benefits to dedicated trains and
21 I think you heard some of that this morning. One of them is
22 both safety and efficiency, but there's fewer switches. You
23 don't have to go through classification yards in a dedicated
24 train. Now that can save you from, you know, say, eight
25 hours on a typical good day when it hits the yard, makes a

1 train, gets into another train, or it could take up to 48
2 hours or better if it hits it on a weekend and there's no
3 train going. I've heard of chief operating officers go
4 ballistic and threaten to fire people for seeing locomotives
5 sit on the side of the rail not working like they're supposed
6 to be working. That's about a \$2 million investment. These
7 casks are going to cost somewhere on the order of, say, \$2
8 million to \$3 million. I think that's an investment that we
9 want to keep working. As a taxpayer, I'd like to see it keep
10 working.

11 By using dedicated trains, best available
12 technology can be utilized. If you put these casks in
13 regular trains, you're subject to whatever freight is in that
14 train. That could be a 40 to 50 year freight container. Not
15 to say that that freight container is not safe, it's just
16 that you can build additional safety into these containers,
17 and I'm going to go on to that in a little bit more detail.
18 And, Steve mentioned it this morning. I think, not only does
19 DOE need to make a decision on the mode of transport which I
20 think they're pretty close to doing, but they also need to
21 weigh in on how they're going to transport it in the use of
22 dedicated trains.

23 I heard the question of the Baltimore Tunnel
24 brought up this morning, too. And, had that shipment been
25 done in dedicated trains, there wouldn't have been that car

1 of, I think, tripropylethylene (phonetic) that would have
2 caused the fire that was in the Baltimore Tunnel.

3 Next slide? From a security standpoint, we have
4 not taken a real strong stance on security other than to say
5 that if you're going to provide security on board that train,
6 we don't run cabooses anymore. That caboose that you saw
7 this morning by Progress Energy was a company-owned caboose.
8 The railroads use end of train devices now to do the same
9 thing cabooses used to do. So, if you want to use on board
10 security, you know, we suggest that a personnel car be
11 provided, that that personnel car have the comforts that are
12 necessary to maintain people on that train for several days
13 which is the amount of time it could take to run from the
14 east coast all the way out to some geologic repository.

15 The railroad industry has done significant work in
16 the area of anti-terrorism since 9-11. And, I can spend
17 another 20 or 30 minutes just going over an overview of that.
18 It's a threat driven plan. We are dependent upon
19 intelligence by the U.S. Government. As that intelligence
20 indicates that there is a threat against the rail industry,
21 we crank up to various alert levels. We have four alert
22 levels, 1, 2, 3, and 4. We're at Alert Level 2 and we have
23 been since 9-11. At Level 2, we've got on the order of 54
24 alerts or alert level actions that we take. When we go all
25 the way to Alert Level 4, we have 113 total actions that the

1 industry takes.

2 Next slide? I'll get into Question 2. Next slide?
3 We haven't--I guess the real answer to this question is that
4 we haven't done anything or haven't gotten any information
5 from DOE to help us in the area of best available technology,
6 but all along we have talked about that. What we've done
7 about that on our own is to develop a performance
8 specification for trains used to haul high-level radioactive
9 waste. Now, that has all the cars and the train as a part of
10 the standard. It requires static and dynamic modeling before
11 construction. That takes time. It requires full-scale car
12 characterization on a static level, as well as dynamic level
13 out at our transportation technology center which is what
14 Steve was referring to this morning, our facility out in
15 Pueblo, Colorado. It also has a 100,000 mile evaluation
16 period built into it.

17 Next slide? The former standard requires a road-
18 worthiness that is over and above what our current--what's
19 called Chapter 11--road-worthiness requirements are. In
20 other words, this car is more road-worthy and it uses things
21 like premium trucks to operate over more severe track than
22 our typical freight equipment and still operate safely. We
23 have electronically controlled pneumatic brakes as part of
24 the standard and right now all trains are equipped with
25 pneumatic brakes. Pneumatic brakes require an air signal to

1 go from the locomotive to the end of the train. That takes
2 time. And, electronic brakes, that goes at the speed of
3 sound. That signal goes at the speed of sound so that all
4 the brakes are applied at the same time. It significantly
5 reduces the stopping distance and the potential for a great
6 crossing accident. Electronic conduits through the train
7 also allows for on-board defect detection.

8 Next slide? What is built into the standard,
9 performance standard, is on-board defect detection system.
10 So, the things that we do--some of which we do wayside at the
11 current time like hot box detectors that are spaced, say, 40
12 or more miles apart, we can monitor that bearing in real time
13 on the locomotive. Other things that are built into the
14 standard is to monitor truck hunting so that if a truck is
15 bouncing back and forth between the rails, we can detect that
16 and take action to prevent that from occurring. Wheel flats,
17 something that we can do wayside now, we can monitor on-board
18 and also the braking performance, vertical, longitudinal,
19 lateral acceleration, and (inaudible).

20 Next slide? This is a diagram of what we see the
21 dedicated train to look like. This is, I guess, the model
22 that private fuel storage is using. Two locomotives, not
23 necessarily because it's necessary for power, but for
24 redundancy in case you have problems with one. You've got a
25 buffer car. The buffer car is required by regulation. We

1 feel that the buffer car needs to be of consistent weight
2 with the other car. In other words, you don't want a late
3 flat in between two very heavy loaded cars. Then, followed
4 by cask cars and then another buffer car and a security car
5 at the end.

6 Next slide? We've taken some other steps on
7 enhancing safety in the rail industry. We're up to OT-55-E.
8 It says D in this, but we're up to Issue E at this point.
9 OT-55 is our operating practices for the transportation of
10 large quantities of hazardous materials including spent
11 nuclear fuel and high-level waste. In OT-55, there are over
12 and above regulatory requirements on track inspection, defect
13 monitoring. In other words, there are wayside detectors
14 spaced more often. There's increased maintenance frequency
15 on those trains, as well as track and increased employee
16 training. And, there's a maximum speed limit of 50 miles per
17 hour for what we call key trains which this would be one of
18 them. There's also--and I don't plan on talking about it,
19 but FRA has also developed our safety compliance oversight
20 plan for high-level radioactive waste and spent nuclear fuel
21 shipments. I'm sure they can talk about that if you'd like
22 to hear more about it.

23 Next slide? We heard this morning about private
24 fuel storage. They're the first shipper that we've had to
25 build to our new performance standard. The cask car was

1 manufactured by Trinity Industry. Again, the overall weight
2 of that cask car combination is 476,000 including impact
3 limiters. The modeling and characterization has been
4 complete and out at our transportation technology center
5 right now they've done the static testing. And, they were in
6 the process of doing the dynamic testing which is the on-
7 track testing, but they're postponed that until they can work
8 out the issues with the State of Utah.

9 Next slide? This is what the car looks like. One
10 of the key differences in this car compared to another rail
11 car is it's a depressed center span bolster car. So, there's
12 two four axle trucks--or two sets of trucks on each end of
13 the car and that's because of the increased weight of the
14 vehicle. But, it's real. There's been a lot of work done.
15 It's not finished, but it does exist.

16 Next slide? Now, I'll address the third and fourth
17 questions. Next slide? I guess, so far, most shipments of
18 spent nuclear fuel have gone by dedicated train. That's for
19 a number of reasons. From the DOE standpoint, a lot of times
20 they'll request dedicated trains. The Navy doesn't request
21 dedicated trains, but we give them dedicated trains because
22 that's what we feel should be done. The Yucca Mountain EIS
23 indicated that dedicated trains are not necessarily
24 advantageous and it, I guess, made no conclusion about
25 whether they would ship using dedicated trains or not. So,

1 that's a key thing that needs to be done in the near future
2 to get the transportation system by rail going.

3 Next slide? Another issue that the rail industry
4 would like to see at rest is there's a very small chance that
5 a cask would have a release in a transportation incident. We
6 in the rail industry have to plan for that event. And, we
7 would like to get together with DOE. I think we've been
8 assured that there is plenty of resources to bear to deal
9 with that event, but we would like to have a more concrete
10 analysis and discussion with DOE about how that would be
11 handled, how an incident would be handled in case we had to
12 deal with it.

13 Next slide? The procurement and testing of cars
14 that meet our performance standard takes time. In the
15 Private Fuel Storage Initiative, the modeling and initial
16 submittal took between six months and a year. We estimated
17 that the full-scale testing would take between two and two-
18 and-a-half years. Some of that depends on how many cars that
19 are going to be tested, whether you have to test the cask car
20 or buffer car and a personnel car separately, but it's going
21 to take time. And, whereas, we feel that there's enough time
22 left between now and 2010, there's not a lot of time and we
23 need to get on making those decisions so that we can plan for
24 that.

25 The other thing and Steve mentioned it this morning

1 again is that we could use some of the experience of private
2 fuel storage. You know, I'm sure that they would be willing
3 to license that car for a price, but again, I mean, we should
4 take advantage of the experience that they've already
5 developed in the transportation of spent nuclear fuel.

6 I didn't come addressed to talk about the rail
7 construction, at all. Nobody has asked us about the rail
8 construction. So, we're assuming that DOE is going to
9 contract that out to a contractor to build and ultimately
10 have somebody operate it. But, you know, we're willing to
11 talk to them if they feel like we've got some sort of input
12 into that. I'm sure we'll hear more about that. And, I
13 guess, that's it.

14 Next slide? Summary, the rail is a safe--we feel
15 is a safe mode of transportation. There's some advantages of
16 using it. Dedicated trains make sense. There are
17 technological improvements that we're committing to continue
18 to build into the rail network to prevent an event from
19 occurring. And, DOE needs to start making those decisions so
20 that we can get that to happen all by 2010.

21 With that, I'll entertain questions.

22 ABKOWITZ: Thank you, Bob. We're going to start with
23 Dave Duquette?

24 DUQUETTE: Duquette, Board. Let me qualify my earlier
25 statement. I'm quite familiar because I'm a materials

1 consultant to AMTRAK in the northeast corridor from Boston to
2 Washington and much of the Montreal to New York runs. There
3 have been tremendous problems in the infrastructure in that
4 part of the country and I'm fully aware that CSX does in that
5 part of the country use the same rail systems as AMTRAK.
6 But, I think that there are problems with some of the
7 infrastructure in the country; certainly, in the northeast
8 that I know about.

9 With that, I would like to go to Slide #3, please?
10 Oh, Slide #3 was the number of derailments per million
11 miles. But, the question I have is how many million railroad
12 miles per year does the freight part of the country do, for
13 example?

14 FRONCZAK: I don't know the answer to that right now. I
15 mean, I can get that for you. That's a statistic that we
16 maintain at AAR.

17 DUQUETTE: But, it's in the millions presumably, not in
18 the hundreds--not in the 100,000s?

19 FRONCZAK: Oh, it's definitely in the millions, if not
20 billions.

21 DUQUETTE: No, no, but you're suggesting three--maybe
22 it's a couple of slides after that. It's the one that shows
23 the number of derailments per million miles.

24 FRONCZAK: Yeah, keep going one more, next one.

25 DUQUETTE: Okay. One more after that.

1 FRONCZAK: Yeah.

2 DUQUETTE: Okay. That indicates about three derailments
3 per million miles and I appreciate the fact that it's
4 decreased considerably since 1990 and I applaud that. But,
5 to me, that's still a lot of derailments if you're doing
6 millions of railroad miles per year. I know of, at least,
7 one near Kansas City that occurred two years ago. There was
8 a serious derailment. There was another one in the northeast
9 corridor. The tracks actually buckled because of heat
10 between New York and Washington. So, I think, the
11 infrastructure does have to be looked at. I think your
12 progress in addressing problems and reducing accidents is
13 quite significant. I also want to indicate that I don't
14 necessarily think that a derailment would result in a release
15 of radioactive material. I just want to point out that it's
16 a possibility. Not that the release is a possibility, but a
17 derailment is a possibility.

18 FRONCZAK: I mean, safety is number one in the rail
19 industry and we want to continue to have that number go down.
20 We'd like to see it zero, you know, and there's cost to
21 safety. I agree that we can be safer and we're trying to be
22 safer.

23 ABKOWITZ: Okay. We have Bob Luna followed by Priscilla
24 Nelson, Dan Bullen, Thure Cerling, Dan Metlay, and Ron
25 Latanision. Bob?

1 LUNA: Thanks. Bob Luna, Consultant to the Board. Bob,
2 I was interested in your comments about the PFS rail car.
3 Somebody told me, somebody from the fuel transport industry
4 told me, that they felt it would be possible to buy used
5 equipment and bring it up to the standards for that you
6 require for high-level waste shipments. I was wondering if
7 you could comment on the possibility that that could happen?

8 FRONCZAK: Well, I think that's a very real possibility.
9 I mean, the key in meeting this new performance standard is
10 going to be equipping it with the electronic pneumatic brakes
11 and those are add-ons that can be accomplished. And, putting
12 the right trucks and spring combination underneath it.
13 Again, I mean, a rail car is a bunch of components. The
14 trucks are separate pieces that you can add to a car very
15 easily. So, that's a reasonable possibility, sure.

16 LUNA: Okay, thank you.

17 ABKOWITZ: Priscilla?

18 NELSON: Nelson, Board. I'm going to ask you about the
19 possible interdependencies and vulnerabilities in the system
20 even with a dedicated train. These days, there's been a lot
21 of sector introspection about SKADA systems and increasing
22 reliance on information and particularly on power systems and
23 power supplies and how the interdependencies develop and
24 cause additional vulnerabilities. This is a whole system
25 perspective. Is there anything special about transport on

1 trains that will require some additional security or
2 assurance of the availability of the information and power
3 system-wide to insure train throughput? Am I making any
4 sense to you?

5 FRONCZAK: I'm not sure I understand your question. I
6 mean, one of the major differences--and I think you heard it
7 this morning before I talked--is, you know, rail system is an
8 integrated system. And, like somebody said this morning, I
9 think it might have been Steve--you know, if you have a
10 derailment or a problem in Florida, it could affect trains
11 going up to Chicago. And, there's not as many reroutes
12 available. Reroutes get to be difficult. A reroute is more
13 difficult between carriers because then you have interchanges
14 involved. Reroutes on an individual carrier can be very--add
15 a lot of distance which adds risk. So, there are a lot of
16 interdependencies, but it's nothing that we haven't worked
17 with for years and years. So, I mean, we feel like we have a
18 pretty good handle on it.

19 NELSON: It's analogous in some respects to the power
20 grid in terms of redundancies and how you build in
21 redundancies and capabilities in the system. But, there's
22 also reliance on information for decision making and on power
23 supplies which may not be internal to your system kind of an
24 issue, but interface with other systems kinds of issues where
25 you're starting to rely more on information, condition

1 assessments, and if you start losing that because of loss of
2 that kind of an interdependency with other systems, then you
3 could not be where you are fairly quickly. So, I'm wondering
4 are you looking outside your immediate sector for the
5 interdependencies with other sectors in establishing
6 vulnerabilities or considering redundancies?

7 FRONCZAK: I mean, nothing other than what we're already
8 doing for normal routine rail transportation. You know, one
9 of the things that the rail industry has, we have our own
10 radio frequency. You know, all of our trains operate on that
11 radio frequency. We have a network set up throughout the
12 entire United States that allows us to communicate with all
13 of our trains all the time. Now, there might be some--you
14 know, when you get into having other people on board and
15 having to deal with what a shipper representative on board
16 might want to do versus our normal routine transportation, I
17 think that a lot of those things have been worked through on
18 the shipments that are already being made and are being made
19 today. We just need to make sure that there's a lot of
20 communication there.

21 NELSON: Okay. Thank you.

22 ABKOWITZ: Okay. Dr. Bullen has yielded to the delegate
23 from Utah.

24 CERLING: Cerling, Board. I was just wondering on the
25 issue of--getting back to the infrastructure and security

1 issues that are special that perhaps need to be done with
2 respect to the shipment of spent nuclear fuel, I guess, my
3 question is really who would pay? Would it be just DOE or
4 would that be taken in by the railroad industry?

5 FRONCZAK: That's a good question. I figured that
6 question would come up because you asked it to Steve this
7 morning and he said I was going to answer it. I don't know
8 the answer to it. The rail industry goes after business and
9 will build a rail line if there is enough business there.
10 Now, you're talking about perhaps 10, 30 carloads of business
11 to somebody's small, little utility. I would find it hard to
12 fathom that a railroad would want to sink any money into
13 improving that line for 10 or 20 carloads of business. Now,
14 on the other hand, perhaps the line out to Yucca Mountain
15 where there's going to be maybe 400 shipments, I don't even
16 know that that would support a case for a railroad company
17 wanting to build that line, take that kind of investment on
18 themselves and make that a business case. We have recently
19 with the City of Chicago--and I don't know how many of you
20 heard about it--we've undertaken a very significant
21 public/private partnership and we've proposed over \$1 billion
22 investment in the City of Chicago on improving railroad
23 infrastructure to make the flow of commerce through Chicago
24 more efficient. We're asking government to share in that
25 project. And, how we're trying to divide it is we are asking

1 the government to pay for public benefits and we're willing
2 to pay for private benefits. So, that's a possible scenario.
3 For these shipments, I envision that if you're going to have
4 to invest a significant amount of money in some small rail
5 lines, you're going to have to do a cost benefit that the--
6 you know, the government is going to need to pay for it is my
7 guess and that they're going to need to do a cost benefit.
8 Which is better? Which is cheaper, a heavy haul to the
9 nearest rail spur or some other mode or upgrading that line?
10 That's my opinion.

11 CERLING: Thank you.

12 ABKOWITZ: Dan Metlay?

13 METLAY: Dan Metlay, Board staff. I'm wondering if you
14 could turn to Slide 15 and the last bullet? I'm wondering if
15 you could say a little bit more about that last bullet; in
16 particular, whether there are any implications for this
17 situation with possible respect to Yucca Mountain?

18 FRONCZAK: Well, I guess, the private fuel storage, I
19 guess, they made a decision that they don't want to invest
20 any more money in a transportation system until they knew
21 pretty well that the transportation system was going to be
22 used. The implication here is you have some fairly long-term
23 items that have to be procured; casks, you know, the cars,
24 building of the rail line. So, key decisions have to be
25 made. So, the implication is that you need to make sure that

1 the key decisions are made so that you're not wasting money
2 and building infrastructure that you've not going to use.

3 ABKOWITZ: Ron?

4 LATANISION: Latanision, Board. Back to Slide 6,
5 please? This is a followup to Dave Duquette's question. How
6 would those statistics look if we were talking about European
7 rail lines?

8 FRONCZAK: I don't have a comparison with me between
9 U.S. and European roads, but the best U.S. roads operate as
10 safe or definitely safer than European roads. And, on
11 average, we're definitely as safe as European roads. And,
12 you're comparing apples and oranges in many respects because
13 you're comparing a primary passenger system in Europe to a
14 primary freight system in the United States.

15 LATANISION: No, I appreciate that, but of course,
16 that's what we're dealing with here in terms of the transport
17 issue we're concerned about. And so, the question would be
18 how would the rail lines that are most likely to see high
19 density of traffic compare even in terms of this--this is a
20 more normalized average, I suspect.

21 FRONCZAK: I mean, I have a slide that goes in and
22 compares U.S. railroad operations to European operations and
23 I'd be glad to sent that to Mark or whoever, you know, at the
24 Board and you can take a look at it.

25 LATANISION: Yeah.

1 FRONCZAK: But, it's very favorable.

2 LATANISION: Thank you.

3 ABKOWITZ: Okay, thank you. I'm going to ask the
4 projectionist to go ahead and take--I'm not done yet with
5 you. Just hang on a second.

6 FRONCZAK: Oh.

7 ABKOWITZ: Ask the projectionist to take down this
8 presentation so we can load up John's which apparently will
9 take a few minutes.

10 Bob, if I were to approach you and said I want to
11 build me a rail spur, could you walk me through the steps
12 that would be required from when I approached you to when the
13 first train would be running and also some reasonable
14 expectation of the time frame associated with those steps?

15 FRONCZAK: I'm not an expert on building new rail lines
16 and I think somebody else brought it up this morning. Again,
17 we haven't built that many new rail lines. I was involved in
18 one small rail spur construction, but you have to go to the
19 Surface Transportation Board, you have to figure out whether
20 or not you need an Environmental Impact Statement. If you
21 don't need an Environmental Impact Statement, you still need
22 to do--you know, go through a limited environmental
23 evaluation. If you have to do a full blown EIS, I think we
24 have a little bit of experience on what the Yucca Mountain
25 EIS took, you know. That can take a couple years. And then,

1 you have to get into the actual design of the rail line.
2 Ultimately, out here I don't know if they've got the property
3 procured. So, you have to get into procurement of property.
4 Is there enough time to do it between 2010 and now, I'd say,
5 yes, but I wouldn't want to wait until 2007, 2008 to start
6 doing something. Things need to be happening, I think, in
7 the next year time frame to get the EIS started and that
8 whole process started. And, I know it's not a detailed
9 response to your question, but it's as good as I can do.

10 ABKOWITZ: Okay, thank you.

11 All right. I do want to make one announcement
12 here, and also before I do that, to tell Bob that I feel very
13 badly about your not attending your son's letter awards
14 ceremony, but as so many things in life are tradeoffs,
15 including risks, I feel very good that we were able to delay
16 whatever reason why the dentist needed to see you.

17 Linda Coultrey reminded me to just mention to the
18 folks that are here that if you're not already on the Nuclear
19 Waste Technical Review Board's mailing list that there's an
20 opportunity to do that and all you need to do is share that
21 information with Linda or drop her a business card or any of
22 that kind of stuff. We won't spam you with all kinds of
23 offers and things like that. You'll only be notified when we
24 have something to share with you as a matter of official
25 business.

1 How are we doing? Not doing well? John, I'm going
2 to ask you to come up here and just do the best you can under
3 the circumstances.

4 HAUSER: Without the assistance of the CD-ROM, it's
5 going to be a little less interesting or colorful.

6 Initially, from the transportation standpoint,
7 truck transportation, the carrier I work for, Tri-State Motor
8 Transit, we've been involved in transporting spent nuclear
9 fuel since 1964, 40 years. We regularly transport all types
10 of radioactive material in the complete fuel cycle from UF-6
11 that goes into manufacturing fuel rods to the spent rods to
12 repositories. We also are involved in the WIPP Program. At
13 this time, we are successfully working at that and hope to
14 renew our contract next time it comes up. It's our
15 experience through, at least, 40 to 50 years of the safe
16 transportation of spent nuclear fuel that it is a safe mode
17 of transportation.

18 At this time, I've found that there are about 2,000
19 tons of spent fuel produced in the United States annual. It
20 has to go somewhere. If the rods have to be moved anywhere,
21 right now we have complete transportation plans and programs
22 in place to cover movement to take it anywhere in the United
23 States. There have been over 3,000 shipments of spent
24 nuclear fuel transported since 1964 and they have been
25 transported safely.

1 With the specialized equipment, as well as
2 extensive training of the drivers and updating of the
3 equipment and support personnel, this adds to the safety to
4 the public. The vehicles have advanced to the point that the
5 trucks are safer every day. When we first started
6 transporting the equipment, you wouldn't believe how it was.
7 But, right now, the trucks are equipped with satellite
8 communication, cellular telephones, we have remote shutdown
9 devices, and continuous monitoring. Now, the satellite
10 monitoring, we can--it's like the GPS and we can pinpoint a
11 truck's location just within a few feet. Any of the
12 designated units that would be involved in the spent fuel
13 program, they can be specially equipped with disabling
14 devices because everyone's fear is can someone steal it?
15 Can they hop in it and drive it away? We can be equipped
16 where a shutdown device can be activated either remotely from
17 our facility or each driver would carry a disabling
18 mechanism. It would be a monument. It could not be moved
19 until we activated it to where it could be moved.

20 The cost of communication with the drivers is what
21 makes it really safe. Cooperations with the states being
22 aware that the shipments are coming, they can also be set up
23 to where they can monitor the shipment when it's in their
24 state. Making sure that they're aware of what it is and how
25 it's moved seems to be what all the states want to know. You

1 know, is it coming through my state and what are you going to
2 do with it if it stops? We can repower, we can move, we can
3 reroute. If there's a problem found, a dangerous situation,
4 accident or a bridge, we can make a right turn. We can avoid
5 because there's always an alternate route set up by the NRC.
6 All shipments have weather criteria. If there's bad weather
7 in an area, we can avoid the bad weather or we can secure the
8 equipment in a safe area.

9 Right now, with all the extra measures that's been
10 put in place for security and with the escorts and all that's
11 involved, we're not foreseeing any problems as far as
12 security at this time. At any time, we can alter our plans,
13 add additional security or whatever is required. Right now,
14 the new measures that are in place, Tri-State Motor Transit
15 has had them in place since 1953 as far as background checks
16 on drivers and worrying about the safe end of it. It is
17 safe.

18 We feel that we've been transporting this stuff, I
19 call it, you know, spent nuclear fuel for over 40 years
20 safely without incident. We could transport it anywhere. We
21 could take it to Yucca Mountain. We have alternate routes.
22 We have routes in place right now going in and out of Nevada,
23 to Nevada, through Nevada, transporting other materials. It
24 would not be a problem, at all, for us to put together the
25 needed programs. Our main concern is that we haven't been

1 able to address is when will truck transportation or any
2 transportation start? If we can find out when a repository
3 is going to be open and be able to accept spent fuel, then we
4 could put a program in place within six months drawing on our
5 experience with the WIPP project. The objectives we see from
6 a trucking standpoint is provide safe, cost-efficient
7 transportation. From some of the figures that we've had, we
8 could do the whole project for what it costs to build a
9 railroad.

10 What works? Well, full public involvement and
11 cooperation from all agencies. The past campaigns of spent
12 fuel over the last 40 years, we can apply them to any
13 shipping campaign. Public forums, let the people know what
14 is really inside those big gargantuan casks going down the
15 road and help them understand it. So many people are saying,
16 well, what is it? What does it do? Why is it in there? I
17 think if people understood more about what was being
18 transported and the precautions that's being taken, it would
19 make Yucca Mountain or any transportation be a lot easier.

20 Without the help of my public commentator, CD-ROM,
21 that's about all I have.

22 ABKOWITZ: Thank you, John. And, I particularly
23 appreciate your moving us closer to being back on schedule.

24 We'll start with Dan Bullen?

25 BULLEN: Bullen, Board. Actually, I want to express my

1 appreciation for your extemporaneous speech without the use
2 of visual aids. I think that's a great compliment to you.

3 But, I do have a couple of questions. You
4 mentioned that the drivers have the ability to disable the
5 truck so that it's not movable.

6 HAUSER: Yes.

7 BULLEN: What type of specific training do the drivers
8 have with respect to both the operation of the vehicle and
9 also the safety that's necessary?

10 HAUSER: Our driver go through, at least, from 40 to 60
11 hours additional training as far as spent fuel, radioactive
12 material. We don't say we have an anti-terrorist training,
13 but we do have a response training, a situation response
14 training that we put our drivers through. And, this is
15 renewed company-wide--our company, we have more stringent
16 regulations. We try to renew it when something new comes
17 out. If there's some new item, some new measure, then we
18 make our drivers aware immediately. We'll sent out a
19 company-wise message to all the drivers and that's quite a
20 few that we can send out a message to all of them at once.
21 Call them out, we have something new. We try to use the
22 telephone or more secure ways of letting drivers know if
23 there's anything taking place.

24 BULLEN: Bullen, Board. Just one other followup then.
25 That is you mentioned that escorts were provided for the

1 shipments, particularly post 9-11, but are the escorts
2 provided by your company or are there also additional escorts
3 provided by each state as you go through their jurisdictions?

4 HAUSER: They are provided by the states. Now, the
5 states are usually compensated. All the states have an
6 interest in providing the escorts, the inspections, the
7 support for their compensation.

8 BULLEN: Thank you.

9 ABKOWITZ: Thank you. Dick Parizek?

10 PARIZEK: Parizek, Board. Could you elaborate on a safe
11 area? I guess, that is in the context of you're driving
12 along and you have to stop for some reason. Do I know what a
13 safe area looks like? I mean, will these trucks be all on
14 the road, typical truck stop, and then can you drive
15 continuously or do you have rests automatically with multiple
16 drivers or tradeoff drivers? How does that work?

17 HAUSER: Okay. It is a continuous movement, continuous
18 movement. The only time they stop is for meal breaks, fuel
19 breaks. They try to combine them. As far as a safe parking
20 area for the spent nuclear fuel, you'd be familiar with them;
21 State Highway Departments, National Guard Units, Army
22 Reserve Units, military bases, definitely secure areas, not a
23 truck stop parking lot. And, they would be attended at all
24 times by one driver and the escorts.

25 PARIZEK: That would be different in a breakdown on

1 route if you were on route and had some truck troubles?

2 HAUSER: Okay. If we're on route and break down, then
3 we have a response criteria in place. We have a--we call it
4 a maintenance central that we can have a truck repaired
5 within hours or repowered within a reasonable amount of time.

6 ABKOWITZ: Thank you. Bob Luna?

7 LUNA: Bob Luna, Board, Consultant. John, could you
8 contrast the relative difficulty in making, for instance, a
9 200 mile shipment using heavy haul, regular, overweight or
10 regular weight highway shipments? What's the degree of
11 difficulty in those three kinds of shipments?

12 HAUSER: Okay. The majority of the time that we handle
13 spent nuclear fuel at this time, it's in an LWT and it is
14 shipped as overweight, but with continuous running. When you
15 get into the super heavy haul moving the 150,000 pound
16 containers, you have a lot of highway surveys that have to be
17 done, you have permitting issues with the states, counties,
18 cities, townships. A lot of things have to be addressed.
19 But, as a carrier, we've been involved in that for quite some
20 time. And, to say it's easy, quick, each movement we do as
21 something that's heavy haul is planned the same way with
22 route surveys, security surveys, height, width, safety, and
23 that's--you know, the coordination of it doesn't really
24 involve any more than we do in our day to day.

25 LUNA: Let's see, a followup. Suppose you were in a

1 state which didn't really want you to do heavy haul. How
2 would that affect the result?

3 HAUSER: If the state wouldn't permit you to move, then
4 without a legal weight cask, you wouldn't move in that state.
5 State cooperation, if the states understood more that
6 there's funding coming to them and helping them and the
7 general public, you know, back to the--what we're really
8 trying to do in making the public aware, I think that would
9 end a lot of the headaches that we have.

10 ABKOWITZ: Abkowitz, Board. I just have one followup
11 question. John, the types of casks that Bob Fronczak was
12 showing us which may require an inter-modal transfer to a
13 truck, I guess, would you classify those as heavy haul or is
14 that a new extraordinary category?

15 HAUSER: That's what we would call super heavy haul.
16 Heavy haul is something that can be permitted and moved
17 without like the route surveys, the weight. Some highways
18 can't support those kind of weights and most states and
19 counties, cities, they'll want an up-front deposit. Yes,
20 you're going to move it and we're going to hold that deposit
21 for five years to make sure that there's no damage down the
22 line.

23 ABKOWITZ: So, super heavy haul would be putting new
24 requirements on the system that we haven't seen to date?

25 HAUSER: That's correct.

1 ABKOWITZ: Okay, John, thank you very much.

2 HAUSER: One thing, I can send anyone a copy of one of
3 those CDs. I'll send them the one that we have here.

4 ABKOWITZ: Yeah, the Board would be interested in a
5 working copy, however.

6 Okay. We're going to our last topic before we get
7 into public comment period number one and lunch. It's now
8 taking the life cycle experience, if you will, from where the
9 carrier has custody of the product to the destination and the
10 receipt of waste shipments at Yucca Mountain.

11 That particular interface is going to be talked
12 about by Gary Lanthrum with the U.S. Department of Energy.
13 Gary is currently the Director of the Office of National
14 Transportation Program, formerly the Director of the
15 Environmental Management National Transportation Program in
16 Albuquerque. In his previous capacity, he was responsible
17 for managing all of the EM field transportation programs
18 including nuclear materials packaging, research, shipping,
19 and certification, the operation of the TRANSCOM systems for
20 the WIPP shipping and managing the Automated Transportation
21 Management System for tracking all DOE's nuclear and non-
22 nuclear shipments. Also, he was responsible for the National
23 Transportation Program's national stakeholder outreach
24 program. And, apparently, he actually got some sleep
25 somewhere in there.

1 Gary is going to actually speak with us twice
2 today. His first talk, as I mentioned, would be on the
3 interface. And, I also wanted to point out that Gary is
4 known to the Board under several aliases including Greg and
5 Sam.

6 Gary?

7 LANTHRUM: I don't know if it was my eyes or not, but
8 when I was sitting back there, I thought the focus could be
9 tweaked a little bit on the projector. Is that--actually, it
10 looks better here. Maybe it is my eyes. Let's see, is it
11 any less yellow that way? Actually, I think it's the
12 projector there because on the screen here, it's very white.
13 So, maybe it's just getting really tired. Maybe one of the
14 color lamps in there, the blue or something, has given up the
15 ghost.

16 While we're doing setup stuff, normally I try and
17 introduce whatever presentation I have with a little bit of
18 humor, but I've been working so much, I've kind of lost my
19 sense of humor. I will say that the discussions that have
20 gone on yesterday and to some extent today about a holistic
21 approach to doing the transportation activities is important.
22 And, it's a little disconcerting because the interface with
23 Yucca Mountain is just one small piece of my overall approach
24 to transportation planning and it's a little awkward to do
25 this out of context of the presentation I'll give this

1 afternoon. So, some of the questions that are inevitably
2 going to be asked, I think will be answered more fully when I
3 do the fuller presentation about the overall planning and the
4 state of our activities later today.

5 This first slide though shows that there are three
6 projects that are involved in the OCRWM planning process.
7 The three projects are as much an artifact of the budgeting
8 cycle and the planning cycle for funding as anything. The
9 three projects are basically the development of the
10 repository itself. There's a repository project. There is a
11 Nevada transportation project that would be responsible for
12 establishing whatever infrastructure is necessary to do
13 transportation in Nevada, whether it's heavy haul truck or
14 rail or if it's just legal weight truck, it would use
15 primarily existing infrastructure. Then, there's a national
16 transportation project where we look at the requirements
17 nationwide, what we need in terms of the cask fleet, the
18 rolling stock, and other capabilities.

19 The next slide actually talks about those three
20 projects and how they relate to each other and expands a
21 little bit by adding an area of the planning that is not
22 within transportation. There's been a lot of talk about
23 interfacing with the utilities and how we develop that part
24 of our interface. Utilities are one of our stakeholders
25 certainly in developing the transportation system and making

1 sure that whatever we have in the way of transportation
2 capability mates well with their facility capabilities with
3 the ingress and egress options into their sites.

4 There's a lot of decisions that had to get made
5 within OCRWM itself, but that interface is not my direct
6 responsibility. And, it's largely because of the sensitivity
7 over the lawsuits, but there is a systems group within OCRWM
8 that does that interface primarily. They will be the ones
9 that are responsible for developing the delivery commitment
10 schedules. I believe, they are working on letters to the
11 utilities to update the long-term delivery commitment
12 schedule discussions with the utilities that have signed
13 contracts. They will also be the ones that will be working
14 on the final delivery schedules as we get much closer to
15 actually making shipments. They are the group that does the
16 interface primarily on the discussion that was held about the
17 oldest fuel first, what does that mean, and the fact that
18 utilities themselves have the capability if they have the
19 oldest fuel that's essentially just a placeholder for line.
20 It's a chit to get into the queue. They can use that chit
21 any way they want once they have it. Once they know where
22 they are in the queue, they can use that to ship other fuel
23 other than the oldest. They can trade it with other
24 utilities within that corporate entity or with other
25 corporate entities entirely. So, there's a lot of

1 flexibility. And, it's a different group within OCRWM that
2 does that interface.

3 That said, we do have an interest in the
4 transportation side of the house on a small part of that
5 interface and the primary part we're interested in is the
6 facility capabilities at the shipping sites. And, I think
7 somebody mentioned earlier--I don't know who comes up with
8 these acronyms--but the NSTI, it was the Near Site
9 Transportation Infrastructure is the way it gets abbreviated.
10 That was done 10 years ago. We are looking at an update to
11 that transportation infrastructure report. We led a contract
12 about a month ago to do a paper review of what was done 10
13 years ago and now that paper review looks at a wide spectrum
14 of infrastructure assets. It looks at the ones that would be
15 most critical to our needs and then from that effort, we will
16 have some kind of a communication, whether it's from the
17 transportation group or the strategy group that actually asks
18 utilities whether or not what was reported 10 years ago is
19 still what they have in place or have things changed and
20 start talking about what changes might have taken place that
21 we need to be aware of. So, that part is going on.

22 Transportation is in the middle and at the other
23 side is the repository work on the surface facilities. And,
24 the primary interface there is on the cask receiving and on
25 the fuel and canister handling capabilities. There are a lot

1 of questions that are tied to both the decision on actual
2 mode that we'll be using that will affect both the folks on
3 the front end and the back end of this process and what
4 actual content gets shipped because the content is going to
5 drive to some extent the casks that are selected and may have
6 some bearing on the mode of transport. And, we are working
7 on those interface points. We're at a pretty early stage of
8 that planning and that's probably a good segue into the next
9 slide.

10 There are waste integration meetings that go on on
11 a biweekly basis between both the waste acceptance group at
12 headquarters and the repository and the transportation group
13 both at headquarters and in Nevada.

14 There are integrated project teams for all of our
15 acquisition activities. We have formed the Integrated
16 Project Team for our cask and rolling stock acquisition
17 efforts and that includes representation from both the
18 repository, from multiple other groups within the Department
19 of Energy, and--in fact, I'll go into that a little bit
20 later. Let me just go through the rest of these.

21 There are internal interface meetings that are
22 held. We had our first one between transportation and the
23 repository surface facility folks a month ago. We've
24 tentatively got one scheduled for 9 February, at least, that
25 week for a second meeting. And, again, things are fairly

1 early in planning stages both for transportation and for the
2 detailed handling discussions at the surface facilities at
3 the repository. But, we are starting early, and as they make
4 small steps forward, we are aware of what changes they make.
5 The discussion took place yesterday about the fact that
6 they've gone from initially looking at using rail to move
7 items from facility to facility to wheeled vehicles and back
8 to rail again. And, we're dialed into those discussions and
9 how they may have an impact on what we develop for a
10 transportation infrastructure within the state as a whole and
11 nationally. This indicates the one we had back in December.

12 There's also the Fleet Management Facility. Ian
13 talked about the capability that COGEMA has and a fairly
14 significant facility that he showed a slide picture of that
15 had a capability of pushing through about 150 casks a year
16 from maintenance. And, there's a lot of routine required
17 maintenance. We will have routine required maintenance
18 probably both for rolling stock and for casks.

19 We are in the initial planning stages for looking
20 at what the facility capabilities and requirements would be.
21 We've done a couple of studies about facility location.
22 Should it be near the site, should it be on the site within
23 the grower/GROWA (phonetic) boundaries, should it be outside
24 of the GROWA, but within the LAM (phonetic) withdrawal area,
25 could it be outside the LAM withdrawal area? The answer to

1 that question is, yes, it could be anywhere. You could
2 locate for a national network. You could, in fact, contract
3 that capability out and use a service facility somewhere in
4 the midwest if that was our decision. We are collecting data
5 that will feed a policy process for making the
6 determinations. But, as part of that, we're talking about if
7 we did locate the facility close to the repository, are there
8 capabilities that the facility might have that would be of
9 use to the repository? And, if it were close to the
10 repository, are there capabilities as far as infrastructure
11 like power, water, other things that the repository might
12 have that the facility could benefit from? All those
13 discussions are going on. It's very fluid right now and I
14 suspect that we are some distance away from making any formal
15 decisions, but the process is engaged.

16 Then, there are weekly management review meetings.
17 Every Monday afternoon, the office directors for the
18 strategy group that does the interface with the utilities for
19 John Arthur's organization that does the Yucca Mountain
20 Project and for transportation along with the deputy, Ted
21 Garish, in Washington and with Margaret Chu. Those take
22 place every Monday afternoon. So, there's a fairly high
23 level degree of discussions that are going on, as well as
24 some detailed discussions. The detailed discussions haven't
25 gotten into a lot of nitty-gritty yet because there's a lot

1 of detailed decisions that haven't been made. The groups are
2 together though. The construct is there to make sure that
3 the right people are in place to have detailed discussions as
4 decisions are made and that's encouraging.

5 My first discussion with the Board back in
6 September, I had been on the payroll with OCRWM for less than
7 a month and I think what I indicated to you was that I was
8 really green and that my first order of business was to learn
9 what the full scope of work was, to identify ways of managing
10 that scope of work in a coherent and inclusive fashion, and
11 then to build an organization around some of the decisions
12 that would be affected by that. I've done a lot of that and
13 we'll talk a little bit more. What I've moved out in is
14 creating a series of projects that will help develop the
15 infrastructure that we need.

16 And, transportation is kind of fun because for a
17 long time it was involved primarily in studies. We're
18 transitioning from doing a lot of background studies to
19 actually building an infrastructure and making the decisions
20 that will enable that infrastructure to get built. And, some
21 time further down the road, we will transition again from
22 building infrastructure to actual operations. Each of those
23 periods of time in the transportation system require
24 different skills sets and different approaches. The
25 management approach of organizing around projects is very

1 useful for this development of the infrastructure stage.

2 We'll get beyond that.

3 But, the DOE Order 413.3-1 is the order that
4 basically guides project management within the Department and
5 it has a very strict level or set of requirements for making
6 sure that you are inclusive in your decision making and that
7 you have significant review from all the affected parties and
8 that is what drove, as much as anything, the development of
9 our integrated project teams for the cask acquisition.

10 The Integrated Project Team membership includes
11 representatives from the business and technical disciplines.
12 We've got legal, financial, contracting, safety,
13 environmental and health, and other groups. So, again, the
14 approach that we are attempting is to be inclusive and
15 holistic, as was indicated earlier.

16 The project team members for our cask acquisition
17 project include folks from RW-30, the transportation group.
18 Thank goodness, it's our responsibility, you would expect us
19 to be involved. EM is involved, the environmental management
20 program. They are the group within DOE that's done a number
21 of--one of the groups that's done a number of spent fuel
22 shipments up to date and has a significant experience in both
23 the institutional relations aspects and in acquiring the
24 basic infrastructure both in terms of transportation service
25 providers and in terms of casks. EH, we've got them involved

1 to make sure that we are addressing the NEPA policy and
2 compliance issues appropriately. We've got Yucca Mountain
3 Project. So, the surface facility people have a play in our
4 acquisition and understand the acquisition approach that we
5 are taking and have some assurance that what we acquire will
6 be able to interface effectively with their surface
7 facilities. We've got Naval Reactors involvement, again
8 another group within DOE that has significant experience in
9 acquiring both the infrastructure and in conducting
10 operations for moving spent fuel. We've got the Nevada Rail
11 Project specifically involved in case a decision is
12 ultimately made that we will be doing shipments by mostly
13 rail. And, ME; ME is the organization within DOE that
14 actually has responsibility for this DOE Order 413.3 on
15 project management. And, finally, we've got General Counsel
16 involved because as much as tech weenies like myself, I'd
17 like to think that we are unconstrained in developing
18 infrastructure. There are a lot of legal considerations that
19 have to be taken into account as we move forward.

20 The items of primary interface with the repository,
21 the first one is the cask system envelopes; how the content
22 is going to be managed, how they're going to be loaded,
23 unloaded, what are the actual dimensions of the casks, what
24 are the lifting lug configurations. One of the discussions
25 that we had in our first meeting with the surface facility

1 group at Yucca Mountain was the concept. Since there will be
2 a range of cask sizes to handle the different contents that
3 we need to ship, the use of something like a shipping skid
4 that would be what the repository would actually use to
5 handle. So, one set of lifting mechanisms and interface
6 could be used for a variety of casks. And then, I would be
7 responsible for how to attach the cask to the skid. Again,
8 it's a concept that hasn't been fully developed, but it's one
9 way that we could address of having more uniform handling
10 equipment in the surface facilities despite the fact that we
11 would have a range of casks that would be used. That gets to
12 the cask and vehicle handling interfaces.

13 The shipper/receiver facility operating
14 requirements, the facility requirements, again I've mentioned
15 that the near-site transportation infrastructure study is
16 being revisited. We will do our paper analysis and extract
17 from that the elements that we think will be more critical in
18 updating actual utility information, and after we have that
19 initial paper review, we'll be looking more broadly and
20 hopefully interfacing directly with the utilities. But,
21 we're doing the same thing with the repository and looking at
22 what their surface facility capabilities would be. And, if
23 there are decisions that we can make early-on in the design
24 process that would help either them or us, we're both willing
25 to move a little bit one way or the other to accommodate an

1 effective system.

2 There will be a significant Nevada transportation
3 interface with the repository regardless of what decisions
4 are made on mode. If we wind up making a decision for using
5 mostly rail, there will be a significant interface of how the
6 rail line comes into the repository. Yesterday, you heard
7 that for the movements between surface facilities, they've
8 gone back to a rail system. There's been talk about whether
9 the gauge of that rail system would be the same as the gauge
10 of the cars coming into the site or not. If it's not, there
11 has to be a combination of both for the goods coming in for
12 the transfer point and then making sure that there's
13 capability of an effective interface where you do change the
14 gauge.

15 The FMP, again that's our Fleet Maintenance
16 Facility, and it's not just the cask maintenance facility
17 which is what Ian focused on, but also whatever rolling stock
18 we have, we would anticipate receiving some maintenance
19 there. If we wind up having mostly rail as our
20 transportation mode, there would be some routine maintenance
21 that we would perform. If it were more complex maintenance
22 or repairs to rolling stock for rail, we would probably
23 contract that out to a specialty outfit that does deal
24 primarily with rail rolling stock. But, there's a
25 significant amount of routine maintenance that would have to

1 be performed. I expect looking at the scope of the number of
2 shipments that we have that we will have a fairly robust
3 inventory both of rolling stock and casks. So, the
4 capability of this facility is going to have to be robust to
5 match it.

6 Canister interfaces, both for commercial and DOE
7 spent fuel and high-level waste, another interface area. The
8 waste characterization data, that applies to both the
9 certification of the casks that we would use, as well as to
10 the operating constraints within the facilities.

11 And, that pretty much covers the interface points
12 that we're looking at. I think some questions again, as I
13 indicated, that are likely to come up may be addressed better
14 as I go through the broader picture of the transportation
15 planning and how this interface piece fits into the bigger
16 picture of the projectized approach to building the
17 infrastructure that we've undertaken. But, I'm ready for
18 questions on this part of it right now.

19 ABKOWITZ: Okay. Let me ask the first question, if I
20 could. The IPT is an internal stakeholder group, is that
21 correct?

22 LANTHRUM: That's correct. It's the group that helps
23 frame our project management decisions internally and make
24 sure that we consider all of the internal requirements.
25 That's correct.

1 ABKOWITZ: Is there any external representation that you
2 would seek out or is that at a later stage in this?

3 LANTHRUM: There's a lot of external representation that
4 we'll be seeking out. Again, this Integrated Project Team is
5 to guide our cask acquisition process. I think again Ian
6 reflected that we've already sent out a notice in Fed Biz
7 that we are starting our cask acquisition approach and what
8 we've asked is all the viable cask vendors to come in and
9 talk to us about whether they have suggestions how we might
10 approach the acquisition of the assets that we will need, if
11 they've got some ideas about innovative design approaches
12 that might make the operations be more efficient. So, that's
13 one phase of it. In the past, the Office of Civilian
14 Radioactive Waste and EM have partnered in a group called
15 TEC. I think that was referenced with Bob Fronczak and
16 possibly John as members of this Transportation External
17 Coordinators working group. Some time this spring, we will
18 have another TEC meeting and that's a great opportunity for
19 other industry groups to interface with us. We have started
20 our interactions with the state regional groups and talking
21 about a range of transportation issues. Their primary
22 interest has been on the package performance study rather
23 than on the acquisition process, but those comments are being
24 incorporated. But, we do have a fairly inclusive program and
25 I'll talk about that on our institutional project later this

1 afternoon.

2 ABKOWITZ: Okay, thank you. Dan Bullen?

3 BULLEN: Bullen, Board. Just a couple of quick
4 questions. You mentioned the update of the report on the
5 infrastructure near the nuclear utilities that you have to
6 access.

7 LANTHRUM: Right.

8 BULLEN: It starts as a paper study and is going to
9 expand into, I guess, identification of--actually walking the
10 facilities, taking a look at the track, identifying what
11 needs to be done. Can you tell me the time frame that that
12 might be completed?

13 LANTHRUM: Well, I didn't say we were going to be
14 actually visiting the facilities because I'm not sure what
15 the allowances are going to be. There will be communication
16 with facilities. The first output of the paper review will
17 be--the initial near-site transportation infrastructure
18 included a lot of things that may not be critical. What
19 we're trying to do is to focus down on the critical elements
20 that will affect our transportation planning, particularly
21 for cask acquisition, for operations planning in the long-
22 range. We'll pull that portion out, package it in some
23 context, and I anticipate right now that the next step would
24 be to provide that information to the utilities and say this
25 is what we've got from 10 years ago. Is it still accurate or

1 have things changed? For the utilities that answer back and
2 say it's still accurate, we're pretty good to go. For the
3 ones that say things have changed, there will be another
4 phase where we will have to deal perhaps on a case-by-case
5 basis what the next step would be to update the information
6 appropriately.

7 Long before we actually make shipments, there will
8 be utility visits. We're way early in the process right now
9 and I would suspect between now and 2010 when we hope to
10 start shipments that there would be additional changes. So,
11 this review will not be the last of things. There will be
12 site visits before shipments are made. There will be an
13 awful lot of interaction with the utilities over the specific
14 casks they'll be using, to make sure they've got the
15 capability of loading them there. We'll be talking to them
16 about staging areas. Will they be able to load multiple
17 casks at a time? There will be significant interface before
18 shipments actually start.

19 BULLEN: Bullen, Board. Just a followup to that
20 question. I guess, my concern deals with the fact that we
21 heard this morning that right at the site gate is where DOE
22 has responsibilities to be able to get the things there. And
23 so, I was wondering you're trying to get your arms around how
24 big the challenge might be and that includes, you know, maybe
25 the infrastructure is already there and hasn't been changed,

1 but maybe it has. So, do you have any idea what kind of lead
2 time you're going to need to be able to accept or start
3 shipping in 2010 to start making the infrastructure
4 improvements that may be necessary or is that just a little
5 too premature?

6 LANTHRUM: I think it's premature. The type and scope
7 of those upgrades is going to vary from site to site.
8 There's been some discussion about the decision, as Ian
9 indicated, in France. They did the study of running a 20
10 mile rail spur actually into the La Hague facility. They
11 determined that with the time value of money and other
12 considerations that it made more sense to do heavy haul. So,
13 there may be sites that had rail access at one time that may
14 not have it now and the decision may be made to not provide
15 rail access. On the flip side, the decision may be for some
16 specific sites, particularly sites that have multiple
17 reactors at them where there's a significant flow of
18 business, maybe it would be worthwhile developing rail. So,
19 it's going to be an interactive process and it's going to be
20 on a case basis. Some sites may have various simple upgrade
21 requirements or none at all and those could be done very
22 close to the time that shipments would take place. Other
23 sites that have more significant upgrades or challenges would
24 take longer. That will be part of an overall operational
25 planning process where you deal with trying to marry the

1 sites and the corporate entities that own these chits for
2 when stuff gets shipped. Marrying those places in line with
3 the facility requirements to support those shipments will be
4 an ongoing process. And, I think that may actually get back
5 into the possibility of this contract renegotiation. If a
6 site has a priority and wants to ship something that the
7 infrastructure doesn't exist for and would be difficult to
8 develop, there may be some ongoing discussions and
9 negotiation about how that contract would be revised to
10 reflect reality.

11 BULLEN: Thank you.

12 ABKOWITZ: Bob Luna?

13 LUNA: Bob Luna, Board, Consultant. Gary, I have two
14 questions. One is there's been a lot of talk about Fleet
15 Maintenance Facility and I can remember since I'm one of the
16 gray-haired people in the room, I guess, that there was a lot
17 of time and money spent in the late '80s and early '90s on
18 fleet maintenance facilities and how to design them, where
19 they should be, etcetera. I was wondering if you've been
20 mining those studies as preliminary to the work that you guys
21 have been doing?

22 LANTHRUM: Absolutely. In fact, the report that's been
23 done on siting options tapped heavily into the work that had
24 been done in the past. And, we will tap in--those reports
25 were just on siting options. The capability options study

1 also is tapping into work that's been done in the past,
2 informed by the conditions of things currently. One of the
3 things that has moved significantly from the previous reports
4 is the more advanced development of the concepts for the
5 surface facilities at the repository. That feeds into the
6 decision and that was not significantly part of what was done
7 before.

8 LUNA: A followon. I was interested in your comments on
9 cask handling at the facility and the discussion of having a
10 skid so that you could handle various casks. The question
11 that immediately leapt to mind was as the guys who are going
12 to be specifying what the casks look like, how big they are,
13 how much they can hold, it seems to me that you ought to be
14 able to specify sort of a universal handling arrangement for
15 the casks so you don't need a skid at the repository so you
16 get a uniform activity. I think that that's what the
17 Transnuclear--the people who run La Hague required when they
18 built the reprocessing facility there. They'd accept any
19 cask as long as it fit in this hole and had these handling
20 capabilities. It seems to me that since you're not going to
21 be using or may not be using a commercial cask that you ought
22 to be able to do that as the driver in this bus.

23 LANTHRUM: The discussions are ongoing. No final
24 decisions have been made. The current consideration of using
25 a skid is something that was brought up by the repository,

1 not by the transportation group. And, we're trying to
2 accommodate our customers in the transportation arena. And,
3 if a skid is something that fits into their thought of the
4 flow of work in the repository, whether it would only be used
5 to offload from whatever the transportation conveyance was,
6 then they would have something more uniform after that.
7 That's going to be part of the ongoing discussion. If we
8 didn't have to have an additional component in the system,
9 that would make me happy. But, if an additional component in
10 the system serves the customer better, then I'm also willing
11 to consider that.

12 ABKOWITZ: Okay. Thank you, Gary. Just as a reminder,
13 he will be appearing for an encore performance later on this
14 afternoon and we can continue this discussion.

15 We are going to have a brief public comment period
16 before we break for lunch.

17 We have three people who are scheduled to make
18 those comments at this point in time. We will start--four,
19 we now are up to four. I apologize if I butcher your names.
20 We're going to start with Gracian Uhalde and then Sally
21 Devlin, Bill Vasconi, and Joe Fallini. In the interest of
22 time, I'd like to ask each of the public commenters to limit
23 their comments to no more than five minutes. In making your
24 comments, if you would approach the podium and use the podium
25 microphone, that would be appreciated.

1 UHALDE: Good morning. I'm Gracian Uhalde and I'm very
2 happy to--until about a week or 10 days ago, I didn't even
3 know there was a Board like this out here. To give you a
4 little background, I'm a third generation rancher in White
5 Pine, Nye, and Lincoln Counties with a fourth generation. I
6 have four sons, two of which are home now and two that are
7 still in college. I don't know how you say it. I have an
8 extensive background with DOE and their predecessors, the
9 Atomic Energy Commission. I'm a survivor of what they termed
10 in those days, which we didn't know until they released the
11 information, 40 off-site surveillance families. I've seen it
12 snow dirt at the ranch in July or when they had the Sudan
13 test. Some of the results of what I've seen and what our
14 family has gone through over the years and it's hard to keep
15 emotion out of it is I've had a tumor myself. My sister had
16 an unrecognizable brain tumor. The doctors in San Francisco
17 sent it off. I had a neighbor friend, he lived 12 miles
18 away, that died at a very young age at either nine or 12 from
19 leukemia. So, I think my background with DOE probably--well,
20 let's put it this way, I've had enough of them.

21 Okay. As one of 40 surveillance families, we
22 weren't told about everything in the beginning. It was all
23 classified. That went on for many years and then finally it
24 was opened up. Like I say, I've seen it snow dirt at the
25 ranch. I really question anything they say. Let's just cut

1 to the chase. My main point to you people is I'm going to
2 put a heavier burden on you. There are people's lives out
3 here that are depending on everything you do and say. I
4 don't think that politically--you people need to ask the
5 tough questions and don't just fall for the politically
6 correct answers. I mean, you've got to take the ball.
7 You've got the ball and you've got to take it and make it
8 happen right. And, I really do appreciate the fact that
9 you're here.

10 Just to give you an example of one of these things,
11 the original geologic requirements for a repository was that
12 it had to be 90 percent geological barrier. Now, supposedly,
13 that's been changed to six to eight requirements listing
14 yesterday or what I heard yesterday were manmade. Well,
15 Yucca Mountain hasn't changed. I think the only thing that's
16 changed is the definition of safe. Maybe I'm wrong, but I
17 think we're seeing a lot of weasel words and things changing
18 --the rules are changing as the game goes on.

19 To give you an example of prime DOE, when they made
20 the request from the BLM to withdraw acreages, they said they
21 needed 308,000 acres. But, in the withdrawal itself, they
22 grabbed 641,000 acres. Maybe that's for study purposes or
23 whatever, but they're not--they're already starting out not
24 doing what they say they're going to do. And, this is just
25 the beginning. And, I think it's up to you people to ask the

1 tough questions all the way through and get the right
2 answers. DOE and their predecessors have created
3 Frankenstein and now they want to bring the son of
4 Frankenstein home. It's that simple. That's the bottom
5 line.

6 And, I hope to comment later. I've got many
7 million thoughts running around in my head today that I can't
8 get them all out. But, I'd like to comment later this
9 afternoon, too. But, I'd just like to give you that thought,
10 and believe me, the burden is on you.

11 Thank you very much.

12 ABKOWITZ: Thank you. Sally Devlin?

13 DEVLIN: Good morning again and again welcome to Nevada.
14 I just want to say Linda said we might have the meeting next
15 year at this time in Pahrump and I will only suggest
16 something to you, gentlemen and lady, and I notice that
17 everybody is in the uniform. If you come to Pahrump in the
18 uniform, they will think you are INS or IRS and they will
19 shoot you. So, please, always be comfortable when you come
20 to Pahrump, Amargosa, or Beatty. That is our object and we
21 are very informal and we'll have a lot of fun for you.

22 The other thing I did want to embellish before I do
23 this afternoon's presentation is something--you know, I'm a
24 toastmaster and very proud of it. And, the problem I hear on
25 occasion and I haven't scolded you for a long time is your

1 tenses when I hear when Yucca Mountain is, not if, might, and
2 all those things. So, please, be a little conscious for
3 those of us who are not very happy about Yucca Mountain
4 because it is personally offensive. It is not a done deal.
5 I hope it will never be a done deal and I think alternatives
6 are what are needed and we will talk about it. So, please,
7 be a little bit sensitive about your language.

8 Now, the third thing, of course is fun. And, I do
9 want you to know why I asked John Arthur for \$25 million for
10 a hospital. Nye County is considered one of--there's 17
11 counties in Nevada. There are only two counties with over
12 400,000. That is Washaw County and that is Las Vegas.
13 That's Clark County. The other counties, Douglas and so on
14 and so forth, they have less than 100,000. And, all the laws
15 were set up for Reno actually when I lived there in the '60s
16 and '70s. But, the most important thing is that now the
17 state is totally dominated by Las Vegas. And, of course,
18 Pahrump and Nye County are very much of a bedroom community.
19 We have over 40,000 living there. I don't say they're
20 permanent residents with our escapees and so on. But,
21 anyway, the rest of the country--and it is escapee. And, the
22 rest of the county, our county seat is 200 miles away in
23 Tonopah with less than 2,000. And, of course, Beatty and
24 Amargosa, Amargosa is growing along with the 15,000 cows that
25 are there. So, lots of stuff that you'll read in my funny

1 report.

2 But, what is most important is every year I do for
3 the State of Nevada what they call the Seer (phonetic)
4 Report. And, it's sent to me by--oh, it's very thick--from
5 the National Cancer Institute. And, I do it for the state
6 just so they will know what the cancer rate is in Nevada. Of
7 course, it's all fallacious because we never had a health
8 department, we never had any of this stuff. Maybe some
9 girlfriend is in the room collecting data because I have no
10 idea and I've asked them where did you get the data. But,
11 anyway, included in that were the Valid leukemias.

12 But, what was kind of fun about it when I do my
13 inimicable letter to the state is that we in the cow
14 counties--and we are a cow county, all 18,300 square miles,
15 Mineral, Esmerelda, Inyo who we protect, that's California,
16 Mineral, Eureka, and of course, White Pine--we're very
17 sparsely populated. We do not have coroners. Did you hear
18 the magic word? And so, when you die, the sheriff comes out
19 and he is the deputy coroner. And, my husband died 11 years
20 ago of cancer. And, when the sheriff came out and took his
21 driver's license and his pills, the death certificate said he
22 died of coronary heart failure. So, everybody in the rules
23 dies of coronary heart failure because there are no medical
24 facilities and because there aren't any medical facilities,
25 there aren't any coroners. So, now, you know how things work

1 and it's kind of funny. Everybody dies of coronary heart
2 failure. So, we do not have any reporting. And, there are
3 lots of people. And, it is a major problem. I'm not even
4 talking about serious epidemics or pandemics or all that
5 stuff that might happen. I am talking about what the
6 physical processes are.

7 So, I do want you to have a laugh on that that our
8 deputy coroners are sheriffs or the coroners. And, of
9 course, we have then the FBI in because of the voter scams
10 because everybody that died, they vote and you vote the
11 graveyard in Nye County. What else can you do for fun?

12 With that, thank you.

13 ABKOWITZ: Thank you, Sally. Bill?

14 VASCONI: Good morning. Bill Vasconi, a resident here
15 in southern Nevada. I wasn't going to speak this morning. I
16 was just going to play it like a campfire. I was going to
17 sit back and keep warm and listen without getting my feet in
18 the fire. But, I may not be here this afternoon. So, I
19 thought I'd just say a couple things.

20 I've been in Nevada for 40 years and 17 of those
21 was at the Nevada Test Site. I started out there as a
22 radiological technician monitor and went into NRDS which is
23 Nuclear Rocket Development Station. And then, the last 10
24 years was a general foreman during that period of time when
25 we was testing our nuclear weapons. As most of you know,

1 there were 928 nuclear devices that were detonated at the
2 Nevada Test Site. 820 of them were underground. So, we have
3 quite a number of repositories out there at the present time.

4 I served several years as chair of Nevadans for
5 Nuclear Safety and Benefits, safety being our primary goal
6 and, yes, equity issues, benefits for the citizens of Nevada
7 are also up on the list. I am a small business owner here in
8 the Valley. I do appreciate the Nuclear Waste technical
9 Review Board for holding their meeting here in Las Vegas.
10 I've had an opportunity to tour Prairie Island on several
11 occasions and Monticello and I've taken some folks back there
12 with me thanks to the efforts of some folks here in the
13 Valley to get those tours on. So, I do have a good knowledge
14 of how those plants work and I viewed your storage areas. I
15 haven't toured the WIPP Project as of this time, but I hope
16 to in the future and I've read and heard a lot of good things
17 about their transportation efforts and their outreach
18 programs in training first responders.

19 I do support the DOE's announcement of the Caliente
20 corridor. DOE has their work cut out for them. It's a
21 tremendous endeavor, but the route does keep the high-level
22 and spent fuel shipments out of Nevada's major population
23 centers of Las Vegas and Reno. Reason, resolve, research.
24 We need to see this policy through to a sound safe resolve of
25 this nation's nuclear issues.

1 In conclusion, I appreciate your continued
2 involvement as you play an important role in validating and
3 protecting our health and safety. When it comes to health
4 and safety, that's something we can all support and agree
5 upon.

6 Thank you.

7 ABKOWITZ: Thank you, Bill. Our final speaker is Joe
8 Fallini.

9 FALLINI: Good morning. My name is Joe Fallini. I'm
10 part-owner of the Twin Springs Ranch which is a family
11 operation. It's in its fifth generation now. Our ranch
12 started out in the 1860's and we're some of those downwinders
13 and guinea pigs and whatever they wanted to do to us.

14 The first thing I'd like to bring your attention
15 to, when the atmospheric bombs were going off, I was
16 developing pictures at that time as a kid. All of my film
17 was destroyed by the radiation. I tried to get pictures of
18 the bombs and we couldn't. We had a school there at the
19 ranch and some AEC people came up. They had a doctor with
20 them and I presented him with this problem. And, he says,
21 well, here's what you have to do. I explained what happened
22 and he says, well, he says, have you got any lead around
23 here? Well, we had quite a bit of lead around the place
24 because we poured bearings and stuff with it for the
25 windmills and stuff. He says you take a put a lead layer in

1 the bottom of your deep freeze. You put your camera in it,
2 you put lead around it, you put lead on top of it, and you
3 don't dare open up that up until your geiger counter is down
4 where it won't wreck your film.

5 So, I've probably got the only true pictures that I
6 know of of what a fallout cloud looks like coming over the
7 ranch. I'm going to pass these out to you people and you can
8 pass them around and you can see it looks pretty damn
9 devastating which it was because the members of my family had
10 a cousin that died. They had another cousin that had cancer
11 all over her lips and stuff. She's still dealing with that.
12 And, our neighbors, all their hair fell out, one of the
13 ladies. And, typical, you know the leukemia, the cancer
14 story, and things of that nature. I would like to make one
15 comment. Probably, the reason Gracian and I are here is
16 because our parents made us stay inside when the radioactive
17 cloud was out. I think that's probably the only reason I'm
18 here at this time.

19 I'd like to start these pictures around and then
20 I'll go from there.

21 (Pause.)

22 FALLINI: Another thing that I'd like to tell you about,
23 we didn't know anything about it. I was surprised this
24 morning to find out that DOE had went to everybody and found
25 out all the problems. And, everything was taken care of in

1 an impact statement. There was 21 hearings. We never got
2 invited to any one of them. We didn't get an invite through
3 any other source. We have a ranch of 363,000 acres. And,
4 they're wanting--made a proposal withdrawal which was in the
5 Federal Register on December 29th, 1903. We obtained that
6 Federal Register and started plotting on it what was actually
7 happening to us. Well, sure enough, you know, they told us
8 there's 308,000 acres. Well, I plotted this out and there's
9 641,000 acres. Now, that is kind of bad, I think, to start
10 off and tell people one thing and then turn around and have
11 it just exactly opposite.

12 This is a copy of my ranch which I'll turn around.
13 You'll see the railroad that's going through it. They said
14 it's a mile wide. If you look at it in places it's five
15 miles on the withdrawal. I don't know why we was never
16 notified of this. Now, it comes back to the same old story.
17 You know, they'll tell you one thing and something else is
18 being done.

19 Another thing that I'd like to relate to is when we
20 was in the atmospheric shocks, they came out there. We had a
21 school there. My father was there. And, when they came out,
22 well, one of the doctors came out and the one that got us
23 aside and told us about the radiation on the film, he says
24 you guys better get a geiger counter. Well, we got a geiger
25 counter and the atmospheric shocks continued. They continued

1 and we went out and they had some people out there checking
2 it and my father goes out and he says it's pretty high in
3 radiation today, isn't it? Oh, no, we don't have any
4 radiation. My father said, well, let's check your counter
5 against my counter. So, he went and checked counters and,
6 all of sudden, yeah, we did have radiation. You couldn't
7 even turn the damn thing on on the third scale. It would
8 just come up and peg. So, now, I guess, we got told another
9 story. There wasn't any radiation, but there sure as hell
10 was.

11 And then, we found out later they was going through
12 the country looking all over the country and they was running
13 up and down the roads and everything and we asked them what
14 they was doing. Well, we're trying to find plutonium
15 pellets. Did you people know that the first dirty bomb was
16 made by the AEC when they clad their atomic weapon in
17 plutonium pellets, set it off, and we're up probably right
18 east of Tonopah, and they was going around trying to find
19 these plutonium pellets. Now, that's another story. Okay.
20 So, we ended up with a dirty bomb. Anybody think, well, the
21 United States wouldn't cause a dirty bomb, would they? Well,
22 there is goes, you know.

23 Then here, right down the line, you know, they keep
24 telling us this and then everything is different. We had a
25 radiation monitor set up at our ranch. It had a scale on it

1 with a chart. And, that chart--you remember Chernobyl.
2 Well, I went out and I noticed--I don't know whether it was
3 one or two days later, I seen a spike on the monitor. And,
4 one of the guys come in and I says what's this spike? And,
5 he says, oh, it's Chernobyl. Well, we learned later it
6 wasn't Chernobyl, at all. It was venting the tunnel right up
7 here at the test site.

8 Now, all these things just keep coming down and
9 keep coming down on us. They tell us about--oh, boy, you
10 people, they tell you one thing and give you just exactly the
11 opposite. I'm getting kind of tired of it myself. I'm going
12 to pass this map around and I'll show you the mile wide
13 route. Here's the Federal Register paper. You can check
14 with it if you want and see what we plotted on our ranch.

15 (Pause.)

16 FALLINI: The one thing that I would like to tell the
17 DOE, the Atomic Energy Commission at one time, the AEC, and
18 that was changed in 1977, my personal opinion, the reason it
19 was changed was to get rid of the agency so there couldn't be
20 any repercussions on lawsuits and stuff. Then, it was
21 changed to the DOE. So, all these things just keep coming
22 down and coming down and here I thought, well, they haven't
23 even picked out a method of transportation. And, they said,
24 oh, it could be trucks, it could be rail. Well, after today,
25 it looks pretty much like rail to me. When they said they

1 haven't chosen the route, it looks pretty much like the route
2 has been chosen to me because I don't see any other Federal
3 Register notices that shows anything, but the Caliente
4 corridor.

5 If we go back and we start looking at the cost of
6 this thing, it's approximately just using the DOE's figures,
7 it's around \$300,000 a mile to put a railroad in. Well, this
8 struck me kind of funny, too, because, you know, then why are
9 we going to take that railroad and give the radiation a trip
10 around the country? It doesn't give a damn if it's run
11 around the country. It can't see. Now, here we go to our
12 route that goes through the middle of our ranch. It's 308
13 miles long. Okay. You can go down through the Chalk
14 Mountain one and it's 100 miles shorter. Well, 100 miles
15 times \$300,000 is quite a bit. If you look at these routes
16 below Las Vegas on the other side which doesn't come through
17 Las Vegas, there's 113 miles and 199 miles. Now, common
18 sense would tell me if this stuff was that bad, you'd want to
19 get it there the shortest way possible.

20 Another thing that I can't understand, how come
21 when we go through Nevada, they tell you one mile and you
22 look at the corridors of the railroads all over the United
23 States--well, what I'm saying if they need a mile here, we
24 damn well need a mile all the way across the United States
25 from every one of these places where they're talking live

1 radioactive waste and the spent fuel rods. Why should we
2 just be a mile wide and every place else--I believe some of
3 them are only 45 foot or so. We seen some pictures this
4 morning where they had a railroad with a chain link fence on
5 it and that didn't look like a mile wide. Why are we being
6 punished for that?

7 Then, another thing that we've done, we looked at
8 that map. There hasn't been one penny put into our ranch by
9 the Bureau of Land Management. We put in over \$1 million
10 worth of water improvements. This railroad goes right over
11 the top of a whole bunch of them. I don't know. We gather
12 cattle with a helicopter. I'm a helicopter pilot and I'm
13 sure there will be restrictions on over the railroad and
14 they're going to put this railroad through. I'm sure it's
15 going to be fenced. My cattle are going to be fenced off of
16 water on one side and maybe right over the top of the source
17 of the water or the end of the water developments.

18 Now, if they was talking about mitigation, it looks
19 like they would have came to us and asked us, but, no, they
20 did not do that. We had to read it in the paper. Now, if
21 they're doing your job, DOE, to come out and notify everybody
22 that this is going on and you want to know what's going on,
23 why weren't we notified? Why were we just on the back
24 burner. We were just somebody out there. I looked through
25 some of these things and it kind of made me mad. I paid

1 700,000 bucks for an error with Internal Revenue Service
2 because I owned something out there. Now, all of a sudden, I
3 look in the papers and, oh, the wilderness people, it's going
4 to affect them. Oh, and it might affect the mining people,
5 you know. And, it's going to affect some archeological
6 sites. And, what the hell happened to the rancher? I guess,
7 it doesn't affect him. He's the owner of the thing. Why is
8 this so?

9 Maybe, we ought to get our ducks in a row here and
10 start going out and get the true meaning of what this thing
11 is doing to the State of Nevada. I don't know why we got it
12 in the first place, but I can surely tell you I think it's a
13 cut and dried deal. I think them sitting up here today
14 telling you that maybe we don't want rail, we don't want to
15 give our radioactive waste to tour through the country, maybe
16 we just want to get it there. And, if you have to get it
17 there, let's get it there in the shortest and the best way we
18 can. Why impact all these people? The first thing I always
19 find out about a government agency, if they want something,
20 they'll go bribe the county officials. Well, Nye County.
21 Oh, yeah, Nye County, I think it's 56 or 57 million bucks
22 they're going to get out of this, you know. Well, what is a
23 rancher going to get out if they're put out of business?
24 Like I say, I'm pretty perturbed over this whole
25 thing. Why can't we cut up and tell the truth? When we come

1 to these people, tell them the truth, don't feed this stuff
2 about it's only 800,000 acres, when it's 240. Why don't we
3 tall them the truth about it? I'm not too sure that this
4 just isn't a meeting like most of the things to tell you what
5 they're going to do. Maybe they've already done it. It
6 looks to me like they've chose the rail route. It looks like
7 they've chose the one through my ranch.

8 Now, what about the trucks? Evidently, they've
9 shipped over 600 metric ton of this stuff and never had any
10 accident. They've got to ship another 600 ton. Well, why
11 can't it go on the way it was? Why do we have to come in and
12 devastate a state, take the tax base away from the people of
13 the counties that pay the taxes? I'm a little bitter, yes.
14 I'm bitter.

15 Thank you. I appreciate you letting me speak
16 before this Board.

17 ABKOWITZ: Thank you, Joe.

18 Just as a reminder, there will be another public
19 comment period late this afternoon. Because of the schedule,
20 but also I'm aware that everyone needs to take a break and
21 also get fed, we're going to reconvene promptly with the
22 emphasis on the word "promptly" at 1:15.

23 Thank you.

24 (Whereupon, a luncheon recess was taken.)

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A F T E R N O O N S E S S I O N

5

ABKOWITZ: We're ready to continue our program today which, as you know, is very aggressive. So, we're trying to get things going here as quickly as possible.

8

If you'll recall from the overview presentation this morning, our interest is in hearing not only from those folks who will have custody of nuclear waste shipments and spent nuclear fuel and high-level waste shipments should the repository come into being, but we're also interested in those folks who have oversight responsibilities and are affected stakeholders along the proposed transportation route.

16

And, if you'll also recall, we talked about kind of the national infrastructure and corridor issue and then the need to focus in more specifically on the State of Nevada's concerns, and then within the State of Nevada, hearing from counties and other stakeholders at the community level.

21

So, the program is now going to shift into this next session on state and local governments. We're going to hear from three different perspectives, as I mentioned; the corridor state perspective, the Nevada perspective, and the local government perspective.

1 And, speaking on behalf of the corridor states will
2 be Thor Strong. Thor currently serves as the Acting
3 Commissioner of the Michigan Low-Level Radioactive Waste
4 Authority which is an office within the Michigan Department
5 of Environmental Quality. He's served as the Associate
6 Commissioner of the Authority since 1992, prior to his
7 current assignment. Thor has also served as Michigan's
8 representative to the Midwestern Radioactive Materials
9 Transportation Committee and he became chairperson of that
10 Committee this month. He also serves as Michigan's
11 representative to the Low-Level Radioactive Waste Forum and
12 serves as an Emergency Management Coordinator for the
13 Michigan Department of Environmental Quality and as
14 Michigan's representative to the EPA Region V Regional
15 Response Team. As a representative of the Midwest Council of
16 State Governments, we have invited Mr. Strong here today to
17 give the perspective of corridor states.

18 I might point out that the Midwest Council of State
19 Governments is one of the handful of regional enterprises
20 that have had a long and successful history of interacting
21 and effecting issues that relate to the transportation of
22 nuclear waste and spent nuclear fuel and other nuclear
23 wastes.

24 Thank you.

25 STRONG: Thank you for that introduction and thank you

1 for the opportunity to be here this afternoon and to share
2 some thoughts on behalf of midwestern states and perhaps
3 corridor states, in general.

4 This is going to be sort of a low key presentation,
5 an old-fashioned presentation without Power Point. The bad
6 news is that if I say anything noteworthy, you're responsible
7 for taking the notes. The good news is that you'll have one
8 less thing to stuff in your briefcase and I shouldn't
9 experience any technical difficulties in the presentation.

10 I want to start with a little story. Just about 10
11 miles south of Lansing, Michigan, the capital of Michigan, is
12 the small town of Potterville. Potterville is a town of
13 about 2,000 folks. On Memorial Day of 2002,
14 uncharacteristically a beautiful, sunny, warm Memorial Day in
15 Michigan, most of those 2,000 residents were outside enjoying
16 the weather, cooking on the grill or mowing the yard and
17 these sort of things.

18 At about that time, a freight train coming in just
19 crossing into the town limits, derailed. About 34 cars of a
20 58 car freight train came off the tracks and ended up in a
21 big heap right inside the town limits. The 34 cars that came
22 off the train included about half a dozen propane tankers and
23 several tankers filled with sulfuric acid. The 2,000
24 residents of Potterville were evacuated from town that May
25 afternoon and the whole town was empty for more than five

1 days while hazmat crews came in to unload the propane, to
2 clean up some sulfuric acid that was spilled and generally
3 clean up the mess along the tracks.

4 Well, now, as you may remember, right about that
5 same time through the spring and early summer months of 2002
6 was when Congress was debating the designation of Yucca
7 Mountain as our repository. The Lansing State Journal, the
8 main newspaper for our capital city, published an editorial
9 that recommended that the Senate reject designation of Yucca
10 Mountain citing transportation concerns as their primary
11 issue and the primary reason for that recommendation. The
12 paper referred to that Potterville incident and posed the
13 hypothetical questions asking what if that train had been
14 transporting spent nuclear fuel rather than merely propane
15 and suggested that the residents would have been faced with--
16 and I'm quoting here--"they would be faced with a devastating
17 nuclear nightmare."

18 Well, I did write the paper and try to clear up
19 some misconceptions, but I share this incident because I
20 think it helps illustrate where state agencies, such as mine,
21 find ourselves in this whole issue. Somewhere in between the
22 DOE and the utilities trying to get a repository operational
23 and get the spent fuel shipped to it on the one hand, and on
24 the other, a skeptical and fearful public along with a media
25 that's not very well informed. Even hazardous materials

1 professionals seem to view radioactive materials as something
2 different and more mysterious than other hazmat materials. A
3 couple of years prior to that when Michigan was looking at a
4 shipment of MOX fuel and it became quite a contentious
5 political issue, one of the Detroit papers ran an article and
6 it quoted a Michigan State Police hazmat training officer, no
7 less, and he was quoted as saying, "Radiological emergencies
8 are unique. We don't practice for plutonium. Unlike
9 chemicals, these are hazards you can't see, smell, or taste."
10 I always wondered how often he goes out and tastes hazardous
11 materials. But, nonetheless, that's what he said.

12 The agenda heading above my name says "Corridor
13 States Concerns", and indeed there are a number of issues and
14 concerns that I feel need to be addressed to assure safe and
15 secure transport of spent fuel. But, speaking for Michigan,
16 we have three nuclear power plants, three operating nuclear
17 power plants, one of which has already had to adopt dry cask
18 storage, and a fourth plant that's in the midst of
19 decommissioning. That Big Rock Point Nuclear Power Plant is
20 well-along in its decommissioning. Within two years, all
21 that will be left at that plant site will be a dry cask
22 storage facility. So, speaking on behalf of Michigan and I
23 think from many other states, we share the goal of wanting to
24 get a repository operational and getting fuel into it.

25 You've heard and we're all aware of the impressive

1 safety record that transporting radioactive materials can
2 boast. But, the concern amongst the public still remains and
3 I think we'd all agree that the Yucca Mountain shipping
4 campaign will be, at least, from a magnitude standpoint
5 unlike anything we've ever done before. Within a couple
6 decades, I presume that the shipment of spent fuel may be
7 seen as a commonplace and routine activity, but initially it
8 will probably be anything, but routine.

9 The states along with their municipalities are on
10 the front lines of that. We want to do our part to assure
11 the development of a safe and secure transportation system.
12 What I have to present are just some ideas that I think we
13 need to have accomplished in order to be able to go to our
14 citizens, to our government officials, and to our media to
15 show that we are indeed prepared to oversee such shipments
16 and to be able to respond effectively to any incident or
17 accident.

18 A number of things that I'm going to share have
19 already been spoken about earlier in the day. So, I'm going
20 to gloss through some of this. But, first of all, and most
21 importantly, is that we all work together. OCRWM's strategic
22 transportation plan that was issued last November calls for
23 "a collaborative transportation planning process", and indeed
24 I think this sense of working together is the very most
25 important thing and the key to everything else.

1 There have been a number of shipping campaigns over
2 the past number of years, and from the perspective of the
3 midwestern states, some of these have been very good, some of
4 them have been bad, and some of them have been down right
5 ugly. The primary difference between those, I think, has
6 been the degree to which a collaborative planning process was
7 followed.

8 One of the best examples that I can cite from the
9 midwest standpoint of a good working relationship was in
10 regard to a shipping campaign of foreign research reactor
11 fuel and I believe we'll hear a little bit more about that
12 this afternoon. But, I can give it kudos by saying that DOE
13 came to the midwest states more than two years in advance of
14 those shipments. They developed a very comprehensive
15 transportation plan. They gave the midwest states a great
16 deal of opportunity to participate in its development, to
17 share concerns, to share perspectives, and they were willing
18 to consider those. They even included us in a cooperative
19 way, collaborative way on the back side in terms of
20 developing a lessons learned document. Another positive
21 example is the WIPP Transportation Plan and Program
22 Implementation Guide. The WIPP Transportation Plan is fairly
23 routinely held up as the model that other transportation
24 plans ought to base themselves on.

25 And, the most glaring example of a bad

1 transportation plan was in regard to a one time shipment of
2 MOX fuel that was to be shipped from Los Alamos up into
3 Ontario, Canada, I believe, back in--it happened in the year
4 2000. With that campaign, I couldn't even get my phone calls
5 returned when I would call the particular DOE office that was
6 in charge of that shipment and there was absolutely no effort
7 to work with the states on that campaign.

8 So, number one, I guess, what I'm suggesting is
9 let's commit ourselves, all of the various stakeholders and
10 parties, to work together. We in the midwest were very
11 gratified to hear of OCRWM's commitment to this collaborative
12 approach, and even more specifically, were gratified of their
13 recognition of this regional planning approach, the regional
14 planning mechanism that's made possible by those four
15 regional cooperative agreement groups of which the midwest is
16 one of them.

17 We've heard a little bit about transportation mode.
18 Indeed, DOE has looked at the issues of mostly truck versus
19 mostly rail scenario. Everybody is sort of, I think,
20 assuming, presuming that the decision will soon be made on
21 behalf of the mostly rail approach because of the
22 efficiencies and economies of scale that rail offer. But,
23 indeed, this is a decision that has to be made soon because a
24 lot of other things hinge on it.

25 From the perspective of state agencies and state

1 response crews and this sort of thing, rail shipments can
2 possibly create some complications that are not present for
3 highway transport. Because rail lines and rail yards are
4 private property rather than public thoroughfares, there is
5 some--it could be problematic for states to conduct
6 inspections, to provide escorts, and some states have even
7 expressed some concern about their ability to respond to an
8 incident if it's on--if it occurs on railroad property. So,
9 rail carriers are going to have to be open to and accepting
10 all the involvement by state and local radiological agencies,
11 emergency response agencies, and that sort of thing.

12 A moment ago, I mentioned the WIPP Transportation
13 Plan as being a model and there have been, I think, a couple
14 thousand shipments to WIPP to this point, all of them by
15 truck. However, DOE right now is looking at the possibility
16 of a rail shipping campaign to WIPP. Over the next several
17 months, those four regional cooperative agreement groups are
18 going to be looking at developing a set of rail safety
19 principles. The intent, in essence, is to have a rail
20 companion guide to mirror the transportation plan that's been
21 developed for WIPP to this point which is strictly highway
22 based. One of the principle reasons for the midwest to be
23 involved and to be interested in this project, this WIPP rail
24 project, is because we feel it will set a precedent for the
25 eventual shipment of spent fuel to Yucca Mountain by rail.

1 We've heard quite a bit this morning about
2 dedicated trains. I won't go into that any further except to
3 acknowledge that the states in large part are in favor of
4 dedicated trains. The one rationale for dedicated trains
5 that I did not hear this morning was the recognition that
6 with a dedicated train, you don't have other hazardous
7 materials riding alongside; hazardous materials, such as
8 propane.

9 We heard a little bit about routing this morning,
10 too. Corridor states are going to be very interested in
11 being part of routing decisions, whether the transport is by
12 rail or by highway. Our loading options are fewer if
13 transportation is by rail than by highway, but nonetheless,
14 states feel like they have the benefit of ground truthing
15 routing decisions and that our active involvement in routing
16 decisions will benefit everyone.

17 We want to be involved with those routing decisions
18 well in advance of shipments, as well. We feel that those
19 decisions ought to be made several years, at least three
20 years, in advance of a shipping campaign in order to give
21 ourselves the chance to focus our training efforts.

22 And, finally, on the issue of routing, we've long
23 maintained that DOE must retain the responsibility for those
24 routing decisions and retain the responsibility for
25 interacting with the states and local governments on those

1 decisions. We would not like to see those responsibilities
2 passed off to carriers or to other transportation
3 contractors, recognizing that, yes, indeed, DOE is obligated
4 to privatize much of the transportation program, but there
5 are some responsibilities that they should just not simply
6 pass off to contractors and routing is one of those.

7 How many of you remember the movie Jerry McGuire?
8 How many of you remember sort of the one classic line by the
9 actor, Cuba Gooding, in that movie? Remember what it was?
10 "Show me the money."

11 Section 180(C) funding, you heard a little bit
12 about that this morning. Section 180(C) is a provision
13 within the Nuclear Waste Policy Act that requires DOE to
14 provide funding and technical assistance to the states to
15 help us prepare for and plan for eventual shipments to Yucca
16 Mountain. Well, the states did work with OCRWM back in the
17 mid-1990s to develop a set of draft policies and procedures
18 for implementing Section 180(C) funding. That policy
19 document though has been kind of sitting on a shelf since
20 about 1998 and we think it's a pretty high priority to get
21 that policy back out, dust it off, and update it and look at
22 it again. One of the provisions of that draft policy was
23 that it provided for the issuance of planning grants to
24 affected corridor states starting four years prior to the
25 commencements of shipments. So if, indeed, we're looking at

1 shipments by the year 2010, then finalizing that policy needs
2 to be undertaken soon because those first initial planning
3 grants ought to be coming to states by the year 2006.

4 One other aspect of 180(C) funding that is
5 important for DOE to recognize is that states are not all
6 going to approach issues of transportation planning,
7 training, and emergency response all in the same way. That
8 180(C) policy should maintain lots of flexibility for the
9 states to be able to use those funds in ways that they deem
10 most appropriate to meet their particular needs.

11 Going off point just a little bit in regard to
12 funding, as I mentioned earlier, that hazmat trainer who was
13 quoted as making comments about rad materials being so much
14 different, I continue to be surprised at how little
15 radiological response is built into general hazmat training
16 by states and by municipalities. There is a real need to
17 institutionalize that training. At this point in time when
18 communities all across the country are looking at and
19 concerned about the prospects for dirty bombs and other
20 radiological terrorism kind of things, I think there's an
21 opportunity to provide some more institutionalization for
22 radiological response training through either Homeland
23 Security funding and a concept that some of the states were
24 trying to push DOE several years ago and that being a
25 consolidated grant concept. Rather than each individual DOE

1 Office doling out small bits of money to states for
2 particular shipping campaigns, the consolidated grant concept
3 would sort of be a more umbrella approach to providing funds
4 for the states.

5 You also heard earlier about full-scale cask
6 testing. I think most states are very fully supportive of a
7 new round of full-scale cask testing. First, from a
8 technological standpoint to indeed validate the computer
9 models that are used to test casks and to certify casks for
10 shipping, but also and perhaps more importantly from a state
11 perspective, to be a way to boost public confidence in the
12 ability of those casks to withstand major accident scenarios.
13 There isn't a lot of universal agreement on the extent of a
14 new cask testing protocol.

15 There is some disagreement on such questions about
16 whether to include the puncture and submersion tests, as well
17 as the impact and thermal test that NRC is proposing at this
18 point. There's a question--I think we heard it earlier--
19 about the issue of whether to test to failure or not. And,
20 there's an issue about whether cask testing should be a
21 prerequisite for the licensing of new casks, cask designs.
22 At least, the corridor states are not in total universal
23 agreement on those questions. It seems to me that the most
24 important thing to do at this point is to get something
25 accomplished in regard to cask testing. At least, the basic

1 protocol as it's been proposed by NRC, and with the results
2 of those tests in hand, maybe that will help determine what
3 more, if anything, needs to be done.

4 We heard a little bit earlier about shipment
5 tracking. The states indeed need to be able to track and
6 known where a shipment is as it comes across, especially
7 states that are large and predominately rural. There is the
8 DOE TRANSCOM system that states have generally used, and in
9 large part, been fairly satisfied with. TRANSCOM has come a
10 long way in recent years to be more usable, more real time
11 kind of thing. There's still some problems experienced with
12 TRANSCOM. With a shipping campaign of spent fuel out of
13 University of Michigan's research reactor last fall, our
14 state police had problems--the system just didn't back itself
15 up regularly enough. We felt like we were sort of not
16 keeping up with the shipment. That day that was being shown
17 wasn't real time enough.

18 But, nonetheless, TRANSCOM has improved and I think
19 improvements will continue to be made. The one important
20 thing from the state's perspective is that there is a single
21 system, a single satellite tracking system that's employed
22 for all shipments. Again, indeed, if we proceed to a mostly
23 privatized transportation system, what we don't want to have
24 is several different contractors with several different
25 satellite tracking systems, all of which the states have to

1 absorb and become party of.

2 You heard earlier also about provision for armed
3 escorts. This can perhaps be a thorny issue as we go down
4 the road. For some recent fuel shipments out of Oak Ridge,
5 the DOE used Federal marshals to provide that armed escort.
6 Two of the states along the shipping corridor would not
7 provide their own armed escorts; whereas, the other several
8 states that were on the shipping corridor provided their own
9 escorts even in addition to the DOE armed escorts. States, I
10 think, are going to continue to have differing perspectives
11 on what they want to do in that regard relative to armed
12 escorts. But, as a starting point and I think as Steve Kraft
13 mentioned earlier the first thing this morning, as a starting
14 point, we would like to see DOE commit itself to fully
15 following the NRC regulations concerning shipment security
16 and specifically in regard to routing approvals and the
17 provision of those armed escorts.

18 I want to mention just a couple things in closing
19 that are kind of particular to the midwest, one which was
20 mentioned earlier. That is barge shipments. When Congress
21 was debating Yucca Mountain designation in 2002, indeed, some
22 of Michigan's Congressional delegation were concerned that
23 the DOE Environmental Impact Statement included the prospect
24 of barge shipments on the Great Lakes. And, in fact, they
25 incorrectly interpreted that to mean DOE wanted to ship and

1 intended to make shipments by barge on the Great Lakes.
2 Nonetheless, even though that's not the case, shipping by
3 barge out of plants in both Michigan and Wisconsin would be a
4 particularly thorny political problem for us all. The Great
5 Lakes are seen by particularly Michigan, but I think other
6 Great Lake States, as such a crown jewel in terms of their
7 natural resource base that shipments by barge would be seen
8 as particularly onerous. We did write a letter to Dr.
9 Margaret Chu last August stating that the Midwest Committee
10 recommended that OCRWM eliminate the option of Great Lake
11 shipments by barge.

12 Finally, there's an issue of winter shipments.
13 Some states have expressed concern over the problem that
14 severe winter weather may pose. Now, of course, truck
15 shipments are probably more vulnerable to severe weather than
16 rail shipments are, but some states have expressed concern
17 over the problem of responding to a particular incident in
18 the midst of severe weather, whether by highway or by rail.
19 The Midwest Committee suggested to OCRWM that they look at
20 the possibility of scheduling shipments from northern sites
21 in the summer and from southern sites in the winter.

22 So, as you see there's no shortage of issues for
23 the states, the tribes, and municipalities to work with DOE
24 on. I guess, the good news is that, at least, from the
25 perspective of the corridor states is that there are no real

1 show stoppers. We need to be committed to working together
2 to address these issues. We need to consider each other
3 equal partners, I guess, if you will, and dedicated to try to
4 work through these things with each other's interests in
5 mind.

6 With that, I'll answer any questions that you might
7 have.

8 ABKOWITZ: Thank you, Thor.

9 I guess, I'll start off with the first question.

10 You mentioned in your discussion of the importance
11 the states associate with being involved in the routing
12 decision. At the same time, my understanding is that the
13 states are pushing DOE pretty hard to announce modes and
14 route decisions as a record of decision as soon as possible
15 so that you'll have the maximum amount of planning
16 opportunity. Has your regional association and your partners
17 been asked to come to the table to discuss the routing
18 decision making process, how you'll be involved, what
19 criteria are going to be used, and so forth and so on?

20 STRONG: We've certainly been pushing the mode decision.
21 The routing decision, I think, is contingent upon first
22 making that decision on mode. No, we have not to a
23 substantial degree been involved with specific conversations
24 or discussions over routes at this point. It's something
25 that we're eager to get involved with, but we haven't been--

1 the routing issue is something that may not be quite to the
2 point in time where those discussions have to take place.
3 It's just something that we need to be involved with
4 eventually.

5 ABKOWITZ: Thank you. Dan?

6 BULLEN: Bullen, Board. Just a quick question. You
7 mentioned the 180(C) funding in support of the states'
8 emergency response and preparedness. Has that level of
9 funding been adequate, do you foresee it to be so? And, I
10 guess, the concern that I have is that DOE has had budget
11 cuts up until every year except about now and the emphasis is
12 going to be maybe on building the repository and making the
13 effort to transport. So, I was just wondering about the
14 sufficiency of that funding and the ability of the states to
15 obtain it?

16 STRONG: Right. Well, of course, Section 180(C) hasn't
17 --we haven't received any 180(C) funding to this point. In
18 terms of its adequacy, the draft plan, if my recollection is
19 correct, started out with recommending planning grants of
20 \$150,000 which is consistent with what's been done under the
21 WIPP Program. Yes, indeed, states will have some concern
22 about the sufficiency of funds and, quite honestly, some
23 states will look at whatever number comes out differently
24 than other states. Some states will be able to live on the
25 lesser amount of funds. And, I guess, it depends on what

1 eventually comes out as the allocation formula. We are
2 trying to keep it simple and base it on things like number of
3 shipments or number of routing miles and this sort of thing.
4 So, we're hopeful that it will be adequate, but in
5 recognition of what you just said about the sufficiency of
6 budgets and severe budget deficits and this sort of thing,
7 that's sort of what prompted my comments about needs for
8 looking at things more universally and include radiological
9 response training and other umbrellas.

10 ABKOWITZ: Ron?

11 LATANISION: Latanision, Board. Have the governors or
12 legislative leaders in the corridor states that you work with
13 expressed public opinions on the transportation issue?

14 STRONG: I think each of these regional planning
15 committees has tried to keep their governor's offices and
16 legislative conferences abreast of things. I know in the
17 midwest, we have fairly routinely gone to governors'
18 conferences and last summer we had the midwest legislative
19 conference adopt a couple different proposals or resolutions
20 --that's the word I was looking for--acknowledging the need
21 for a full transportation plan and also a resolution was
22 passed in sort of supporting the idea of full-scale cask
23 testing. So, indeed, there's more that we can do and
24 eventually as we go along we'll need to do in terms of
25 keeping governors and legislatures abreast, but I think we've

1 been doing a reasonably good job at this point.

2 ABKOWITZ: Dave?

3 DUQUETTE: Duquette, Board. This is sort of a followup
4 on Dr. Latanision's comment or question. You're in a state
5 that has nuclear reactors and spent fuel and so on and so
6 forth. But, many of the corridor states do not. Do you have
7 any feeling for what their attitude is for transporting it
8 through their states?

9 STRONG: Well, in the midwest, I think, Indiana is the
10 only corridor state that does not have a nuclear power plant.
11 And, indeed, they're concerned with basically the same
12 issues as all of the rest of us. The need to be involved
13 with routing decisions, the need to be able to have the funds
14 and the time to train emergency response personnel along
15 those routes, and some states are eager to do things like
16 hospital training and this sort of thing. I don't see a lot
17 of difference in perspective between a corridor state that
18 has versus those that do not have nuclear power plants.

19 Does that answer your question?

20 ABKOWITZ: Thank you very much, Thor.

21 STRONG: All right. Thank you.

22 ABKOWITZ: We're now going to shift our focus to
23 transportation concerns from the perspective of the State of
24 Nevada and speaking on behalf of the State today is Robert
25 Loux. As most of you know, Bob is the Executive Director of

1 the Nuclear Waste Project Office within the State of Nevada's
2 Agency for Nuclear Projects. This office has been in
3 existence since 1983 and Mr. Loux has been the only Director.
4 He has worked under six Nevada governors in high level
5 radioactive waste management and other energy policy
6 issues.

7 From my academic background we refer to Bob's
8 success in that regard as the Webe Theory. We talk about
9 that with regard to our Department Chairs and Deans and
10 there's a lot of former Deans and Department Chairs on this
11 board, but the Webe Theory is basically, "We be here before
12 you get here, we be here after you're gone."

13 I would like to welcome Bob up here to talk about
14 transportation planning and also recognize Bob Halstead who
15 is the transportation guru for the State of Nevada and is
16 equally knowledgeable and passionate about the subject.

17 LOUX: Thank you very much. I appreciate the
18 opportunity to be here today and appreciate your holding
19 hearing on this fascinating subject.

20 Some of the issues that I'm going to touch on
21 have been kind of illuminated already today.

22 When our previous speaker was talking about some
23 of these shipments from Michigan and talking about some of
24 these stories it reminded me of one about a junior senator
25 from Michigan who, upon hearing about plutonium being

1 shipped through Michigan to Canada, wrote a rather strong
2 condemning letter of the whole planning process of the
3 Department of Energy in shipping this material and ERS
4 ended up banning the effort. And of course, as you may
5 know, the junior senator went on to become the Secretary of
6 Energy. I suspect that his views now have changed somewhat
7 in this regard.

8 You're correct that I have with me also Joe
9 Strolen, in addition to Dr. Halstead, and as you know, Bob
10 is not a doctor, but he plays one on TV.

11 Before I actually get started, on a more serious
12 note, all of the kinds of things that we're talking about
13 here today and things I've heard all morning, have come
14 from all of us who are simply paid to take some of these
15 positions and to be here today.

16 And, I just can't help but not recognize the
17 Nevada ranchers that have been here earlier today and spoke
18 to you on issues that I think we all feel very deeply
19 about. And really, they are the real people who are
20 affected about what's going on here. We're all involved in
21 these planning processes and issues, but truly, those are
22 the people that of anybody DOE ought to be talking to, it
23 ought to be them. They are the ones who are on the front
24 line, the ones who are being most dramatically affected.
25 And, I thought that their comments and statements today

1 were very compelling, and I can't help but recognize that
2 they are the people that really need to be involved in this
3 process.

4 As you know, a year or ago or so, I think it was
5 in February, we made a similar presentation that I'm going
6 to talk about today, and I'm not going to go through all
7 the same issues, most of which you've kind of heard before,
8 although there's some that I will kind of touch on briefly.

9 We have, as you know, been long involved in all
10 of these issues that we've talked about today. When I
11 heard the earlier remarks on Department of Energy, it
12 literally could have been 1984 that we were sitting here
13 listening to the same thing, and we did hear the same
14 presentation then that we heard today, and really not much
15 has changed. And we've made these similar recommendations
16 to the Department of Energy I've listed here for probably
17 better than 20 years now.

18 We also have been involved in these regional
19 organizations that Thor spoke of. The Western Interstate
20 Interview Board, the Western Governors' Association, other
21 states and local governments and tribes, in developing
22 these recommendations, and as I've said, we've worked on
23 them for, really, more than 20 years, and we've developed
24 transportation primers. WEBE has, there's been WGA
25 resolutions about transportation. Lessons learned from--

1 this gentleman spoke of the WGA WIPP transportation
2 programs, and by and large all of those recommendations
3 have just been completely and totally ignored by the
4 Department of Energy, who actually paid for them through
5 these regional organizations. They paid for this primer,
6 paid for some of these products that came out that were
7 very, very good planning tools and by and large have been
8 totally ignored.

9 Restating these same concerns without requiring
10 DOE to adhere to some sort of strict decision-making
11 process, we believe, is becoming just a continued exercise
12 in futility. The only way we know to accomplish the kind
13 of project that's going on here is through NEPA, which
14 prescribes, as many of you know, a very coherent step-wise
15 planning process that all of these decisions could be
16 gathered in and could be dealt with comprehensively as
17 opposed to what's really going on in this process. The
18 fact that DOE has included transportation issues in the
19 Yucca Mountain EIS really does not really absolve them from
20 conducting a full blown NEPA analysis of spent fuel and
21 high-level waste transportation.

22

23 Here's the road map, essentially, we put forward
24 to DOE in August of 2002. No surprise here. Develop a
25 national plan, scoping for a programmatic EIS, develop a

1 draft programmatic EIS, complete the final programmatic
2 decisions.

3 Then issue a ROD, an integrated transportation
4 system, and--next slide, and then use the Tiered EISs and
5 the EAs for the subcomponents of the system for heavy all-
6 truck operation, rail alignment, as the case may be.

7 This process, for most state and local
8 governmental planners and even those in the federal
9 government is not unique. It's well know, well prescribed.
10 It has worked out before even for DOE. For example in the
11 waste management PEIS for low level waste and mixed waste
12 decisions that were made in 1999, and DOE followed this
13 kind of step-wise process all the way along.

14 The next slide I think is the last one in that
15 sequence.

16 All the way along, and it has really resulted in
17 a rather coherent, organized, well defined decision-making
18 process where everyone saw the opportunities to
19 participate, saw where their input had effect into the
20 process. And by and large, although Nevada and I suspect
21 Washington State, aren't in agreement with the ultimate
22 outcome of the planning process, resulted in a decision
23 that by and large have not been able to be really legally
24 challenged, and have actually served, actually, the
25 Department quite well.

1 And the WIPP program is another one. The former
2 speaker mentioned, you actually have the architect of that
3 program in the room today, Ralph Smith, from the WIPP
4 program who has done a fantastic job of organizing all of
5 the WIPP planning process that most states I think have
6 found to be satisfactory.

7 The DOE's preferred rail notice that we've talked
8 about earlier today really, and it was noted by Nevada
9 ranchers and others, is really a symptom of this
10 dysfunctional process that DOE has engaged in. The current
11 approach is really untypical to what really ought to be
12 done. It's an example of what's really wrong. They've
13 announced a preference for a Caliente rail corridor before
14 a decision has been made about shipping mode or national
15 campaign or shipping routes. There have been no analysis,
16 comparative analysis, among the alternatives of the five
17 routes the DOE indicated in the EIS. There's no way to
18 know what was leading them to the Caliente route, for
19 example, if the exclusion of the Las Vegas routes were the
20 routes that went through the Las Vegas Valley, or screened
21 primarily on population. Something I might agree with, but
22 what does that say to other cities all the way along the
23 way. Salt Lake, Chicago, all these other places. There's
24 no evidence that there has been any comparative analysis,
25 something that we really believe ought to be forthcoming.

1 We ought to all be able to see.

2 And suffice to say, and I think the previous
3 speakers have really talked to this. There has really been
4 absolutely no--I mean no, a big zero--consultation,
5 communication, whatsoever with the State of Nevada in any
6 sense of any of these issues. Perhaps some with some of
7 the counties, but I suspect, by and large, it has not.
8 This whole process is segmented, piecemeal and really
9 backwards. And really, again, this announcement that we
10 talked about earlier is really the symptom of the entire
11 project. It really shows what can go wrong when you really
12 start doing the piecemeal planning process and don't
13 integrate and put these things in the proper fashion.

14 Let me just leave you with three or four
15 questions that we would have for DOE and particularly
16 related to this December announcement on this Federal
17 Register notice that was referred to earlier.

18 You know, why would DOE select a preferred
19 corridor without first identifying the preferred mode? If
20 DOE adopts the mostly-rail mode, what's the actual modal
21 mix to be expected? Why did DOE fail to consult with
22 Nevada and counties on the rail corridor, like Caliente?
23 And, to say nothing of the people actually affected,
24 ranchers and other people.

25 What specific criteria and data were used to

1 select the preferred corridor? Other rail corridors
2 remain under consideration, something to be reconsidered if
3 both Caliente and Carlin are found to be feasible,
4 something that we believe is certainly not beyond the realm
5 of possibility, given these two alternatives, represent the
6 longest, most costly and most difficult aspect of the Yucca
7 Mountain transportation issue.

8 When will DOE issue a ROD concerning the mode
9 selection? And, has DOE completely eliminated
10 consideration of mostly trucking, the preferred mode? And,
11 under what circumstances would mostly truck be used?

12 These are questions that, in addition to the ones
13 that you've heard from other speakers are ones that DOE is
14 failing to address, has not addressed to date, and ones
15 that we submit probably need to be addressed before the
16 process goes much further.

17 Lastly, let me say there are hundreds of other
18 questions that we and others have talked about related to
19 DOE's piecemeal that can only be answered by holding DOE's
20 feet to the fire, requiring a comprehensive, integrated
21 transportation planning process. And we believe this can
22 only be done by demanding a full and complete NEPA review.

23 Having said that, in trying to address some of
24 the questions, Mr. Chairman, you had posed to some of us,
25 we do have some response to some of them. They may be a

1 little longer than you want to spend time here today. But
2 I'm assured if there's any tough questions from the Board
3 that my backup here can probably handle all of those. So
4 with that, let me just turn it over to you and see what
5 questions you might have.

6 ABKOWITZ: Okay, thank you, Bob. We'll start with
7 Dave Duquette.

8 DUQUETTE: Duquette, Board. Assuming, and it's
9 perhaps a big assumption, that the project is approved,
10 does the State have a preferred rail corridor? Well, not a
11 rail corridor, a transportation corridor, I should say.

12 LOUX: It's particularly I think premature at this
13 point to even kind of look at those issues until we're
14 further down the road in trying to really understand if the
15 project is really going forward. I think there's probably
16 some serious doubts at this point that it's going to
17 proceed and if it does proceed, certainly not on any time
18 scale. I think that we need to be involved in a process
19 collectively with the counties and the cities and other
20 entities in Nevada, with the Department of Energy at some
21 point in time to really realize that. But no, we don't
22 have a preference.

23 DUQUETTE: Thank you.

24 ABKOWITZ: Dan Bullen.

25 BULLEN: Bullen, Board. Five rail routes from which

1 the DOE made its selection were part of the final
2 environmental impact statement for the underground project,
3 as I understand. I guess I'm--maybe my memory is fading,
4 but I was just wondering, what was the public participation
5 in the vetting of those routes during the course of the
6 environmental impact statement for Yucca Mountain? And,
7 what additional kinds of information would you expect to be
8 presented by DOE in the public domain so that they would
9 have an opportunity to comment?

10 LOUX: Well, a lot of those issues, you're right were
11 talked about in the Yucca Mountain EIS and the public
12 hearings, some of which were held in Nevada, some of which
13 were held, certainly, outside the state, and I suspect in
14 most states they wondered what the heck they were really
15 commenting on since it wasn't clear to them what this had
16 to do with them at the point in time.

17 Your second part of the question?

18 BULLEN: What opportunities were there for the
19 Nevadans to comment on the sites now--yeah, what additional
20 information would you expect to see from that?

21 LOUX: Well, the first issue is that there has been no
22 opportunity. And secondly, the issues that we would like
23 to see at this point in time is certainly some analysis,
24 for example, about how we made this decision relative to
25 Carlin and Caliente, or reverse that, Caliente/Carlin.

1 What was the comparative analysis? What were the factors
2 proved one over the other in preference for the Department
3 of Energy to choose? Were they financial? Were they
4 avoiding land use conflicts with the population? No one
5 knows. It's as if it was pulled out of a hat. We believe
6 that has to be a public record, that has to be part of the
7 NEPA compliance process, and something that ought to be in
8 the public domain that everyone can examine.

9 BULLEN: Bullen, Board. Just one last quick question.
10 Would you expect to see those kinds of arguments in the
11 record of decision when it is finally finalized with
12 respect to the route selection? Or is it just going to be
13 a route selection and that's it?

14 LOUX: In a word, no.

15 ABKOWITZ: Bob, I have a couple questions, if I might.
16 The first one is we heard earlier today about the
17 intermodal transfer issue and what would happen when you
18 take a well cask and put it on a truck and now it's a super
19 heavy weight vehicle and would require special permitting.
20 Is that a permit that only the State of Nevada has the
21 authority to grant, and what is the, sort of the view or
22 the likelihood of such a thing occurring?

23 LOUX: Let me tell you, to the extent that they take
24 place on state highways, yes, the State of Nevada has that
25 authority. What our State Department of Transportation has

1 told DOE is that if they want to engage in that sort of
2 activity that each one of the shipments would have to be
3 permitted separately, individually, for each individual
4 shipment.

5 They've also specified requirements on upgrade,
6 additional highway lanes, if you would, adjacent detour of
7 these highways as prerequisites to going forward. As well
8 as, I think, a variety of other technical criteria that
9 they've communicated to DOE already, I know. But those are
10 just the highlights.

11 ABKOWITZ: My second question is as these issues start
12 getting vetted at the county and local level, and I know
13 we'll be hearing from folks in a short while, what role do
14 you see the state playing in sort of refereeing or
15 facilitating the process?

16 LOUX: Well, I'm not sure at this point that we're
17 going to get in any sort of a position of refereeing any
18 sort of discussions. We certainly want to be a resource.
19 We want to be able to provide what information experts such
20 as Dr. Halstead and others make those available to them,
21 certainly on analysis and others. And we want to be in a
22 participatory mode with these other entities, both the city
23 and the counties all the way along.

24 Let me just--one other comment I really needed to
25 make, and about the land withdrawal issue that came up

1 earlier. Our analysis, by the way, is almost precisely the
2 same as the one that these gentlemen have rolled out. The
3 acreage is not close to what is in the Federal Registry
4 Notice, No. 1.

5 Secondly, we believe, despite DOE's comments, it
6 does impact areas--the Nellis Gunnery Range and Test Site.
7 It travels that. And certainly, many of the corridors are
8 well in excess of a mile, some of them are in excess of
9 seven miles. We're still in preliminary stages of mapping
10 much of this out. But our tentative analysis agrees with
11 the analysis these other gentlemen have done, and they seem
12 to be very accurate in that regard.

13 ABKOWITZ: Did your office have any advance notice of
14 this information before it was published in the Federal
15 Register?

16 LOUX: The Governor's Office got a call and a fax of
17 the letter the day it actually came out. And that was the
18 extent of any notice that we had gotten.

19 ABKOWITZ: Okay. Thank you very much.

20 LOUX: Thank you very much.

21 ABKOWITZ: And, by the way, Bob, we will be kind of
22 submitting a list of 24 or so safety issues that is
23 consistent with your question that we believe, if Nevada
24 was funded, we could help resolve very quickly.

25 LOUX: Thank you.

1 ABKOWITZ: Okay, our next presentation is what I
2 fondly refer to as the local government variety hour.
3 We're going to be hearing from representatives of several
4 different local governments in Nevada. In particular we'll
5 be hearing from Nye County, Lincoln County, Eureka County,
6 Lander County, Esmeralda County, and Clark County. And,
7 there's an hour that has been set aside for these folks to
8 share their views. And, as I understand it, there will be,
9 it will be laid out as some scheduled time to prepare
10 presentations, and then time for full discussion amongst
11 the county representatives.

12 And, because Nye County is the location of Yucca
13 Mountain, we have the Nye County Representative, Les
14 Bradshaw to coordinate this session of today's meeting.

15 Les, if you will come forward and introduce your
16 colleagues.

17 BRADSHAW: And let the variety hour begin. If we
18 could call the panelists forward. They are listed on the
19 agenda, plus we have the Mayor of Caliente, Nevada, Mr.
20 Phillips. So, if you would take your places up here, we
21 would very much appreciate it.

22 Beside myself, Abby Johnson and I have--will be
23 presenting--Abby Johnson representing Eureka County. We'll
24 be presenting a sort of a joint statement from eight of the
25 counties. That would be--you know, I've got to memorize

1 these counties going counter-clockwise or something so I
2 can remember them, but basically the White Pine, Lander,
3 Eureka, Churchill, Mineral, Nye and Clark and Inyo. So,
4 Abby and I will be giving a joint statement consolidating
5 the thoughts and concerns that would answer the questions
6 that the board has posed. The two speakers, not
7 necessarily for their individual counties endorsing those
8 comments, but we are presenting a joint statement and
9 consolidating the thoughts of those eight counties, in the
10 interests of time.

11 Then, Esmeralda County represented by Mr.
12 McCorkell. George McCorkell, will present comments germane
13 to Esmeralda, but also to the Caliente corridor group of
14 counties. That is the three counties, and our efforts to
15 work together to develop common databases and to present
16 common information to DOE.

17 And then, Mike Baughman on behalf of Lincoln
18 County, and then in addition another participant from
19 Lincoln County, which will be the Mayor of Caliente,
20 Nevada, located in Lincoln County.

21 And, we'll leave some time at the end for
22 comments and discussions. Bear in mind that it's pretty
23 hard to--it's a trick of good proportions to try to get the
24 10 counties to take just an hour. We could all just go on
25 and on about our individual county concerns. But we have

1 learned that many of our concerns are common and we're
2 going to try to present those to you and so that there's a
3 minimum of repetition and a maximum of good information
4 being presented to you.

5 I'm going to talk on, or just present some ideas
6 on--the next slide please, if you wouldn't mind--
7 transportation systems and interaction process. And then
8 Abby Johnson will talk--address emergency management and
9 transportation decision-making. And then we'll go on to
10 Mr. McCorkell, Mike Baughman, Mr. Baughman, and then Mayor
11 Phillips. So, these are the combined views. And again,
12 individual counties may have slightly different views or
13 emphasized views.

14 I would also indicate to you that the way the
15 panel is made up, there may not be proper emphasis to suit
16 all participants on the relative magnitude of various
17 issues, but we can bring those issues out on the questions
18 and answers.

19 On the transportation system, DOE of course has
20 announced a--the way I understand it, they've announced a
21 preference for the Caliente corridor with a backup for
22 Carlin when they--if they do decide rail as the principal
23 mode, and those would be the corridors that they would look
24 at. So we're focusing--now that takes off three other
25 routes that have been on the table for a while. And we're,

1 I think most of the counties are focusing on the issues
2 that we have about transportation on those two routes, or
3 corridors and we're assuming that there is going to be a
4 mostly rail mode choice made, although this choice, as I
5 understand it, isn't officially made at this time. But it
6 has been strongly intimated or hinted at. But there will
7 always be a residual trucking or highway shipment
8 component.

9 So, the issues are narrowed somewhat, but they
10 are not narrowed down to sort of cut and dried, clearly
11 defined issues. Because the highway transportation
12 component is still a little--how that will actually play
13 out is a little bit unknown at this time. The state and
14 other people will have certain abilities and influence on
15 the routes that would be used for that segment of a mostly
16 rail scenario.

17 Most of the counties on the panel would support
18 very strongly the direct rail to Yucca Mountain, their
19 feelings being that it's probably the best way to keep the
20 shipments away from most of the population. Most people,
21 at least the ones that I'm in contact with, believe that
22 the rail basically is safer than having it on the highways.
23 And, most of the cities and towns along the corridors in
24 Central Nevada would prefer not to have a lot of trucking
25 of nuclear waste through their town.

1 The rail was built--the rail will be built off to
2 the side. We can all help DOE plan that and place that,
3 and so the nuclear waste comes into minimal contact with
4 the general population in Central Nevada. So that's
5 generally the preferred point of view of most of the
6 counties. There's a dissenting opinion on that and I'm
7 pretty sure you will hear about some thoughts on that
8 today.

9 So, just speaking for Nye County at this point,
10 Nye County is very strongly saying rail only and rail
11 early. That is, we prefer rail as the principal mode. We
12 would hope to minimize road transportation to the extent
13 possible, and we hope the DOE can have the wherewithal and
14 do the planning and have the funding and the legislative
15 direction to build the rail early on so that the early
16 highway component of the transportation campaign can be
17 minimized.

18 There are, certainly we realize that even if
19 there is direct rail there will be, have to be a highway
20 component to DOE's transportation campaign. And we
21 recognize that. All the counties recognize that. We're
22 trying to deal with it.

23 So from transportation system's point of view,
24 you asked some questions about what are our main concerns.

25 Most of the counties would probably agree that

1 the information flowing from DOE to enable counties to do
2 planning, to be able to actually plan their activities, to
3 deal with the impacts of the transportation program, that
4 planning isn't--they haven't laid out the big picture yet,
5 and you've been here for most of the day and heard that DOE
6 is working at that. But it just, the big picture isn't
7 laid out yet. So timing, benchmark events, and so on, and
8 a lot of the smaller decisions that make up this larger
9 decision have yet to be made.

10 Therefore, communities and local governments
11 don't have the ability to plan their activities to deal
12 with DOE's plans and to be able to either minimize the
13 adverse impacts or maximize what could be called the good
14 impacts from the transportation program.

15 And, just as a couple of examples. A
16 communications network in Central Nevada along whichever
17 corridor is selected would be a good thing, a
18 communications network for emergency response and emergency
19 services that's consistent, reliable and compatible amongst
20 the corridor counties and local governments, cities, and
21 useful by DOE. Counties at this moment are investing money
22 in long-term emergency response communications
23 infrastructure upgrades, and yet, we are not able at this
24 point to work with DOE to make sure that our investments
25 are ultimately going to be usable as we--ultimately we'll

1 have to work with DOE on having a compatible and efficient
2 and reliable communications system for emergency response
3 and dealing with transportation incidents.

4 So that is just one example. And it takes years
5 to get these infrastructure upgrades in place, and we can't
6 just do it at the last minute. We can't wait until a year
7 or two or three or four before the first shipment or the
8 first train comes down the track to get this infrastructure
9 in place. And that's just one example. And the panel
10 members could all give you numerous other examples of the
11 long wait time needed by the local governments.

12 So we're not suggesting that DOE is playing hide
13 the ball at all. They are very welcoming and open arms to
14 come in and talk to them, but their decision-making process
15 is not as quickly paced as perhaps some of the impatient
16 local governments would like to see. And, but, you know,
17 in the end, I think if we keep talking to each other and
18 keep working together that we won't get up against some,
19 you know, deadline where we can't get our infrastructure in
20 place because DOE is going to start up on a certain date.

21 A lot of the county delegates and the city--well,
22 I'm--I'll let the cities speak for themselves, but the
23 local governments would like to see the big picture laid
24 out, an integration of decision-making components, what DOE
25 is basing it's decision-making on and how the various

1 components of decision-making are addressing local
2 government questions. And then what's the big picture? How
3 can they predict out a number of years what the, sort of
4 the business, what I'll call the business plan, will be for
5 actually implementing this project?

6 A good step would be for the DOE to issue the ROD
7 so that there's--we know what mode it's going to be, but
8 apparently they've selected the corridor that they will
9 work on first. And that would be a good way to narrow the
10 issues and focus down and help local governments to do
11 certain things to relieve the anxiety of having this
12 project in our midst.

13 So, the local governments are asking for
14 interaction, which I'm not suggesting is totally lacking,
15 but we would--our concern is that, as these folks that you
16 heard from--and I do recognize a large contingent from Nye
17 County here with views and concerns--but people were taken
18 aback or surprised by an announcement that DOE made which
19 was broader and had more ramifications attached to it than
20 what we had anticipated. A simple announcement of a
21 corridor or preferred corridor, coupled with the BLM
22 involvement and the BLM actions and the BLM land
23 segregations.

24 We in fact were taken aback by the breadth and
25 the magnitude of the BLM ancillary follow-up actions, or

1 not ancillary, but the concerted DOE and BLM actions. We
2 didn't understand that there was going to be, you know, I
3 think you heard a figure of 600,000 or 700,000 acres
4 targeted for basically being put into suspense or, you
5 know, no further actions along those indicated sections.
6 We didn't understand that, and we would have liked to have
7 understood it. And so, that's an example of the need for
8 even more interactions between the local governments and
9 DOE.

10 Now, I've listened very carefully today and
11 there's--DOE is a large organization. It has a lot of
12 management centers, I guess you could say. But we all need
13 to learn how to deal with that and when a decision is made
14 that is so broad and so encompassing and has such a
15 magnitude of impact, we should know that--we should
16 understand what that decision really means.

17 A lot of the counties are concerned about the
18 NEPA process. And I think others on the panel will address
19 this a little bit more for you, but there was a NEPA
20 process. We commented. There's not a feeling amongst, the
21 AULGs and the citizens and the city that the NEPA process
22 fairly addressed the local government concerns. You've
23 heard a lot about this today and I think you will keep
24 hearing about it. It in fact is a concern that the NEPA
25 process in fact is not a meaningful process for

1 interactions on this issue or at the individual citizen
2 level and at the local government level.

3 The issue of umbrella organizations has been
4 discussed--we've just heard from an umbrella organization
5 and you need to work with those, but remember, we were
6 saying to DOE at the end of the funnel, and you saw a
7 little cartoon on the beginning of our thing here, at the
8 end of the funnel a couple of the counties in the U. S. are
9 impacted more than anyone else, and they deserve special
10 consideration and they should not be represented in DOE's
11 thinking and decision-making by an umbrella organization
12 that has a broader perspective and views and concerns and
13 loyalties and obligations than perhaps these few affected
14 counties in Central Nevada. So we ask for consideration
15 about some special interactions process that allows the
16 affected governments that are truly going to deal with each
17 and every shipment some--we could say special standing.

18 We do, we come to the table with suggestions. We
19 think that perhaps DOE could ask us more questions. We
20 have a lot of solutions. If we had time we could--all the
21 participants here could give you a long dissertation on
22 solutions that we could bring to DOE. We believe that we
23 have expertise and ability and insights into the local
24 governmental process, the local impacts, these fellows that
25 were before you today, we could have averted a lot of that,

1 the hard edge that this issue has brought to these people
2 by some prior interactions and some knowledge and some
3 information flowing out to the people, to the government
4 and to the individuals.

5 And, we have a lot of ideas about, in Nye County
6 for instance, which is the situs jurisdiction of where
7 Yucca Mountain will be, if this is going to happen, it's
8 going to have a huge impact in the northern part of
9 Amargosa Valley and Beatty, Pahrump. We have some ideas on
10 how, and if you're going to build things or do things or
11 put things in or bring in 2,000 to 3,000 workers, we have a
12 lot of good ideas on how we could work with you to make
13 that process ultimately beneficial instead of just kind of
14 a boom and bust kind of a thing.

15 So come to us and ask us about our ideas on how
16 we can help this project have the minimal impact and if
17 there's positive issues that could be maximized. I think
18 most of the counties should want to do that. Certainly,
19 Nye County is looking at ways that, if this is going to
20 happen, we certainly want to make it a benefit to the
21 communities and not a drain or a detriment to the
22 communities.

23 That concludes my remarks. I'll turn the
24 microphone over to Abby Johnson and then the others will
25 follow in their designated order as we've outlined. And,

1 then we'll have some time at the end for questions. If it
2 looks like we're going overtime I'll be out waving my arms
3 to us to speed things up so that we can have some time for
4 questions.

5 Thank you so much.

6 JOHNSON: Hi. I'm Abby Johnson. I'm the Nuclear
7 Waste Advisor for Eureka County. And, Les and I decided to
8 split up this presentation on behalf of eight out of the
9 10. And so, as usual, anything that sounds collaborative
10 is from the eight out of the 10. Anything that sounds like
11 a radical opinion is mine.

12 Regarding emergency management, local governments
13 in Nevada are in the front line of public health and safety
14 for nuclear waste transportation and are responsible for
15 being prepared in case there's an accident. Even if the
16 risk is believed to be minimal, as Les said, we are
17 experiencing virtually all the shipments. And we have the
18 responsibility to be prepared for the unlikely event.

19 Interlocal mutual aid agreements continue to
20 commit counties to regional emergency response obligations,
21 regardless of routing and mode decisions. And similarly,
22 these mutual aid agreements which are particularly
23 important to rural Nevada, will require emergency first
24 response training and equipment to be provided by DOE to
25 local governments who are not necessarily directly on a

1 designated transportation route because of the nature of
2 our geography.

3 We find that DOE's record is inconsistent with
4 its success with shipping campaigns. As we've heard today
5 already, the WIPP interactions have gone particularly well,
6 whereas the foreign fuel shipments by rail through northern
7 Nevada, at least based on Lander County's experience, did
8 not. And one thing that I think is really important to
9 point out is that working through the state government--
10 this is a general comment--does not guarantee adequate
11 preparation at the local level. And this should be a
12 concern for DOE and for states, as well as for local
13 governments. All three of those should be worried about
14 that lack, or concern.

15 Route preparation criteria. DOE needs to
16 establish acceptable route preparation criteria before
17 shipments could begin. Criteria could include emergency
18 response training, equipment, infrastructure improvements,
19 appropriate monitoring, oversight capabilities. The WIPP
20 example is that shipments don't start along a route until
21 it's considered to be open. To be open, DOE has to provide
22 training and participate with states and public information
23 and, in essence, the state has to agree that the
24 preparations along the route are adequate, and that
25 emergency responders are prepared to handle an event.

1 I guess--this is one of my comments, is that
2 that's great, but that's maybe not enough for the counties
3 at the draining end of the funnel. There may need to be
4 more interaction with local governments at the draining end
5 of the funnel.

6 Thereby leading to the next slide, that it's
7 important to involve local governments early and often. I'm
8 going to say what Les said, but in a slightly different
9 way. One, coordination for AULGs with DOE is essential.
10 Looking at the WIPP model and possible ways to strengthen
11 it would be to have the state and the locals involved in
12 transportation planning and implementation, and that that
13 planning should address emergency response training and
14 equipment, required infrastructure improvements,
15 appropriate monitoring, oversight capabilities and the role
16 of volunteers, which is really a tricky thing, at least
17 here in Nevada where most of rural Nevada is protected only
18 by volunteers, and what we would be asking them to do in
19 terms of training for this level is perhaps more than is
20 practical.

21 180(c) is not the answer. We've heard a lot
22 about that today already. Based on a DOE analysis of total
23 system lifecycle costs in 1998, the amount of project
24 funding dedicated to fulfilling DOE emergency preparedness
25 responsibilities under 180(c) is inadequate to meet

1 national needs to upgrade highways and emergency response
2 capacities. This could lead to under-funding of impacted
3 agencies and jurisdictions. And, DOE must develop
4 realistic cost estimates for improving and safeguarding
5 rail and truck.

6 Well, what about the capacity of the effected
7 units of local government? There are two points I would
8 like to make here. One is to bring to your attention,
9 again, a concept that Eureka County has studied, but which
10 we're happy to share with everybody else. And that is that
11 DOE should plan and budget for regional, and frankly,
12 rural, emergency response training facilities that would be
13 fully funded by DOE, staffed by professionals, but
14 controlled or operated by local governments. We proposed
15 this in a report and in our impact assessment report. This
16 especially deals with the problem of depending on
17 volunteers, among other things.

18 The other concern is emergency medical
19 capabilities and training. Those capabilities are like
20 regular emergency response in that maybe nothing is going
21 to happen, but you've got to have everything ready in case
22 it does. Volunteers, facilities, emergency medical
23 capacity, training, in preparation for a potential
24 incident.

25 I would like to move on to transportation

1 decision-making by DOE. The AULGs are experiencing a
2 piecemeal decision-making on transportation because of the
3 lack of the transportation programmatic EIS, which would
4 have analyzed cradle to grave transportation of all
5 materials destined for Yucca Mountain, including PFS, the
6 defense waste, and would be in the context of current low
7 level waste and transuranic shipping programs that are
8 already affecting California and Nevada.

9 In order to avoid 12th-hour decisions which
10 prohibit effective risk management, risk analysis and
11 management, such as emergency first response training, DOE
12 must move forward expeditiously to make specific mode and
13 route decisions regarding transportation through Nevada.

14 Regarding the upcoming mode decision, mostly rail
15 or mostly truck, the FEIS lacked a national route-specific
16 study that should be the basis for informed decision-making
17 on mode and route, and that takes into consideration all
18 affected, involved and responsible parties from those many
19 cradles to that one grave.

20 The FEIS is inadequate to support transportation
21 planning and decisions that take into consideration the
22 indirect effects and cumulative effects of nuclear waste
23 transportation.

24 And, frankly, what is the basis of DOE's mode
25 decision? Who decides? Why isn't this a public dialog

1 since the entire country is affected? 21 FEIS hearings
2 does not constitute a national public dialog. What is the
3 mode preference based on other than rail is safer?

4 Bob Loux indicated that when the decision comes
5 out it will just be a decision with no explanation. I hope
6 he's wrong.

7 In addition, a lot has changed since September
8 11th, 2001. And, because FEIS was completed prior to that
9 time, the FEIS does not give proper weight to security
10 issues. And, a supplemental EIS that focuses on those
11 regarding Yucca Mountain transportation and the commercial
12 nuclear fuel cycle should be developed.

13 Regarding truck decisions, the final EIS for the
14 project does not provide sufficient detail on potential
15 truck routes into Yucca Mountain. Although DOE claims that
16 the FEIS is sufficient to support all subsequent decisions
17 concerning routing, no analysis was done on several rural
18 routes already used by DOE for nuclear waste
19 transportation. And also, the FEIS did not compare
20 potential truck routes with respect to safety and cost.

21 Regarding rail, as has already been discussed,
22 Caliente is the preferred rail corridor at this time.
23 Carlin is a secondary preference. The DOE intends to
24 prepare an EIS, as we understand it--as we understand it,
25 comma, the DOE intends to prepare an EIS only on the

1 Caliente corridor. From a planning perspective, analyzing
2 the secondary route and rail truck alternatives, in the
3 event the preferred route is infeasible would be prudent
4 and efficient.

5 From Eureka's County's point of view as a
6 potential host of the Carlin route, the secondary backup
7 plan, DOE's decision-making process of Carlin as the backup
8 route is unclear. If they say we're just studying Caliente
9 and we're going to work it whether we go to the north or
10 the south here, are we no longer the backup plan, or are we
11 the backup plan until a transportation record of decision
12 on that is issued and they say, okay, I think we've got a
13 real one? It's very confusing.

14 Some final thoughts: DOE has resisted
15 acknowledging that its current low level waste and
16 transuranic waste shipping programs are legitimate subjects
17 of study for the purposes of anticipating how DOE will
18 handle transportation of high-level waste and spent fuel.
19 DOE should encourage AULGs to use oversight funding to
20 develop an understanding of DOE's existing nuclear waste
21 transportation practices and regulatory framework.
22 Until a supplemental EIS is completed on security issues,
23 there is no rational basis for a decision on the preferred
24 mode of transportation or preferred routes. Absent
25 decision on mode and routes, impacted jurisdictions cannot

1 be identified and costs to prepare these routes cannot be
2 estimated.

3 Long range planning for us is extremely
4 difficult. 180(c) is not a panacea. It will not be
5 available, I guess, until three years prior to the first
6 shipments. The amount of funding unpreparedness is unknown
7 at this time. Knowing neither the risks nor the resources
8 available to offset these risks makes long-range planning
9 quite difficult. Funding needs to be based on total impact
10 as being under the draining end of the transportation
11 funnel, from our point of view.

12 And finally, our challenge as affected units of
13 local government is to understand the impacts, to weigh the
14 burden of risk and responsibility imposed by the county--
15 excuse me, imposed upon the county. To develop a plan to
16 respond to those burdens, to get DOE to compensate the
17 counties for the cost of implementing the plan for the
18 duration of the shipping campaign, and to implement the
19 plan for the duration.

20 Thank you. And, the next speaker is George.

21 McCORKELL: Good afternoon. I'm George McCorkell.
22 I'm here representing Esmeralda County. I'm going to speak
23 very briefly about our Central Nevada Community Protection
24 Working Group.

25 As you know, DOE has designated the Caliente rail

1 corridor which has a significant impact on Esmeralda County
2 regardless of which alignment is selected. The current
3 corridor is adjacent to much of the eastern edge of
4 Esmeralda County and is sandwiched between the Esmeralda
5 County Seat of Goldfield and the Nellis Range Complex.

6 In coordination with DOE, Esmeralda, Lincoln, Nye
7 Counties and the City of Caliente have begun the formation
8 of a multi-jurisdictional working group. We're pleased to
9 report that the efforts we have made thus far to address
10 Yucca Mountain transportation safety and security concerns
11 have been very effective. The process of working together
12 is allowing us to identify concerns which we hope to
13 address on a cooperative regional basis, as appropriate.

14 We're not to the point of addressing these
15 concerns. In fact, we're just beginning the processes of
16 identifying them. While some are intuitive in nature, some
17 are not, we plan to get to the point at which we can,
18 through cooperative agreement funding from DOE, provide the
19 information and potential solutions to the Department to
20 address the key transportation concerns we will be faced
21 with. The culmination of a cooperative agreement between
22 DOE and the jurisdictions in the working group is essential
23 for us to be able to address the concerns we face.

24 Thus far, we feel good about the success for
25 multi-jurisdictional effort and the encouragement we've

1 gotten from DOE.

2 However, there are concerns Esmeralda County will
3 be unable to address without cooperative assistance from
4 DOE. We are unable to tell at this time either what all
5 the concerns will be or how long it will take to address
6 them. The process of identifying our concerns and then
7 addressing them is of key importance to us at this point.

8 And then, lastly, just based on the success of
9 the cooperative agreement they initiated with Nye County
10 several months ago, we're encouraged that DOE is willing to
11 meaningfully participate with both jurisdictions and
12 experts who know the area and the issues best.

13 So, thank you. And I think Mr. Baughman is
14 speaking next on behalf of Lincoln County.

15 BAUGHMAN: Thank you. My name is Mike Baughman, here
16 for Lincoln County.

17 And, I believe on the table in front of you you
18 have a copy of our presentation. You should also have, if
19 you could bring it to your attention, a copy of a
20 bibliography of sponsored research. It was a document
21 placed on the table in front of you as well that I'm going
22 to refer to briefly when we go through this.

23 Let me just begin by pointing out that the Board
24 of Lincoln County Commissioners adopted Resolution 2001-01,
25 which indicates that shipments of high-level waste and

1 spent nuclear fuel will be transported by rail to the
2 maximum extent practical. So it is the official position
3 of Lincoln County that rail is the preferred mode.

4 If necessary, shipments by truck, and we do think
5 there will be some shipments by truck, but if it is
6 necessary to ship by truck, that those shipments should, to
7 the minimum extent possible, use public highways and to the
8 extent possible avoid transit through communities. Perhaps
9 along those lines, I think the County has always been quite
10 interested in the Chalk Mountain route because it does
11 minimize distance traveled on public highways.

12 Two very important points that the County
13 Commissioners adopted. One is to be able to identify and
14 maximize any potential infrastructure and economic benefits
15 associated with the entire repository program, but in
16 particular with transportation of spent nuclear fuel and
17 high-level waste.

18 And then also, commensurate with their
19 recommendation regarding rail and truck transportation,
20 that any measures, or all measures be taken to minimize the
21 impacts associated with this, and particularly risks
22 associated with the transportation.

23 I would note that all three of the Caliente, all
24 three of the switch points that are associated with the
25 Caliente corridor, rail corridor, originate in Lincoln

1 County. One of those switch points originates within the
2 City of Caliente. An alternative switch point originates
3 about three miles east of Caliente and then the third point
4 is actually out in the county general over towards Utah
5 state line. But all three switch points are located
6 within--and Caliente rail corridor always originates in
7 Lincoln County.

8 Key safety concerns and security concerns. One
9 of the questions that we were asked to address, and I just
10 listed two here. And everybody touched on this briefly,
11 but basically our position is is that any delays by DOE in
12 making decisions regarding transportation and implementing
13 transportation planning may impede pre-shipment risk
14 management and the effective ability of mitigating, if you
15 will, at minimizing risk. And so we as well are very
16 concerned about potential 12th-hour decisions.

17 With having said that, I think we commend DOE.
18 We commend Dr. Chu for going forward with the beginning of
19 transportation decisions, something we've been encouraging
20 them to do for quite some time. And I believe to her
21 credit, it has a lot to do with the organizations she set
22 up and the focuses they are beginning to put on this key
23 issue.

24 Another key safety and security concern deals
25 with inadequate training and lack of availability of

1 equipment for emergency first responders and emergency
2 medical personnel. And, we would note that that lack of
3 training, that lack of equipment, will have the potential
4 for exacerbating risks in the event of an accident or need
5 to respond.

6 A little bit about the county and the city and
7 the work that they've undertaken since 1984 in this
8 program. The county and the city have undertaken about 70
9 sponsored research projects. This bibliography of
10 sponsored research provides a listing of those for your
11 review and information. You will note on page 7, for
12 example, there are a variety of studies that were done
13 concerning transportation, some fairly recently. Page 10,
14 I'll just strike your reference to that--take your
15 reference to that. We've actually engaged the University
16 of Nevada, Las Vegas in conducting independent risk
17 assessment of both rail and highway alignments,
18 alternatives in the county.

19 And so, there has been a great deal of work done.
20 That work is available to this Board if you chose to look
21 at it. That work was used by the county and the city in
22 developing their comprehensive impact report that was
23 presented to DOE a couple of years ago.

24 Unanswered questions. We were asked to put on
25 the table, if you will, some of our thoughts about missing

1 information areas where we would like to focus our
2 attention. And, this Board has over the past several years
3 made innumerable recommendations to DOE. And, I would
4 suggest to you that this Board has played a very key role
5 in influencing DOE's decisions about how they spend their
6 resources, where they focus their work.

7 And, one of the issues we would lay on the table
8 is is that--to basically pose the question, and that is how
9 does the public health and safety benefit of DOE spending
10 to further reduce uncertainty in repository performance
11 compare to the potential public health and safety benefit
12 of DOE spending to reduce transportation accident frequency
13 and severity? And I think a question that would be very
14 interesting for this Board to take up is is would a shift
15 in spending yield enhanced public health and safety
16 benefits?

17 And obviously, what we're looking at here is--and
18 I did a very quick backup of the envelope analysis looking
19 at the final environmental impact statement. Looking at
20 the sources of death in the repository. Fatalities. And,
21 I don't even have any idea at this point whether this is
22 accurate because it was done very quickly. But let me just
23 tell you in summarizing all those sources in the EIS, but I
24 could identify for the repository we're looking at anywhere
25 from six to 12 people. And that depends on cool repository

1 versus hot repository, those types of things.

2 If we turn our attention to transportation, at
3 the national level we're looking at 13 to 21 people.
4 Within the State of Nevada, we're looking at anywhere from
5 two to eight people.

6 Now, I suggest to you that transportation
7 certainly at a national level is a greater source of
8 concern from a public health and safety standpoint than the
9 repository, perhaps. And, when we spend tens of millions
10 of dollars, perhaps hundreds of millions of dollars, to
11 reduce in very minute amounts the uncertainty associated
12 with repository performance, it yields a commensurately
13 very, very small benefit in terms of public health and
14 safety, in terms of death.

15 If we were to take some of that same amount of
16 resource and plow it into the transportation system to
17 either enhance the safety of rail and/or highway, we could
18 have remarkable, perhaps, changes in some of the
19 transportation numbers.

20 And, I threw that out as food for thought.

21 I would also note in going through these numbers,
22 the long-held presumption which we in Lincoln County hold
23 dear, that rail is safer. The national statistics show
24 that. You need to know that the EIS would tell us that in
25 fact rail, largely because of the maximally, maximum

1 credible accident scenario and the exposure consequences
2 associated with that has a higher number of fatalities in
3 Nevada. And that's also true--well, it's true in Nevada.
4 I'll leave it at that. It's not true at the national
5 level.

6 And so, that begs the question then in terms of
7 looking at rail versus truck in Nevada and being sure that
8 we have a very safe rail system, and I'll get to that.

9 We need to know where one day we will conclude
10 that the direct rail to Yucca Mountain site is feasible.
11 We need that answer soon. We commend, again, DOE for
12 moving forward. They are engaging engineering consultants
13 and others to start this evaluation process. Obviously,
14 our concern is if it's not feasible what's the fall-back
15 alternative. We have rail-to-truck intermodal alternative
16 in the EIS that's in our county as well. And if we're
17 going to fall back to that, we would like to know that
18 sooner than later. Again, we don't want a 12th-hour
19 decision.

20 Continuing with the unanswered questions, getting
21 to this issue of direct rail versus truck and just the
22 rest, the fatalities and all of that. Again, the same
23 question applies. If it's going to cost up to a billion
24 dollars to build a rail line and, you know, and it's going
25 to be problematic or it's going to cost you, take a long

1 time to build it or it's not going to be available until,
2 you know, about 15 years or so before you're done actually
3 with your shipping campaign, at what point does the costs
4 associated with building the rail line and the
5 institutional factors with that, would those resources
6 perhaps not be better spent in shifting those over to
7 enhance highway transportation system? That might actually
8 be ultimately a safer system. We don't know the answer to
9 these questions. But we think they are worth investigating
10 as we go forward. We're confident this can be done safely.
11 But we also think there's an opportunity here to focus
12 resources to make it even safer. And we would encourage
13 that.

14 We have some questions about how direct rail will
15 be operated. We're very interested in whether we're
16 talking dedicated trains or general commerce type trains.
17 Shared use with general commerce. Will this 300-mile rail
18 corridor be available for commerce? Will it help us with
19 our mining industries and others? I don't know. We don't
20 know the answer to that.

21 Will it be operated by the UP or will it be a DOE
22 contractor? And then finally, branch line maintenance, and
23 by whom? We want to know, you know, kind of how is this
24 going to be done and who is going to operate it.

25 With that I would like to introduce Mayor Kevin

1 Phillips from the City of Caliente, who will close out our
2 panel.

3 PHILLIPS: Thank you, Dr. Baughman. Ladies and
4 Gentlemen. My remarks will be brief and more of a summary
5 perhaps.

6 I'm Kevin Phillips, the Mayor of the City of
7 Caliente, Nevada. Sorry that Mr. Loux left. I appreciate
8 the fact that he kind of gave out the qualifications of the
9 speakers that you should most listen to. He indicated that
10 you probably should listen to the cowboys or those that
11 don't get paid for being here. I'm probably the most
12 qualified. For one, I'm the Mayor of Caliente, for which
13 you don't get paid. Secondly, I have a hardware store
14 which is mighty tough to get paid. And I run a small
15 ranch. Having said that, I hope you will give considerable
16 thought to what I have to say.

17 Point 1 is just a brief historical perspective of
18 the City of Caliente and Lincoln County. In 1900, the
19 railroad came to Lincoln County and the City of Caliente.
20 And then later to the smallest hamlet in the county of Las
21 Vegas.

22 Point 2, in 1987 Lincoln County was declared
23 affected by Secretary John Harrington, and the reason was
24 because of transportation. The other situs contiguous
25 jurisdictions were granted affected status through an

1 appeal of the definition of affected through the Nuclear
2 Waste Policy Act.

3 From 1994 to the year 2000, the name of the City
4 of Caliente appeared in proposed federal legislation as
5 part of a congressionally perceived solution to the
6 transportation to the national repository. Ladies and
7 Gentlemen, the discomfort of the unknown has really been
8 something else on this. I'm serving in my 11th year as
9 Mayor, all of which time this has been an issue. As
10 affected governments we have studies on every legitimate
11 and imaginable thing, assuming that we are part of the
12 transportation corridor in Nevada. And hence, affected.

13 But the unknown has been tedious, tiresome and
14 wears one out. I have said to the Department time and time
15 again, pick a route. Any route. Toss a coin if you have
16 to. And then just let us know whether we're on it so that
17 we can either go on with life or start doing real work.

18 The preferred corridor selection in my judgement,
19 after all these years, is a major and significant step
20 forward. It not only gives relief to those of us that are
21 involved in terms of knowledge and knowing, and now
22 focusing on the issues at hand, but I believe it's
23 significant for the advancement of this project for the
24 Department and for the nation.

25 Now, the jurisdictions on the corridor,

1 Esmeralda, Lincoln, Nye, and the City of Caliente, are
2 ready to work cooperatively, constructively, with each
3 other and with the Department to find solutions.

4 Thank you. We're ready for questions.

5 ABKOWITZ: Okay. Board members. Do you have
6 questions? We'll start with Dan Bullen.

7 BULLEN: Bullen, Board, and I hope this isn't my only
8 opportunity to ask questions if I can think of something
9 later that I would like to ask.

10 A number of the speakers basically gave an
11 indication or at least I interpreted an indication, that
12 there may be some economic benefits from the construction
13 of the rail line. And so, could each county either expound
14 upon whether or not there are benefits that they think
15 would be derived from this, besides the short-term, as Les
16 mentioned. You know, come in, build it and then go away.
17 That's obviously a boon or bust kind of thing. Are there
18 other economic benefits that the rail line might bring, and
19 have they been identified, and are they of interest to the
20 counties?

21 BRADSHAW: Let me take--I know they have some very
22 pointed remarks here also. Nye has looked at the ancillary
23 benefits of multiple use of the rail. We are not
24 particularly adverse to dedicated trains, but we don't want
25 to have dedicated tracks. And, we hope the DOE will

1 operate this rail in a way that will allow ancillary users
2 within the county, potential people that are there,
3 potential users that have existing businesses and
4 operations now, and also people that would--that that new
5 rail corridor would draw.

6 We've identified about a million and a half tons
7 of shipping annually along the--in the general area. This
8 would include both corridors, Carlin and Caliente, coming
9 down to Amargosa Valley. Not going down to the I-15
10 corridor. People that are shipping by truck now and--but
11 were rail available to them, close in proximity to their
12 operations that they have indicated they would be favorable
13 to being a rail customer. And we believe that that
14 tonnage, a million and a half, would double within two or
15 three years of the rail being available, so from that point
16 of view.

17 Also, there's the taxation issues that would
18 bring some additional tax base. And of course, the worker
19 issue. People have to operate the rail. They have to buy
20 goods and services and there will be a huge infrastructure
21 of ancillary business to service the transportation
22 infrastructure. I'm not just talking about DOE's
23 operation, cash maintenance and all that, but all the QA
24 people, all the people that are going to have to fix and
25 grease and clean and so on. That will be a good benefit to

1 the region. And I know some of the others have some
2 comments on that. Surely Lincoln County.

3 SPEAKER: Les, after that, we're without comment.

4 BULLEN: Bullen, Board.

5 Just a follow-up to that question. And it goes
6 back to the comments with respect to safeguards and
7 security. I guess the question that comes to my mind is
8 that, granted, if you picked either the Carlin or the
9 Caliente route, by the time you get onto that stretch of
10 track, it's still like a one-way ride to the mountain. And
11 so, for economic development purposes and also for
12 safeguards and security, wouldn't it have made more sense
13 to make this a loop so that it had two routes in and out
14 of? And I know DOE didn't want to hear the fact that you
15 want to build more rail, but I guess I was just interested
16 in the fact that if you made it a loop, then you wouldn't
17 worry about the Southern California reactors not being able
18 to have access to the mountain. You wouldn't have to worry
19 about issues of safeguards and security except for maybe a
20 30-kilometer spur that would go off to Yucca Mountain and
21 everything else would be just a commercial rail line like
22 everything else in the country.

23 BRADSHAW: Many of the counties, of course, DOE has
24 precluded that now. They, you know--

25 BULLEN: I understand that. I just wondered what the

1 county perspective was.

2 BRADSHAW: We've long--Nye county, for instance, and I
3 think some of the other counties, has long advocated--is
4 going to spend a big amount of money, a billion dollars or
5 whatever on a new rail infrastructure and the country
6 hasn't built something like this for a long--many, many
7 years. Let's make this part of the western regional
8 transportation infrastructure and think NAFDA and think
9 relieving the traffic congestion in California, and think,
10 you know, new opportunities. And a through-going rail
11 seemed to make a lot of sense to a lot of us, but--and we--
12 but you know, there were a lot of pressures against that.
13 I mean DOE only has a mandate to get nuclear waste to Yucca
14 Mountain and that's all they really want to do. And that's
15 all they are mandated to. Unless somebody tells them to do
16 something different, that's what their job is and they are
17 not going to volunteer to build extra spurs into Beatty or
18 Tonopah, into other places unless they get some top-down
19 direction and money to do it. So these issues have been
20 batted around for many years, but apparently those have
21 been precluded at this time.

22 BULLEN: Bullen, Board.

23 Do any of the other counties have comments on
24 that? I mean specifically with respect to the issues of
25 safeguards and securities, since that was raised by, I

1 think Abby raised it.

2 MCCORKELL: Dr. Bullen, I just wanted to--I thought
3 that was an excellent question and I probably should have
4 included in my presentation some of the projects that our
5 multi-jurisdictional working group is looking to undertake.
6 That is probably one of our top priorities is to look at
7 those very same issues. So we've already identified them
8 and we're getting ready to put them on the table and
9 prioritize them. But certainly that is one issue that Nye,
10 Lincoln, Esmeralda and the City of Caliente, through that
11 cooperative, you know, this cooperative agreement, would
12 plan to look at.

13 NAVIS: One comment from Clark County. The point I
14 would like to emphasize was the point that Abby made about
15 the mutual aid agreements. Not only county to county that
16 Clark County is involved in, but also multi-state
17 agreements. So, if something happens across the state
18 line, to California and San Bernadino County, Clark County
19 is compelled to respond to an accident in that county.
20 Same with across the border in Arizona and also Utah. And
21 so, the multi-state responsibility, regional responsibility
22 that we have makes us feel compelled to emphasize our
23 affected status regardless of what transportation decision
24 is made. We're also well aware of the fact that mostly
25 truck--mostly rail means some truck. To what extent we're

1 not sure because we're not sure what decisions are going to
2 be made. And so, we have looked at public safety and
3 emergency management capabilities with truck scenarios, but
4 we've not fully looked at the rail implications. And so,
5 that would be our next step as a county to take a look at
6 what that means for rail. We believe that any costs to
7 respond to, prepare for, plan for, equip, manage in any
8 way, would far outweigh any economic benefit to Clark
9 County. So, that's our formal position right now, without
10 taking any kind of a position on a preference for any
11 route, and to also to continue to emphasize the need to
12 stay an affected unit of government throughout this process
13 until a final determination is actually made.

14 BULLEN: Bullen, Board.

15 Actually, I would love to follow up on that with
16 respect to the issues that were brought up with the 180(c)
17 area. Do the counties, and these are obviously the most
18 affected counties, have a level of funding in mind that
19 they think would be adequate to support the 180(c) efforts
20 that are necessary? And I know this is probably very
21 premature because you know you can't apply for a long time,
22 but there's got to be a number that you have in mind and
23 say this is at least a minimum threshold that we think
24 would be adequate to prepare ourselves for this type of
25 activity?

1 NAVIS: One of the analyses that we did that we
2 included in our impact assessment report talked about just
3 for preparedness alone, looking at \$360,000,000 for Clark
4 County. About \$2.7 billion over the course of the shipping
5 campaign to prepare and potentially respond to an accident.

6 BRADSHAW: And, if I could respond. For Nye County as
7 an example, and perhaps this working group will work it
8 out, but certainly we have to remember that you have to get
9 the volunteers jazzed up to go out and respond to that
10 call. I'm not talking about--I mean there may be a truck
11 tip over some day or a train, but the more usual thing is a
12 truck is going to--or train or something is going to break
13 down and there's going to be liquid leak. You've got to
14 get people to volunteer, so we're thinking you have to get
15 a level of expertise and training and capabilities and
16 communications and equipment that will make those
17 volunteers respond. If they hear it's a nuclear waste
18 thing, they're going to be busy. You know, they are going
19 to go the other way. So, a couple million, \$3,000,000 or
20 \$4,000,000 in the immediate vicinity to gear up and with a
21 minimal amount of paid, you know, paid participants. Most
22 people in Nye County are volunteers. Over 300. And, with
23 some training there may be five to seven, \$50,000 a year to
24 maintain that. And that's at a level that isn't at the--I
25 mean the volunteers, the emergency response community would

1 like much more level of participation, but a minimal. So
2 that's kind of what we thought in the past. But I mean,
3 and we don't believe that 180(c) is adequate at all. I
4 mean from what we've heard. But we don't want to be mixed
5 in to the--I mean 180(c) is good, but it's not going to
6 address our concerns.

7 JOHNSON: Dan, I just wanted to add one thing. I
8 don't have these numbers in my head, but on our website,
9 www.yuccamountain.org, we have our report that talks about
10 the estimates for the emergency management, regional
11 training facility. And, that has a breakdown, that kind of
12 thing. So the information is available there. That's of
13 course not all, but that's a good start to answer part of
14 that question.

15 BULLEN: Thank you.

16 LATANISION: Latanision, Board.

17 As we've just been discussing, there are some
18 rather clear economic implications for this development. I
19 wondered if the people, your constituents in the towns and
20 counties have expressed in any formal or informal sense
21 their sense of this project? Is there a public sentiment
22 that's clear to you and your colleagues?

23 BRADSHAW: It's clear to me. They are here today.
24 You've heard from some of them. But there's a lot of
25 people, someone mentioned the uncertainty factor. I think

1 the Mayor did. The anxiety of not knowing. But, knowing
2 that it's coming it's like waiting for the train in the
3 dark or something. You just--people need to know
4 information, benchmark events, that sort of thing.

5 LATANISION: Well--Latanision, Board.

6 Let me be more blunt. Is it a matter of the
7 public in your communities taking this as being something
8 they anticipate will happen or are they eager for it to
9 happen? Or what is your general sense of the public
10 reaction to this?

11 BRADSHAW: I think you've got a range of reactions
12 across the panel, and very briefly, for Nye, people in our
13 county, many of them are test site workers and so on, we
14 believe that we can deal with this. If it's going to
15 happen we can deal constructively with it. But it's that
16 we need a level of comfort. We need the warm fuzzy feeling
17 that DOE is going to work with us and that we can get
18 prepared for it. And we don't really have that right now.

19 LATANISION: Latanision, Board.

20 There hasn't been anything like a referendum, a
21 vote of any sort, a referendum on the issue?

22 BRADSHAW: In our particular county, no, but there has
23 been others.

24 PHILLIPS: In Lincoln County and the City of Caliente,
25 there has been a couple of referendum issues. Our people

1 fully recognize that what they perceive to be really--sorry
2 about that. Thought I had a bigger mouth.

3 In Lincoln and the City we've had a couple of
4 referendum issues. The people support the concept,
5 believing that it's inevitable and that it can be managed,
6 and that we should take advantage to the degree possible.

7 LATANISION: Thank you.

8 NAVIS: From Clark County's perspective on that issue,
9 we haven't had any official vote or referendum within the
10 county, but the county commissioners have passed no less
11 than four official resolutions opposing the repository
12 based on consistent survey data over the last 15 to 20
13 years that shows a 70 percent disapproval rate of the
14 repository within Clark County.

15 We also have done some more pointed studies and
16 surveys about what particularly is of concern to the
17 public, and the number one concern is, consistently,
18 transportation.

19 JOHNSON: And, in Eureka County our northern community
20 of Crescent Valley, which should be directly affected by
21 the Carlin route, we have had public meetings over the
22 years where varying local concerned citizens have showed up
23 and consistently asked the same questions and expressed the
24 same concerns, which basically boil down to many of the
25 things that Mike Baughman had in his presentation. Who is

1 going to own the rail? Who is going to own the track? Who
2 is going to operate? All those kind of nuts and bolts
3 questions of--plus a real concern that this disrupts their
4 way of life, totally.

5 BRADSHAW: And, you're probably aware that NEI
6 sponsored a survey in Nevada, at least in Nye and some
7 other counties that addressed this very issue, and when
8 asking the question, do you particularly want nuclear waste
9 in your back yard, of course, everybody would probably say,
10 well, if I could get out of it, you know, why would I want
11 that? But, if the questions were similar to this, if it's
12 coming, do you think you should be sort of compensated or
13 offset or you should get something for this? And most
14 people would say, well, yeah. If we have to bear this
15 burden, there should be some offsetting equity come to
16 the county. And so that's the frame of mind that people
17 are in.

18 ABKOWITZ: Okay, Dick Parizek.

19 PARIZEK: Parizek, Board.

20 The lady in Clark County, did I get the number
21 right? Was it \$2.7 billion or million?

22 NAVIS: Billion, with a B.

23 PARIZEK: And, over what time period?

24 NAVIS: Over the proposed 24 to 38-year shipping
25 campaign.

1 PARIZEK: And, that would be only for Clark County?

2 NAVIS: Correct.

3 PARIZEK: So, each of the other counties--nothing
4 comes from Clark County?

5 NAVIS: It's Clark County, all of the cities within
6 Clark County and two tribal entities within Clark County
7 that's a collective member.

8 PARIZEK: It is likely that other counties would have
9 other needs?

10 NAVIS: Correct.

11 PARIZEK: And, I was going to ask whether or not this
12 is transportation only, not connected to the repository
13 part of this, because it seems to me there's going to be
14 permanent jobs. And this didn't include the \$25,000,000
15 hospital we've heard about several times. Obviously there
16 is going to be staff, some are going to be full-time staff.
17 And so how does the full time staff requirements for the
18 repository help out in some aspects of the needs for
19 transportation, emergency responses?

20 NAVIS: We believe that that is more than offset by
21 some of the other losses we anticipate potentially. Drops
22 in the tourism industry that would lead to job losses in
23 that industry more than outweigh any potential benefit we
24 see from any jobs related to the repository.

25 ABKOWITZ: Thank you. And, Les, I would like to thank

1 you and your fellow panel members for both a very
2 informative and timely, and on-time performance. And,
3 we'll look forward to working with you individually and as
4 a cooperative.

5 And, I might point out, I don't know if the Mayor
6 can hear me, but Caliente might be a desirable site to hold
7 a transportation panel meeting in the future. We hope if
8 we ask you to host that that you would be willing to have
9 us.

10 PHILLIPS: Absolutely.

11 ABKOWITZ: Thank you. We're all going to take--we're
12 going to take a 10-minute break now. It will be a little
13 more abbreviated than on the schedule. We will reconvene
14 in 10 minutes.

15 (Whereupon, a recess was taken.)

16 ABKOWITZ: We're going to be entering into the final
17 sections of our program today, and I notice that we have no
18 more breaks scheduled, but close to three hours of
19 material, so this will be interesting.

20 The next piece of the program is to look at prior
21 transportation experiences and lessons learned with an eye
22 on the concept of let's not re-invent the wheel. There are
23 a number of campaigns that have taken place in the past or
24 that are going on now that have some similarities to
25 aspects of what is anticipated should a Yucca Mountain

1 transportation program become operational, and the planning
2 stages prior to that. And we certainly would like to have
3 an opportunity to hear about those experiences and get some
4 measure of what, if anything, is transferrable to what is
5 anticipated with Yucca Mountain transportation.

6 Our first presentation today is going to be on
7 the waste isolation pilot plan, otherwise known as the WIPP
8 project, and the WIPP project has been alluded to several
9 times today as kind of the exemplary project in terms of
10 how to do it right.

11 And, we're fortunate to have Ralph Smith with us
12 today. Ralph has been a central figure in the purported
13 success of that program. As you probably know, WIPP is the
14 only deep geological repository operating in the United
15 States and Mr. Smith has been invited to tell us about both
16 the development and the operational activities related to
17 the transportation system and the movement of transuranic
18 waste to WIPP for disposal. Ralph?

19 SMITH: After everybody has already talked, I guess
20 my talk is going to be very short since all lessons learned
21 have already been learned and everybody has alluded to
22 them. As Monty Python used to say, "And now for something
23 totally different, you're going to see me do it."

24 The first thing I would like to do is thank Bob
25 Loux for his kind comments; however, let me clarify

1 something. During most of that seven-year process it took
2 us to build a transportation system in agreement with the
3 states, I often felt, not like an architect, but most like
4 Mr. Fix-it, so it was a lot different than he described in
5 his use of the word architect.

6 One, to know what WIPP is. I know that most of
7 you probably already know, but let me just go over quickly
8 what WIPP is and what we do.

9 I don't like this. I'm a person who walks and
10 talks and gets amongst the audience, so if I feel a little
11 nervous up here it's because I don't--my talks are usually
12 done on the move.

13 We're trying to clean up the transuranic waste in
14 this country above 100 nanocuries, and let me say that's a
15 fairly arbitrary number. But that includes about 6.2
16 million cubic feet. Right now we believe about 19,000
17 truck shipments will accomplish that. And, if it's over 35
18 years, we're probably going to do--oh, there we are. I
19 like it a lot better. I'm just not comfortable standing in
20 one spot. I think I grow roots--about 19,000 truck
21 shipments, and as you'll see in the next slide, we are, if
22 not the largest, certainly one of the largest type B
23 container owners in the world.

24 So let me say right now--go back one. Go back.
25 That's all right, we'll get to it when we get to it.

1 We've done about 2,000,000, a little over
2 2,000,000 miles loaded, probably about 6,000,000 since the
3 project took conception in the mid-80s. We've got about
4 56,000 drums, 55-gallon drum equivalents, in the ground,
5 17,000 cubic meters. This shipment, or this number is a
6 little bit short since, as we'll see in the next slide, we
7 have four shipments out of Nevada, not three, and so, you
8 know, about 25 shipments a week and that number changes
9 daily. And, we've been in operation 4.8 years, since March
10 19th, 99, so we're coming up on another anniversary here
11 pretty quick.

12 We did have two truck accidents. We were hit by
13 a drunk driver in Carlsbad. A drunk driver was doing
14 between, we believe 80 and 100 miles an hour. He hit the
15 back of our trailer, totally destroyed his pickup truck,
16 and did so little damage to the trailer, we were able to
17 drive it the other 30 miles to the work site, after having
18 passed the CVSA inspection.

19 The other one was a woman in Andrews, Texas
20 decided she couldn't figure out what a stop sign was for so
21 she ran into the side.

22 We have, however, taken the drunk driver who was
23 a Texan too, we've taken the Texas magnet out of our
24 trailer so that the drivers don't hit us any more.

25 Here's the sites we ship from. We've shipped

1 from 13 sites around the country. Some of those major DOE
2 sites and five or six smaller ones. And these are the
3 numbers in yellow of shipments. Like I said, as of
4 yesterday we did a four-shipment out of Nevada Test Site,
5 and those numbers continue to go up every day. And, 2,281
6 shipments. We're very proud of that.

7 Here's our TRUPACT, or Type B container fleet.
8 Today we have 107. We're going to get to 111 by the end of
9 the month that will be 109 and we'll get a couple more the
10 end of the summer. And 79 TRUPACTS. The TRUPACTS are the,
11 used to be 14 55-gallon drums and they are used for contact
12 handled waste. Contact handled waste being waste under 200
13 milligrams to the surface. In other words, you can move
14 those barrels around by hand.

15 We have one 10-160 B. Right now we have half of
16 it. The other half is owned by the Ohio Field Office.
17 That's being used to ship out of the Columbus site, and as
18 soon as we're done with that, whenever that may be because
19 of legal complications in the State of Washington, we'll
20 take ownership of that.

21 This slide is a design for remote-handled.
22 Remote-handled is more radioactive. Still it's transuranic
23 waste. A picture of a HalfPACT. A HalfPACT is just a
24 smaller version of a TRUPACT, and that's designed to ship
25 heavier drums. We have 55-gallon drums that weigh over

1 1,000 pounds. Well, that's a pretty heavy little old drum.
2 And so, using those, we can get virtually more waste than
3 we could if we put them in a bigger package because I have
4 to have 14 drums even if they are empty drums, or damaged
5 drums in the TRUPACT, where in the HalfPACT, I can fit
6 seven. And plus, I reduce the size of that by 36 inches
7 and that's a lot of material. Let me tell you, a TRUPACT
8 is quarter inch stainless steel, 10 inches of high density
9 foam, porous stainless steel. It's the outside package.
10 We use double containment packages. Then you have about an
11 inch of dead space and another quarter inch package that's
12 totally separate. Empty, these things weigh about 13,000
13 pounds. Full, 19,250. So those are fairly heavy.

14 And then, you might recognize this. I had a
15 picture this morning of the West Alley Cask, which was also
16 Three Mile Island. This is a quarter size. This is a 72-
17 B, and I know Kachena talked about building those for us
18 with PacTec. These are for loading three 55-gallon drums
19 horizontally. They are lead-lined and can take up to 1,000
20 rem per hour shipments in there. And, we have, as you can
21 see, 12 of these. When we're licensed eventually to
22 handle, accept remote handled waste, this and the 10-160B
23 will be the packages of choice.

24 Okay, on the first slide with the sites, I didn't
25 show you all the routes. We have about 4,000 miles of

1 route. The little black dots are, a couple, but not all of
2 the sites, we've closed. And, of those 4,000 miles of
3 routes, the ones that are really going to be open for a
4 long time--remember, I've got about 75 percent of the waste
5 west of the Mississippi. But really I have in about five
6 or six sites most of the waste. And most of it is in Los
7 Alamos, Rocky Flats, which should be done by the end of
8 this year or it could be into early next year, INE EO, the
9 environmental lab in Idaho, in Hanford. And Savannah River
10 is the other big site east, with Oak Ridge having the most
11 remote-handled waste. Those sites. So basically the
12 corridor that leads from Savannah and Oak Ridge to WIPP and
13 then the corridor from Hanford down. The west to the west,
14 and the midwest and the northeast, out here I probably have
15 less than 300 shipments. In the midwest I probably have 40
16 shipments, total, into the northeast about 60 to 65
17 shipments.

18 So when we talk about, you know, affected parts
19 of the country, basically if you take this route, the route
20 from Hanford down, that's what I'm going to affect long
21 term, that's where most of the 19,000 shipments, probably
22 18,000 plus of those 19,000 shipments are in those two
23 routes. And, along those routes we do have Atlanta,
24 Georgia, Houston--I mean Dallas, Texas, Albuquerque, New
25 Mexico.

1 One of the things we're trying to do is trying to
2 get away from going through Los Angeles, as we did with Las
3 Vegas. Our desire would be to not ship through large
4 cities. However, remember that 49 CFR requires us to use
5 the interstate system to the most extent possible if it's
6 higher route control quantity. And we've told the states
7 that we would consider each shipment as if it were higher
8 route control quantity, and I'm not going to get into that
9 whole ball of wax. But with the State of Nevada and
10 California we're able to ship on non-higher route control
11 quantity roads because they were not higher route control
12 quantity.

13 Likewise things coming out of Lawrence, Livermore
14 will probably use this 99 and 58. We've already talked to
15 the state about that, ruling on that for the last 10 years.
16 And unless we get into higher route control quantity we're
17 trying desperately not to, you know, have to go through Los
18 Angeles and Las Vegas.

19 So, what works? I've broke it down into kind of
20 natural breaks. Advance planning. What works is long-term
21 excellent state and tribal relations. This business is 110
22 percent of relationships. When we opened Savannah River,
23 Interstate 550, which is a spur around the southern part of
24 Augusta, just opened, just before we made our first
25 shipment. In two days because of the relationship we had

1 with southern states, Georgia and South Carolina, we were
2 able to perform a re-route. Instead of taking the waste
3 north through Akins, South Carolina, to Interstate 20, we
4 took it around the south part of Augusta on Interstate 550.
5 And without those relationships that simply would not have
6 been possible. It would have taken us months, if not a
7 year. In a lot of places, they tell us it's a year to 18
8 months to get a route approved. But because of what we're
9 shipping and because of our relationships, we in states saw
10 that it was better, shorter, less impactful, better roads
11 and re-routed. That's what this business is about.
12 Talking to folks, getting consensus.

13 You know, I'll tell you what. The seven years I
14 spent putting the transportation system together basically
15 most of that was talking to the states, the tribes, the
16 local communities. When we opened the Idaho route I went
17 in every county and community of size between Idaho Falls,
18 Idaho and Carlsbad and talked to the City Councils, the
19 Mayors, the state and local politicians, just everybody.

20 And we've trained. Safety. That's the safety
21 protocols we have. We--and we'll get to the CVSA
22 inspection on the next slide.

23 Emergency response training, let me say that we
24 have done just short of 30,000 first responders in medical
25 personnel combined. We've trained in hospitals, we've

1 trained EMT's, fire, regular fire, volunteer fireman,
2 police, state police, sheriffs. You name it, we've trained
3 them. And we've trained in places that sometimes were not
4 absolutely on our route. Right now I'm training in Los
5 Angeles. And, I said, well, gee, I'm not going to be
6 shipping there. Some of this is good neighbor stuff. Our
7 training is for a logical response to a HAZMAT incident.

8 Well, what we found over the years is that it is
9 transferrable. That knowledge and that training, not only
10 to a HAZMAT, but to any incident. And so we've been
11 training both first responders, command and control, just a
12 number of things, and trying to train along the routes, or
13 within a reasonable distance. When somebody comes to me
14 with a reasonable request and says they need some help, you
15 know, this is about give and take between the states and
16 tribes and DOE and about building a reputation of working
17 together. And that's what we've tried to do.

18 We've done 29, almost 30--we've got the 30th
19 exercise, full scale exercise. These are all major
20 exercises involving just tons of people. We have one here
21 in January--year before, I believe, up on the test site.
22 And, we have had a lot of lessons learned. We've had
23 several failures there, which these are state exercises
24 that we support.

25 And, you know, I always tell people that one of

1 the things we'll do is we'll tell you where the ends of the
2 earth is. If you want to run off of it, we're not going to
3 stop you. But we certainly are going to keep telling you
4 you're about ready to fall off the ends of the earth. And,
5 in a couple of cases people had decided the edge of the
6 earth, that was fine with them. They would run off of it.

7 And public information. Until 9-11, we used to
8 do a lot of public information. And I mean take our roach,
9 we have a special trailer with TRUPACTS with the side cut
10 out of them so you can see the inside. You can see the
11 waste. And we would go all over the country. I mean I've
12 spent 10 years at this. The first seven years I traveled
13 more than 200 days a year. And we went every place.

14 Since 9-11, the problem has been any of these
15 kind of shipments you don't want to have the kind of
16 publicity that goes with them. And, it's not that we want
17 to make them secret. It's just that you don't want to
18 invite some person that looks at things differently than
19 the rest of us who think that these may be a target for
20 their activities. And we all know that's terrorists and
21 that kind of stuff. And so, basically, at the request of
22 the states, we've toned down the public response.
23 Certainly, we're still willing to do it. The states,
24 however, have been less receptive because of concerns about
25 security and that kind of stuff.

1 Transportation. Cooperative development of the
2 transportation plan, which again is the states. Treating
3 all loads alike. Again, this is all as if they were higher
4 route control quantity.

5 The thing I don't want to do is have, in the
6 middle of the night a driver, a truck driver--and these are
7 good people. These are the top of the truck driving, and
8 I'll talk about them in a minute--having to make critical
9 decisions. That is not what you want to have done.
10 Everything is treated the same. The routes are the same,
11 so we can train them and teach them as best as humanly
12 possible about what to do and not leave critical decisions
13 until 3:00 o'clock in the morning on a dark, snowy night in
14 the middle of Wyoming. You get them every once in a while,
15 still, but we're trying to cut that down so that the safety
16 factors are maximized and the security factors are
17 maximized.

18 TRANSCOM. We hear about TRANSCOM--I could tell
19 you, the first seven or eight years I was in DOE, TRANSCOM
20 was the only issue that I couldn't get my arms around. It
21 literally would not die. We went through a computer or
22 internet-based TRANSCOM system a couple years ago, and
23 virtually, and I know Thor had a couple of problems. But
24 we're about 98 percent positive on our new TRANSCOM system.
25 It's rare when we have problems with it.

1 And, it's a far-sight better--used to be whole
2 banks of modems and I used to tell people they were wooden
3 boxes that were that old. And, they would fail all the
4 time. You would get into a system and it would dump you
5 out. You know, five, six times an hour. Then one day, and
6 the next day it would work fine for three, four hours at a
7 time, and it wasn't worth anything. The new system, if you
8 can get in, and you guys probably just haven't paid enough
9 money--the system works wonderful.

10 And literally, we've just--but this is the
11 underpinning of the whole program. Because if you can't
12 tell where a truck is and you can't talk to the truck when
13 you need to and the truck can't tell you what they are
14 doing, you got a problem. So TRANSCOM has been just
15 wonderful.

16 We, as Tri State, and John, I know, I really, I
17 felt sorry for him this morning, felt like coming up here
18 and doing finger puppets for him. We--there has been a
19 number of security enhancements to the trucks. Let me tell
20 you, though, that because of what we did in this, when 9-11
21 happened, we were one of the first fleets to come back and
22 be able to ship. And when all these things, the Homeland
23 Security put on top new requirements, we had already had
24 those for years. We have all of our drivers background
25 checked by the state police. And that's not only their

1 driving record. That's their criminal record. Every year
2 the whole company, secretaries, management, mechanics,
3 everything. So, you know, from the get-go. They are all
4 drug and alcohol tested.

5 So, anything that Homeland Security has thrown at
6 us so far has been a no-brainer. We just, we've already,
7 usually have taken care of it. And it has a lot to do with
8 the states, too, because the states, I'll tell you, they
9 were absolutely--and the tribes, were absolutely a party,
10 the three parties in making this plan something that's
11 working and it had to be tweaked very little in the last
12 five years.

13 One thing we're looking at and we're trying to do
14 more was tandem shipments. We're not convoying these
15 things, per se, but certainly, as we get into one of the
16 last slides we'll talk about hours-of-service laws that
17 just went into effect, and we believe those are going to
18 negatively impact us. Especially during the winter. We
19 have shipments to the west and, go figure, you get snow.

20 We were stopped yesterday. The Nevada Test Site
21 shipment got into Arizona and there was snow up around
22 Flagstaff, which I know is a surprise to everybody. And
23 so, they were stopped at 1:30 in the morning. Finally got
24 started again about 8:00 o'clock this morning. So we have
25 that. And when you've got these shipments, they have to be

1 watched on a 24-hour basis. We all understand we need a
2 place to put them in safe parking. And I know they did a
3 fairly good job of talking about safe parking this morning.

4 So I have to have a driver up. With the new
5 hours of service laws, if I get one truck up there, I can
6 run that puppy out of hours. And, when they are out of
7 hours, those things cannot be watched. I have no,
8 literally no way, of watching those because those guys have
9 got to go to bed. It's a federal law, and I'm sure not
10 going to tell my folks, oh, go ahead and disobey the
11 federal law. No problem, you know. I'm not going to jail.
12 They are not going to jail.

13 So that could be a major problem to us and the
14 states and we're, you know, it's only since January 4th, so
15 we're still in the learning curve of what that's going to
16 look like, but we really think it's going to be a problem.

17 Points of origin. Every WIPP truck point of
18 origin is inspected by a state entity, usually the state
19 police or a state transport police, to CVSA Level VI.
20 CVSA commercial vehicle safety alliance, what this is is a
21 zero defect inspection. Light bulbs out, anything, we'll
22 put that out of service. That means when we start from
23 Nevada Test Site, from Lawrence Livermore, from any place,
24 that truck is as close to perfect as we can get it. And
25 it's time after time. It's not just one--it's every time

1 they go up there. And since we've done 2200 of those, they
2 were done 2200 times.

3 Also, Colorado, by state law, inspects every one
4 of ours every time they come in the state. Also New
5 Mexico, I'm trying to think of the reason why, but I can't,
6 so--but New Mexico does 100 percent of our trucks for their
7 inspections when they come into their state. So, something
8 coming out of Hanford or Idaho is inspected at least three
9 times for these same standards. Understanding that two of
10 those happen after the trucks have gone 800 or 1,000 miles
11 and then another one has gone even farther. And they still
12 pass those kinds of inspections. It's remarkable. The
13 transportation system we have literally is the best in this
14 country. And we are pouring millions of dollars into it.
15 But, we're pouring it into a good thing. Safety is the
16 number one thing, and I'll show you in just a second.

17 States activities really mirror what we did. We
18 have trained just a ton of state employees, usually, like I
19 said, highway patrol or state transport police. Drivers
20 checks have been done by the states. Response, we've done
21 all our coordination outreach. And consensus polling,
22 we've worked with the four of the five major regional
23 groups. The only one that differs between Gary and me is
24 WEIB. Western Interstate Energy Board. And, I do WGA and
25 that's by choice of WGA, so whatever.

1 Okay. We'll get right down into here.

2 Mobile contracts. Right now I have two trucking
3 companies that work for us. They are both contract
4 truckers and they use dedicated equipment and dedicated
5 drivers. What that means is when they put a truck-tractor
6 on my job, they don't use it any place else. Same way with
7 drivers. The drivers' standards for our drivers are so
8 high that, literally, I'm talking about the cream of the
9 cream of the crop. If you've ever had a DUI, don't even
10 apply. Don't even worry about it. You're not going to get
11 hired. If you have a number of tickets in your own car.
12 don't even apply. We're not interested in you. These
13 people have at least 325,000 miles. Most of our drivers
14 have well in excess of, you know, 800,000, 900,000 miles.
15 These are very good drivers to start with and then we give
16 them six weeks of training of top of that.

17 But one thing I wanted to point out, this is not
18 a race, Guys. We pay our drivers salary, not by the mile.
19 Most truck drivers in this country, the reason they go so
20 damn fast is they are in a hurry to make money. Our
21 trucks, first of all, are governed at 65 miles an hour.
22 That is checked when they get back every time so if
23 somebody has decided they were going to play the game on
24 the computer and game the governor, they will get caught
25 and they will be working elsewhere. And there's no

1 incentive for it. Whether it takes them an extra hour to
2 get in or not, like the one last night, is not--doesn't
3 reflect in their pay, at all.

4 Also, safety incentives. We pay--if a company,
5 and this is by company, has no accidents during the year,
6 then every driver in that company gets 15 cents per mile
7 for what they've driven. That can mean, and usually means
8 somewhere around \$6,000, \$7,000 at the end of the year.
9 Pretty nice little kick. If they have one accident, they
10 get 10 cents, and that's for everybody. This is a peer
11 pressure deal. If the whole driving fleet has one
12 accident, they get 10 cents. If they have two accidents,
13 they get zero. So you can imagine the incredible pressure
14 on everybody to be absolutely zero accidents.

15 And again, I don't mind paying them 15 cents a
16 mile. Matter of fact, I enjoy it because that means that I
17 can come in front of an audience like this and say, Guys,
18 we've done everything we can to keep these safe. We're
19 doing everything we possibly can think of to make sure that
20 the safety and security in this country for these shipments
21 is being addressed. But everything is two-person driving
22 teams. Once they start, as John was saying this morning,
23 the only reason they stop is potty breaks and diesel fuel.

24 Continuous monitoring of shipments by the
25 drivers. In other words, when they are stopped, somebody

1 has got to be up watching that shipment. These things are
2 just not left out there on their own devices.

3 And strong working relationships with DOE and
4 DOE's contractors. At WIPP, we're about 1,000 people, with
5 45 DOE people down there and the trucking companies and the
6 management operating contractor, which is the Washington
7 Group, as well as the other contractors. We treat this
8 like a big family. We share equipment amongst the trucking
9 companies. When there's a problem, there are trailers
10 assigned to each company. Remember, the trailers are mine,
11 the TRUEFACTS are mine, the tractors are Tri State's. Or
12 CAST's. I don't own tractors. And I don't own drivers.
13 Drivers are their employees. But, we treat this like this
14 was all of our work, not just a CAST problem or a Tri State
15 problem or somebody else's. This is everybody's at WIPP's
16 program. And, failure in this is failure for the rest of
17 the program.

18 And then challenges. I hate to say what didn't
19 work. That sounds way too negative. There are some things
20 that don't work, but let's put it this way: One of the
21 problems--and Gary is going to have--this is going to be a
22 major one. And I think he's got a hell of a higher
23 mountain than I did, shipping schedules.

24 You know, right now we've got various sites that
25 are shipping and some of them want to be treated better

1 than others or get more resources. And they are all DOE
2 sites. We control the people. I can't imagine the food
3 fight we're going to get with the utilities when they all
4 say, okay, tomorrow you be at our front door and you and I
5 have enough resources to go to the two of them, much less
6 all of them. That will be a food fight. And that's
7 something you've got to address pretty quick, because it
8 literally will drive you crazy trying to run shipping
9 campaigns when you're running them nationwide.

10 Inconsistencies at the shipping sites, we've
11 already talked, you know, I'm a nosey person. I always
12 have been. And, I also deal with every state, even though
13 there's only 30 states that I deal with myself, because of
14 the regional groups--I deal with every state in the
15 country. And some of the folks that come to us, like say
16 Maine, Maine Yankee, and ask us about characterization and
17 that kind of stuff. And one thing we recommended they do
18 was, you know, it would have been lovely if years ago
19 everybody videotaped all the loading of the casks so we
20 know what the hell is in there. They didn't. So we have
21 no idea. So sometimes we've got to open the stuff up.
22 Well, opening our waste is the problem. Opening their
23 waste is insanity.

24 So what we've done is--and what Maine Yankee is
25 doing was videotaping everything it loaded with a

1 commentator because they sent us videotape and it has them
2 loading stuff, and then it had 10 minutes of nothing. I
3 said, you know, I can only imagine a regulator saying, what
4 the hell were you doing in the 10 minutes? You know, what
5 are we missing here? It's like 19 minutes of tape missing
6 from--you know. So, we went back and told them, you know,
7 you guys need to have a commentator and you need to make it
8 continuous, or if you've got breaks in there you need to
9 say we were repositioning this, or we were doing whatever.
10 But you've got to get a commentator so you can tell them
11 what the hell was going on.

12 And so, that would make the waste acceptability a
13 lot better because you will know 10 years, and as I told
14 the gal who was up there, 10 years from now you may be sued
15 as Maine Yankee. How are you going to prove that the QA
16 was done; that the stuff was loaded as you said it was
17 loaded? If you've got videos--it's like my trucks. Every
18 single tractor I have has continuous loop video in the
19 front. If you run in front of me in a car and stop fast, I
20 can go to Court and pop that little old puppy in the VCR
21 and show that Judge and jury and everybody else what you
22 did. And it's proof, very invaluable. We've almost been
23 hit twice by head-on from drivers on four-lane roads and
24 they were in the wrong lane. At least I hope they were in
25 the wrong lane. And, we didn't do anything with it, but

1 certainly, it was nice to see, you know, that our drivers
2 were taking responsibility and that kind of stuff.

3 Procedures, you know, we had, it just so happens
4 that the accident we had when we got hit by a drunk driver,
5 the back TRUPACT, which was No. 157 was found to have some
6 blue pseudoallele active contamination in it. And, the
7 report is coming out on that today or the next couple of
8 days. Basically what we believe happened was there was a--
9 the lid was improperly torqued on a drum. And that should
10 not happen. I mean this is a procedure that every site
11 has, understanding that every site may have different
12 drums, different manufacturers, but when those drums come
13 in their Type A container, they have specifications of how
14 they need to be handled and sometimes people need to get
15 together with their specifications. And it cost a heck of
16 a lot of money, time and grief because we had to send that
17 thing back to Idaho. There's no way we can open it. We're
18 not prepared for radioactive material. Understand, we are
19 a site. We have no radioactive material free on-site, so
20 we can't take radioactive contamination. I know people
21 just--that's kind of anomaly.

22 Also, quality assurance. Quality assurance has
23 got to be the big thing, Guys. If you don't, if you can't
24 be sure you're doing everything right, NRC is going to get
25 you sooner or later. We have an NRC agreement for our

1 TRUPACTS. If we ship prohibited items in there or we do
2 things wrong on a consistent basis--and I don't think it's
3 going to be terribly much consistent--a couple times
4 they'll probably get us, they are going to shut us down.
5 They jerk license and say, until you come up with a way to
6 prove to us--and we've got to prove to them. They don't
7 have to, you know, as long as they sit up there in
8 Washington, that you're never going to do this again,
9 you're not shipping. So we're constantly working with the
10 sites on how to make this better because this is a real
11 challenge.

12 We did put in here, and I'm not trying to ping
13 DOT. Lord knows, I wouldn't want their job with this.
14 Although they've not made our job any easier. They send
15 out these regulations, they send out a little blurb--I'm
16 pretty much done--and they didn't give us enough
17 information.

18 Impact of routing. New Mexico, having these
19 things sit along the road and we have sometimes seven of
20 them sitting up near Trinidad, Colorado. Probably is not
21 the best thing. And state escorts, from our point of view,
22 and for waste we're doing, is pretty much not a good thing.

23 Okay, we also have problems with shipping
24 containers. Mostly that's caused by internal stuff where
25 people say you're not shipping, you don't need the

1 containers. The lead time on these, even when you think
2 that they are just soda cans, is huge because they are part
3 71 QA and building a TRUCPACT may seem like a very easy
4 thing, but it's really not.

5 And then delivery just proves to be a nightmare.
6 We're still getting TRUPACTS almost five years after we
7 started. Obviously we probably needed those during that
8 five years.

9 Carrier contracts. Unfortunately I've got two
10 five-year carrier contracts that expire the same day. Next
11 June I could virtually have four contracts, two new ones,
12 two old ones, working, driving the same stuff the same days
13 for 30 days as we go through a period, and it's not a great
14 thing. We're going to fix that.

15 Also, fixed price contract with no escalation.
16 Fixed price was probably a bad idea because we had no idea
17 what the costs were going to be. Literally, this kind of
18 shipping never was done at DOE. There's no cookbook.

19 And qualified drivers, it has been literally,
20 because I'm taking the top one or two percent of drivers in
21 Carlsbad, New Mexico. Think of that now. Carlsbad, New
22 Mexico. It's really, really, really hard to get those
23 drivers. It really is. And, keep them. You know, when
24 we're paying top wages. Literally, we're paying the top of
25 the wage scales and we're giving them bonuses on top of

1 that. And other benefits, and still a nightmare to try to
2 get drivers.

3 I think that's the last slide, right? That one
4 you can throw away.

5 Anyway, if anybody needs to get hold of me, there
6 you are. Questions?

7 ABKOWITZ: Okay, thank you, Ralph. We're going to
8 start with Dave Duquette.

9 DUQUETTE: Duquette, Board.

10 I'm a little confused, probably because I wasn't
11 listening carefully enough, about your drivers. Do your
12 drivers spell each other? Is one sleeping while the other
13 one is driving?

14 SMITH: Right.

15 DUQUETTE: And so it's a continuous cycle. They don't
16 pull over except for anything, necessities?

17 SMITH: Right.

18 DUQUETTE: Okay, thank you.

19 ABKOWITZ: Dick Parizek.

20 PARIZEK: Parizek, Board. On the accidents, the two
21 drunks I guess you mentioned, is that charged to the driver
22 as an accident?

23 SMITH: No.

24 PARIZEK: That was not on his record or her record?

25 SMITH: Nothing we can do about it. Well, one was

1 drunk and the other one, as I tell the story, and you've
2 got to remember, I embellish things. I know that's a
3 shock. One was a 19-year-old, this is the second DUI, this
4 drunk. The second one was his sister on a beer run for him
5 in Andrews.

6 PARIZEK: But, I'm sorry--so the record remains clean.

7 SMITH: There was nothing we could do about them.
8 They were both their fault, totally.

9 PARIZEK: Other than the TRANSCOM system, because I
10 think I saw that once years ago in a truck that was needing
11 work, sitting down in Carlsbad. What other upgrades have
12 been required? I mean you started out with equipment that
13 was giving you some trouble when you're doing new things or
14 replacing equipment. This thing that we heard yesterday by
15 Budnitz. We're not going to be flying the same airplane
16 for 30 years. You haven't been flying the same truck for
17 four years.

18 SMITH: Not close. One thing we did was when we first
19 started, when we were first shipping, we had a different
20 contract. It basically said that you would replace trucks
21 after 250,000 miles. You replace tires and brakes after
22 100,000 and everything. Well, we did that. And it cost us
23 the first time about \$9,000 a tractor, and the trucking
24 companies loved us. They got brand new tires off of our
25 trucks because 100,000 miles on a truck tire is brand new.

1 What we do now is say two percent down time. If a tractor
2 or any of its components started seeing two percent down
3 time, we inspect that truck and go in and haul that thing
4 out of there and put something new in. And so we don't
5 care. You can keep a tire for--we can't keep it forever,
6 obviously, because we have standards on that, but you know,
7 get the use of miles out of the tires, get the use of miles
8 out of the brakes, whatever. We've literally had tractors
9 that within the first 1,000 miles started to have problems
10 and never have got over it. They were probably Friday to
11 Monday tractors. And trucking companies have gotten rid of
12 those within months after they got them, brand new
13 tractors.

14 PARIZEK: And maintenance, we've heard about the
15 importance of having maintenance built in, you know, to the
16 whole system, and in your case you could maintain before
17 you leave and I suppose when you get back, but enroute,
18 what happens if something breaks down? What's the typical
19 situation? You drive up to Texaco and blow the horn or--
20 this is kind of unique stuff, I would think.

21 SMITH: Well, it is because if we've got a load on--
22 empty, we can do whatever--pretty much whatever we want.
23 With a load our central modeling calls the state, explains
24 the situation. The trucking companies usually know where
25 there's facilities available to fix them. And, in some

1 cases, the state will come out and escort us. In some
2 cases they just allow us to get on--it'll be an off-route,
3 an off-route with the state's concurrence, and that kind of
4 stuff. Again, it's all about communications. If you've
5 got a problem, you've got to tell the states what's going
6 on. We've had a number of them. I mean you can't have
7 heavy equipment like that without having a number of
8 incidents, but nothing serious. It has just been, you
9 know, tires here or a generator there, or, you know, just
10 the stuff you would normally think of with your automobile,
11 only the truck is a lot bigger, lot more stress.

12 PARIZEK: One more question. You own the TRUPACTS, so
13 do you have maintenance on the TRUPACTS?

14 SMITH: Yes, I do.

15 PARIZEK: Where do you do that?

16 SMITH: In Carlsbad. EPD is a subsidiary of
17 Washington Group who builds a number of the TRUPACTS, does
18 the maintenance on them, too.

19 PARIZEK: You agree with the need for that? I mean--

20 SMITH: Oh, absolutely.

21 PARIZEK: --that's a very important element.

22 SMITH: Well, under NRC they were required--they are
23 required to go through a yearly maintenance and re-
24 inspection earnings. So instead of shipping them all over
25 the country, it's nicer to do it rather close to home where

1 we can control and look over the shoulders of the folks
2 that are doing it for us.

3 PARIZEK: Thank you.

4 ABKOWITZ: Dave Diadato.

5 DIADATO: Diadato, Staff.

6 I'm thinking about your numbers in terms of your
7 total shipments that you need to do and the mass and the
8 volume that you need to ship, and thinking about densities
9 of 1,000 pounds per 55-gallon drum and that kind of thing,
10 and you started to talk about some serious weight, maybe
11 even more than Yucca Mountain. I don't know if that's
12 true, if it's always 1,000 pounds per 55 gallons. But the
13 question is, was there ever a consideration of this rail
14 idea? Did you ever--do you look at rail initially and then
15 why did you reject it, ultimately?

16 SMITH: We looked at it a number of times. Matter of
17 fact, we're in the process of re-looking at it. I think
18 personally, and this is from my experience, so this is not
19 DOE and I'm sure I'll be shot by other folks in the room.
20 Rail has got two major fortes, size and weight. My trucks,
21 except for the 10-160B are all legal weight trucks. They
22 are all under 80,000 pounds, size, the height, the length,
23 there's nothing that is over-sized for road shipments. And
24 so, if--I don't know if it provides us any advantage to go
25 by rail, but that's, again, my humble view of the shipping

1 world. We are looking at rail. We do know eventually
2 we're going to have to ship some things by rail. They are
3 just flat too big to--whatever.

4 But every package, every TRUPACT III that Ian
5 talked about being built, PacTec is building up in Tacoma,
6 will be truckable and even though overweight, probably only
7 weigh about 95,000 pounds, which is really not a big deal.
8 It's only when you get 110,000 or 12, where most states
9 start having a heart attack and their bridges and that sort
10 of stuff, have a problem handling. So we're well within
11 what we can ship, and like I said, the TRUPACTS and the
12 HalfPACTS, even with 1,000 pound drums, are never over
13 80,000 pounds.

14 DIADATO: All right, thanks. And then the second
15 question was, you had seven years of going and talking to
16 people and I presume during that time there's some
17 listening, too. So the question I have is what are the
18 three most common questions you were asked as you went
19 around during this seven-year period, communicating with
20 people?

21 SMITH: Well, they wanted to know what the waste was,
22 which is trash. Except for plutonium, americium and the
23 daughter products. Our stuff in most cases--you'll never
24 see ours placarded for the hazardous material because it's
25 too little. Okay, even if it was--even if there was no

1 radioactive material in there, the amount of hazardous,
2 other hazardous material just wouldn't get it there.

3 How is it going to get to where it's going? So
4 they want to know the routes. They also wanted to know the
5 mode of transportation. And, they want to know if it's
6 safe. How we answered that--and let me tell you, the most
7 important thing we've ever done is train 30,000 first
8 responders. They don't believe DOE people. I am totally
9 shocked, I mean, I rate it right there with used car
10 salesmen and Martha Stewart. I don't know, it's--but when
11 we train the first responders, all 30,000 of them, in all
12 these communities across the country, and they get to see
13 this stuff and touch, feel, whatever, when the Mayor of the
14 city asks them, what do you think about true waste, my
15 problems are usually over. Guaranteed.

16 I went to Barstow last week. This is my second
17 week, and for all these Las Vegas people I'm out here
18 spending money two weeks in a row, so I'm supporting your
19 economy--went to Barstow last week and you know we had had
20 some flap about us shipping starting two weeks ago, and
21 that will be over next Friday since we've done the fourth
22 shipment yesterday and the fifth tomorrow, two more next
23 week. At least of the first set. And, they've been
24 trained. Matter of fact, we've done a whole lot of
25 training in California and Nevada. We had already done it,

1 but we did it more since Diane Feinstein and her letter to
2 Secretary Abraham, and literally, the police chief, fire
3 chief both got up and told the Mayor not a problem.

4 End of my story, end of my discussion over it.

5 DIADATO: Thank you.

6 ABKOWITZ: Dan Metlay, you have a quick question?

7 METLAY: Dan Metlay, Staff.

8 I assume you've submitted to NRC regulations
9 voluntarily. Is that correct?

10 SMITH: We're not covered by NRC. Our shipping--the
11 only thing with NRC with us is the Type B containers.

12 METLAY: Okay, just the certification--

13 SMITH: Just the certification. We do not follow NRC.
14 Oh, I'm telling you what, there probably isn't a dental
15 floss difference between what they require and what we're
16 shipping. Probably, we're--as most people will tell you
17 about our program, we're extra-regulatory for everything.

18 ABKOWITZ: Ralph, I have the final question here, and
19 I recall reading somewhere along the way that at one time,
20 and maybe perhaps they still do, DOE has something called,
21 I believe it's a Senior Transportation Management Forum or
22 some terminology like that with the idea being that
23 transportation managers from various campaigns would sit
24 down and work together and share experiences, and, you
25 know, break bread and all that good stuff. Does such an

1 institution exist today, and have you been involved in
2 that?

3 SMITH: No and no. Well, I don't know, and no.
4 Whether it still exists, Gary may know.

5 ABKOWITZ: You want to speak to that as well? Well,
6 you need a microphone.

7 LANTHRUM: I can give a bit of a background. Gary
8 Lanthrum, DOE. There was--a long time ago there was a
9 Senior Executive Transportation Forum that was convened and
10 their charter was to address cross-program issues that
11 would come up that required inputs from more than one
12 program. And, it was fairly active in the early days of
13 WIPP being put together, but as WIPP became more
14 operational and the program, cross-program issues became
15 fewer and fewer, it fell out of fashion and is no longer
16 currently operating.

17 Alice, do you want to talk to whether it was
18 being reconsidered, or anything in the current realm?

19 WILLIAMS: A very short answer on that. There is
20 tremendous interface among all the transportation programs
21 within DOE. Whether it--and within the NNSA organization.
22 Whether we go to a formally-constituted program like we
23 had earlier or whether we continue on a more informal way
24 of sharing lessons on that remains to be seen, but there is
25 a very strong interface that we are starting to build

1 between the Environmental Management Program as well as the
2 Office of Civilian Radioactive Waste Program, which
3 probably will be taking over that kind of function and
4 we're just beginning that activity.

5 ABKOWITZ: Okay, thank you. And, thank you, Ralph.

6 SMITH: Certainly.

7 ABKOWITZ: Our next speaker is Charles Messick, and he
8 will be talking about the Foreign Research Reactor Fuel
9 Program. On the agenda the research was actually left out.
10 I don't want you to think that we have started to accept
11 other types of fuel that we were unaware of.

12 Chuck's background has been with the, in DOE, has
13 been with the Savannah River Site since 1990, and more
14 recently he has been working with the Foreign Research
15 Reactor Spent Nuclear Fuel Acceptance Programs, actually
16 been involved with that program since its inception in
17 1996. And he has been the Lead Program Manager for the
18 last three years, and we certainly look forward to
19 hearing Chuck's knowledge and experience from that program.
20 Chuck?

21 MESSICK: Thank you. It's a pleasure to be here
22 today. And, as I get going on my presentation, I started
23 taking some notes and realized that some of the things I
24 put in my presentation probably is less applicable than
25 some of the things that I'll try to expand upon today

1 because of what I've learned today. I haven't been
2 involved with this part of the program and so I wasn't
3 exactly sure.

4 Also, as Lead Program Manager at the Savannah
5 River Site, I'm also the only worker I have. I'm the only
6 FTE at Savannah River Site working on this program. We are
7 a very low-budgeted operation. I do have some contractors.
8 So, I'm my own worker. So, sorry.

9 What I wanted to point out just as one example,
10 and hopefully, it's a good example, but it may not look so
11 good. We also have not had any accidents to date. The
12 picture I'll show you here is a truck overturned in
13 Argentina to one of our later shipments in 2001. Actually,
14 that was in December 2000.

15 But what this is is the equipment container that
16 was in convoy with the packages. Even in these countries
17 we differentiate between the requirements for who can drive
18 the material and who can drive the other things. However,
19 it wasn't the same convoy. They had less experience
20 driving. The better trucks were carrying the cask and
21 these were following it. However, we did have one incident
22 during that time.

23 But the incident shows you that in some ways. one
24 data point shows you that something did happen, but it
25 happened to the equipment containers, although nothing--on

1 the IP-2 containers, nothing happened with those. But, the
2 accident occurred on the non-retro fuel.

3 And also, on my presentation, I'm going to talk a
4 little bit about the program origin, a little bit more
5 about the--I've it called the attributes of the program,
6 which sort of were addressed with the questions that may be
7 applicable to this program. And then some more of the
8 detail, lessons learned, some of them very detailed, I've
9 pulled them together from a couple of different sources.
10 And maybe a little too detailed and haphazard. So,
11 however, most of the information is in your slide and I'll
12 try to expand on it. I'll also try to increase these notes
13 I took, and they may apply to you.

14 This program began in 1996 from the signing of
15 the RECR decision by the Department of Energy. It stemmed
16 from the Atoms for Peace Program from the 1950s. Part of
17 that program involved 41 countries that we gave enriched
18 uranium to to run research reactors. Part of the agreement
19 was for doing that was we would take the material back.
20 Now, that benefitted us in a couple reasons. We'd take the
21 material back and put it back into our process, and that
22 continued on until the 1980s and early 1990s when those
23 programs were halted. Ours eventually became in place.
24 During that time, we no longer had use for that material so
25 it became a bi-product or unusable material for us and it's

1 now designated for repository or some ultimate disposition.

2 So our program is a little bit different than the
3 past programs, which is probably why it had some resistance
4 in getting a new program going.

5 I think I covered some of this so I'll skip over
6 some of these and try to just hit the highlights of what's
7 important. And, some of these things that's important to
8 know is that this program is intended to support the non-
9 proliferation objectives in that the reactor operators who
10 are still using highly enriched uranium agreed to convert
11 to lower enriched uranium or some other fuel in order to
12 continue operations. And I would like to say we have been
13 fairly successful in that, as only a few reactor operators
14 or reactors in the world that we have supplied uranium to
15 that are still using HEU and we're working on those. They
16 have not agreed to participate in the program.

17 There is LEU out there for mostly reactors to
18 convert and use. There are some issues with that regarding
19 the disposition capability of that LEU fuel, which is still
20 a problem for a lot of our reactor operators.

21 This just gives you a brief outlay of the these
22 41 countries. Part of our program, and you'll see a little
23 bit later, we've separated our spent fuel into two
24 categories. One is the TRIGA fuel. That is destined for
25 the Idaho National Environmental Engineer Laboratories.

1 And, all the other material we call the test reactor fuel
2 is designated for the Savannah River site, which is 95
3 percent of the fuel, obviously, so the Savannah River Site
4 will get most of this material in probably 36 of the 41
5 countries. So we have the lions share of the work. This
6 involves about 20 metric tons to be shipped back to the U.
7 S. One ton going to Idaho, the other 19 tons that go to
8 South Carolina.

9 One of the other members in an earlier
10 presentation talked about the West Coast shipment. We have
11 done one West Coast shipment from San Francisco to Idaho.
12 All the rest of them have come to the Savannah River Site.
13 So currently we have five have gone to Idaho. You see
14 that later. Four of them have come to the Savannah River
15 Site first and then another shipment campaign to get it to
16 Idaho.

17 Our program is a 10-year program plus another
18 three years for the reactor that converts it to the--or
19 stop using the fuel at the very end of the program for it
20 to cool down to K, and then establish a shipping process
21 for that. So none of the fuel must be readied after May,
22 actually May 2006 in order to be eligible for this program.

23 Beyond 2009 we expect the reactor operators to
24 determine their own disposition path for that. That is the
25 way this program is set up.

1 Just to give you a little briefing as far as the
2 shipments we've done. If you add the two we've done 28
3 shipments, two of these 23 over here is actually two of
4 these over here because it's only--the shipment was only
5 done to the Savannah River Site and forwarded on to Idaho.
6 But we have pretty much covered the span of the world to
7 get our shipments in.

8 What we're talking about as far as transportation
9 goes here is only from, primarily for us it's the
10 Charleston Naval Weapons Station, Charleston to the
11 Savannah River Site, a mere 126 miles by pretty much rail
12 or truck, or road. And, however, so that's a very small
13 piece of the pie for what we do as far as making these
14 shipments happen. And actually, this is probably the
15 easiest part we have to do, and hopefully, I'll cover that,
16 why it's easier in just a moment. That will give you some
17 idea as to what we're doing.

18 Okay, the 28 shipments--21 of the shipments come
19 from the Charleston Weapons Station, which is our primary
20 port of entry into the United States. We've had two
21 shipments from Canada, both using the same route that came
22 in through Niagara Falls and down to the Savannah River
23 Site. Again, one West Coast shipment to INEEL and then
24 four cross-country shipments from Savannah River Site to
25 Idaho.

1 And, when we talk about shipments, these--the
2 regulations talk about shipments as far as packages. These
3 are shipment convoys or campaigns. They can be between
4 one, two, up to 16 packages in one shipment, which I'll
5 address that as far as the truck versus train in a little
6 while as far as potential benefits and/or pros and cons.

7 In implementing the program--and I think someone
8 else mentioned it earlier, too, is, the Department of
9 Energy plays a direct role in making these shipments
10 happen. We don't contract out to the shipper and then wait
11 for it to happen and open the gates when it gets here. We
12 don't do that. We're in direct involvement with this
13 program. I think it makes it a better program because of
14 that. Also, it causes a little bit of problems as far as
15 who calls who when they do have some concerns or problems
16 during the shipment campaign.

17 We have in the inception been an open forum in
18 what we've done. We've tried to hold public meetings and
19 hopefully they were adequate. In these public meetings it
20 was determined that a train was the most preferred
21 mechanism in order to transport it.

22 We try to involve all the stakeholders in what we
23 do. And, from initiation and then afterwards. When we
24 talk about stakeholders, the resources we use to make a
25 shipment happen, we constantly and continuously communicate

1 with those folks in order to continue our process.

2 And, as Ralph pointed out earlier, that's been a
3 real key to our success, particularly in the smaller
4 distance, from the Savannah River--from the Charleston
5 Naval Weapons Station to the Savannah River Site because we
6 have a constant relationship with those folks. And any
7 problems that we have we'll know it early on.

8 Now, put up--well, I'll talk about that in a
9 minute.

10 And Ralph even said the same thing. Sometimes we
11 go beyond in some cases. And we do that in order to make
12 the shipping campaign a success. And we talked about go
13 beyond, it's not that we go and spend extra money just to
14 appease people. We justify that. But we try to do the
15 extra things that makes the shipping campaign more
16 meaningful to the people that have to support it.

17 A little more explanation is this program, and
18 the question that came up earlier as far as NRC shipments
19 and what have you, we still have a small problem with that.
20 But this program, we have two categories of reactor
21 operators. We have reactor operators from high income
22 economy countries and then what we call other than high
23 income economy countries, which are low income and middle
24 income by the World Bank report.

25 High income economy countries is what funds our

1 program. We charge them a management fee and when they
2 ship in we charge them \$4,500 per kilogram of total mass
3 that we received, and \$3,750 for LEU, what we receive, then
4 we use that money to pay for the various things that we're
5 responsible for paying for. And, I will discuss this a
6 little bit as far as the program attributes in just a
7 moment.

8 However, the other important part as far as
9 transportation goes, by our contracts we have those those
10 reactor operators, the high income country ships it to the
11 Savannah River Site. We're not responsible for it as far
12 as the shipping goes. We do have a contract with CSX, we
13 don't have a contract with Tri State. We don't have any of
14 those things. But we are still the coordinators of what
15 happens in the United States. So we make that happen. But
16 we don't have a direct contract with them.

17 On the other hand, the low income countries, or
18 other than high income economy countries, we do. We
19 provide a contract to a, what we call a transportation
20 services contractor who will hire the ship, hire the rail
21 company--CSX is the only option we have--or the trucking
22 company to make those things happen, as well as a host of
23 other companies.

24 So the responsibility is different. We still
25 ship in accordance with NRC regulations on both of those,

1 and there's some discussion as far as what we really are
2 doing in that regard even on the NRC side, particularly the
3 difference between the Charleston to Savannah River Site or
4 Savannah River Site to Idaho. So that's still open.

5 The other thing about our program, by the foreign
6 reactor operators, it's a volunteer program. They do not
7 have to participate. If you look in the EIS it shows you
8 approximately 18,800 fuel assemblies that we could ship.
9 We're really going to get something a little bit less than
10 10,000 fuel assemblies we believe. To date, we've got
11 about, we have 5,000 fuel assemblies and about 142 casks so
12 far to Savannah River Site, and about 10 casks to Idaho.

13 Okay, as far as the attributes, and hopefully,
14 this will cover some of the things that may be applicable
15 to this program or it may not, or it's a decision that it
16 does or doesn't.

17 Again, most of our segment starts from a single
18 point, that being Charleston, which is different than what
19 this program may do, but it changes the perspective. We do
20 have--we do about two to four shipments, up to 30 casks per
21 year. Again, one shipment can be one cask to about 16
22 casks. I think the largest we've had is about a 13-cask,
23 so far. So it's a little bit different than having the
24 WIPP shipments for instance. It's a different type of
25 perspective how you look at that.

1 And, of course, what I'm about to show you here
2 on the other attributes, you may look at that as far as why
3 we do what we're doing to make the shipments happen or make
4 the program a success, or whether it's the right thing to
5 do or not. Obviously, there's pros and cons to each.

6 As I said, the shipments destined for Idaho will
7 come to the Savannah River Site first, so they are counted
8 as two separate shipments. The reason we do that is to
9 adjust for the cross-country portion of the shipment so
10 that we can avoid rush hour traffic and so we can affect
11 the time to leave the Savannah River Site and control that
12 so we can--we can do that as we committed to the States in
13 order to get past the larger cities and not during rush
14 hour times. We see a problem sometimes. It doesn't occur
15 that way just because of various other issues.

16 Again, we follow NRC regulations and DOE orders.
17 The program coordinates with and provides grants to the
18 South Carolina State Law Enforcement Division, and
19 Department of Health and Environmental Control. That's one
20 of the things we can talk about. We do that, provide a
21 grant to make our program a success. Is it more cost-
22 effective? Is the thing to do to pay a rate per cask that
23 some of the states are doing? I don't know. But this is
24 what we do for this program. It works well for us and I
25 think we're going to continue that process throughout the

1 end of our program.

2 However, if you have several different campaigns
3 going through the Department of Energy, certainly would
4 make sense if you were going to provide a grant that you
5 have common grants. It's not a good idea, or may not be a
6 good idea for us to provide one FTE to the State of South
7 Carolina for a duty officer and for another campaign to do
8 the same thing. So we can combine resources there.

9 The program funds all unloading and security
10 operations at the Naval Board, here at the Charleston Naval
11 Weapons Station. And we provide a prorated share of
12 maintenance and cost equipment used at the Weapons Station.
13 It's not necessarily a very good deal for us, but it's
14 what we have to do for security purposes. We pay for 100
15 percent use of the crane on the wharf in Charleston. All
16 the maintenance for it. We pay for 1/6th of all the rail
17 service they have on the base because we had determined
18 that's our prorated share. It is very expensive for us to
19 do that. But that's our only port of entry so that's what
20 we have to do to make it happen.

21 However, the things we do here, the people that
22 support us believe in what we're doing and they support us
23 100 percent. Again, we have constant communication with
24 them with all the things we do, and when when we need to do
25 something, we can get it done. And so for that it's just a

1 great benefit.

2 Here's one thing I'm sort of proud of, I guess.
3 Someone talked about the security rail car, or the caboose.
4 We also--I just purchased one myself, well, the program
5 did. But it took me three years to make it happen. But
6 that was one of the lessons learned. We constantly had a
7 battle with getting a rail car, security rail car that SLED
8 determined was adequate enough or even to get one there, to
9 make a shipment.

10 We paid a lot of money for this particular
11 caboose, but the final straw was, whatever it comes down
12 to, we can't get a caboose on site to make a shipment. I
13 have a ship at sea that's 100 miles off the coast and I
14 have to tell it to stop. It's carrying a boat load of
15 spent nuclear fuel on it, and it's just waiting around
16 because we don't have a caboose.

17 The other part of it is, and here's the other
18 part, is I talked about the things that we do to make the
19 program a success. The fact that I delay a shipment by
20 three days means that I've got 100 people out there that
21 had planned their work week and planned all the work
22 activities for a Monday shipment, for instance. And now,
23 all of a sudden it's not going to happen until Friday.
24 What does that do to the State of South Carolina's
25 resources when I'm using 1/5th of their SWAT team for this

1 shipment and all of a sudden their work scope changes?
2 That's not a good thing. Consequently, bought the caboose.
3 And when I bought it they had direct input into what went
4 in it.

5 Some of the other things that we provide that may
6 be of interest to some of the other programs, we provide
7 radiological personnel at the port to conduct radiological
8 surveys. We use the REP Team, the Department of Energy REP
9 team, to do this function, however, they are not a REP team
10 when they do that. It is part of the qualifications and
11 part of their proficiency or qualifications to do our
12 process, so we use that team to maintain their expertise as
13 well as serve a benefit for us.

14 We also provide a radiological team to shadow the
15 shipment. We don't do that any more, as of this last
16 shipment. DHEC now does that for us. Part of the grants.
17 So they shadow the shipment in case of an event.

18 We also chose not to have a radiological team on
19 the security caboose because it has been determined, or
20 someone believes, and we go along with that, that if you
21 have an event that causes a derailment of the train that
22 the people in the caboose are probably not any help to you.
23 So consequently, we shadow that.

24 The second thing is we implement the CVSA
25 inspections for the trucks, Level VI, and that's been a

1 pretty good success for us. Although, if you look into the
2 lessons learned part of my presentation, there's quite a
3 few things that have come up even though these haven't been
4 inspected. So there are some problems with that.

5 Mechanical things fail. We've had tires blow out on the
6 interstate. We've had brakes lock up 100 miles after it
7 departed, things of that nature, that--don't know how to
8 fix that, but we're trying to keep up with it.

9 One of the things we do with that is we do have a
10 repair truck with--Tri-State repair truck or a contractor
11 that sort of shadows a shipment that's within 30 minutes of
12 a shipment. One of the things, or one of the reasons why
13 we do that is not because so much--well, if a truck has a
14 flat tire we have to fix it--is we have all those resources
15 out there and we have to protect that during that time. So
16 if you have an event or you have a small breakdown, those
17 resources are really taking up and protecting that shipment
18 during that time. So it's worth it for us to actually have
19 someone shadowing that that can help.

20 Some of the things that we've had, again, I've
21 already talked about the tire blow-out within 20 miles
22 after having been inspected. Has something to do with hot
23 and cold. Air pressure, I'm not sure about that, but
24 possibly. But when you see a SWAT team on the interstate
25 you don't want to stop and ask questions. Not even me.

1 They don't know me. But, nonetheless, that's what we do.

2 We did institute a lessons learned program early
3 on in the program, and we tried to solicit input from
4 everyone that we could that had any type of association
5 with the program, and we tried to implement those. We
6 tried to address them. No, we didn't implement everything,
7 of course, we did provide a 1-800 number to anyone who
8 wanted to call during an actual shipment campaign. The
9 people who needed to know had the numbers to call. Things
10 of that nature. We have a communication plan.

11 Early involvement of all the involved parties
12 invoked ownership, and that's just a statement. But that
13 is in fact true. That's why we, I think we're successful
14 for this part of the shipment campaign, and why it is not
15 a--it's not one of the bigger issues of our shipments
16 because these people as well as the people that work on the
17 program believe what we're doing is important enough, and
18 that we need to support it to make it happen. And they do.

19 Of course, followup, followup, followup. Just a
20 comment.

21 Here's some of the lessons learned, but I kind of
22 go through those in some of my notes because I think these
23 notes are more applicable. NRC licensed cask, we use
24 obviously Type B packages, the NRC licenses. Or DOT
25 certified for certificate of competent authority which they

1 use NRC for review for that. So, we do follow those
2 regulations.

3 The other things that might be important to you
4 is we take, for the high income countries, we take title of
5 the fuel as it's unloaded in the United States. So before
6 that, it belongs to them. At that point it belongs to us.
7 However, again, as I said earlier, irresponsible shipping
8 all hinges around Savannah River Site. The only reason we
9 took title at that point is to apply the Price Anderson Act
10 for insurance.

11 For other than high income countries, we take
12 title at the foreign port because we're paying for the
13 ship, we're paying for the contractor to help make it
14 happen, so therefore we take control of it over there. In
15 their country they have to take responsibility because in
16 the event of an incident, it would be their resources that
17 would have to be mobilized to make that happen.

18 One of the other points of comment I guess that
19 occurred earlier is, facility compatibility for cask and
20 transport equipment. We talked--someone said something
21 regarding the flat racks being compatible or similar. We
22 use a similar thing for--all of our packages have to be in
23 isocontainers. Not necessarily hard-walled, but
24 isocontainers so you can pick up with the standard
25 isocontainer rig, which is what we provided to the Weapons

1 Station to do that. So we do that for handling purposes
2 there.

3 However, when it gets to the receiving facility,
4 you also need to be compatible with the cask. And, we have
5 had to modify our facilities twice now, maybe three times
6 coming up, in order to support handling of the different
7 fuels and the different casks. Since we don't control
8 those, the reactor operator controls providing that--the
9 cask they are going to provide. It's got to be one we can
10 receive, but they have different fuel, and so we have to
11 check that out every time.

12 Dedicated trains, and trains versus truck. Just
13 to address that from our side, and again, we do, as I said,
14 multiple shipments from one to 13 or 16 packages per
15 shipment. If we did an evaluation of that and sort of
16 determined that--and again, these--okay. I guess I should
17 cover part of this. But I want to make sure I cover--
18 because it's kind of more applicable.

19 But, we determined that it takes about three or
20 four packages in a single shipment in order to make the
21 break-even point between truck and rail, as far as cost
22 goes, because what happens is is for us the security team
23 wants to only travel in convoys of two. So they have to do
24 the CVSA inspections and then the convoy leaves with the
25 appropriate escorts, and then we have to wait for those

1 escorts to be available for the second shipments. So it's
2 a resource issue more than a cost issue. But that's pretty
3 much how we determine whether we're going to do a truck or
4 a train shipment. Three or four, we determine from that as
5 far as when to do train and truck.

6 Dedicated train is, at least in our opinion, when
7 you have a lot of resources that are shadowing the
8 shipment, making the shipment happen, that's a--I don't
9 want to say a small price to pay, but it makes the shipment
10 happen versus leaving a lot of things out there that your
11 resources are being used for. And there's a lot of people
12 associated with monitoring, supporting that shipment during
13 that time. So for us, it's something that we think we
14 really need to do.

15 One of the things as far as lessons learned that
16 we think is a really good thing for us, and I think it has
17 sort of been said, we have pre-shipment meetings and we
18 have pre-shipment conference calls about a month before to
19 make sure with all the stakeholders that everything we are
20 planning on to date is in place and any issues that we know
21 about so we can work those issues.

22 One of the month reporting (phonetic) for us is
23 either shortly before the ship leaves or some time around
24 when the ship leaves the foreign country so at that point
25 in time we need to make sure of that, that we are working

1 those issues, so we kind of track that.

2 And then, we have pre-shipment meeting the day
3 before the ship actually arrives. With this we ask for
4 everyone to be in attendance that's going to support the
5 shipment, and we verify everything is in place. It has
6 been well worth that effort. People are well aware of
7 what's going on.

8 We have issues. We had a small engine derailment
9 on the Weapons Station on one particular shipment. We
10 didn't know if we were actually going to bring the ship in
11 because we couldn't get the shipment to leave the Weapons
12 Station. So, it made the shipment happen. Everyone knew
13 what was going on. There was no issues with that. We had
14 no complaints by our stakeholders. They understood and
15 supported as necessary. We didn't know if we were going to
16 make the shipment until two hours before the ship actually
17 started coming into port.

18 But we do have to ensure all organizations are
19 ready, ensure the prerequisites are completed, ensure the
20 shipment is on schedule, make sure the ship is exactly
21 where it's supposed to be at that point in time. And make
22 sure everyone knows. We announce any changes in the plans.
23 Verify 24-hour point of contact is in place.

24 And, what we do with that is, we maintain a list,
25 specifically me as the shipping director at that point in

1 time, maintain a list of all the supporting agencies and
2 how I can get hold of each and every one of those persons
3 while they are away from their home office supporting this
4 shipment. We have had problems with that before in the
5 past and that is a very, very good thing to do. And that
6 is in addition to the communications plan.

7 Key organizational representatives present at the
8 beginning in operations, we have had problems where there
9 has been a--if you were the expert you would have seen it
10 and could have corrected it, but since you weren't, since
11 they weren't there at the time, it went on for several
12 hours and then all of a sudden that organization shows up,
13 and, oh, this is all wrong. And so, we have everyone there
14 that needs to be there for their technical expertise is
15 there at the beginning of the process.

16 Press releases are coordinated in advance. Of
17 course, everyone should know that. There's lots and lots
18 of opportunities for miscommunications. Everyone knows
19 that too. We try to, part of the things, we do these
20 conference calls and these pre-arrival meetings is to
21 minimize the miscommunications and to make sure everything
22 is in place. We work, I think we work hard at trying to
23 make that happen.

24 I've already talked about the caboose, but
25 leasing it is not a reliable thing to do.

1 Rail priority can be problematic. And we have
2 had several instances on that as far as priorities of
3 rails. We're limited to 35 miles an hour. We have
4 problems with who we get on the tracks with. We have to
5 pull over, let the faster one of the trains go by. Things
6 of that nature. It's a constant battle and we're only
7 going 126 miles, not necessarily on a main route, but it's
8 still on a frequently used route, up to Augusta, Georgia.
9 And so that can be a problem.

10 We need to work with our railroad companies to,
11 not only give us priority, just to make sure all the other
12 people that are working that night or that day that we get
13 the priority also. We get the priority from the people
14 that we work with, but we don't necessarily get the
15 necessary priority for the rest of the organizations or the
16 rest of the train routing within the country overall that
17 can affect our region. That has been a problem.

18 Staged spare rail cars, spare trailers. We have
19 those staged in order when we do our inspections, and if we
20 have a problem with it, we can replace them out instead of
21 trying to get someone in to fix it in a very moment. So we
22 spend time in doing that.

23 Pre-inspect and operate all moving parts on the
24 rail cars. And, I guess in your case or for this case, the
25 potential would be to use new ones, but they will be out in

1 the weather and eventually do that. And when you come down
2 to loading and something doesn't work, you have a problem.
3 So pre-inspect, stage them correctly. Doesn't really
4 apply to you, but it does to us, since you can't really
5 tell where the package is sitting, what's top and bottom.
6 We need to know what it is before it gets to the receiving
7 facility.

8 Ensure distribution of the transportation plan
9 and security plan includes the working level people. We
10 can do the best I can to get it to the governor's designee,
11 give it to the right state officials. Doesn't necessarily
12 mean it gets to everyone that needs to know that you really
13 do work with on a day-to-day basis. So we go out of our
14 way to make sure those people are informed also so they can
15 go look for it in the right office and find it if they need
16 it. Things of that nature.

17 Since ours are in isopackage, isocontainers,
18 contingency plans for opening containers since that gets
19 you inside to where the cask is. Generally we have seals
20 on the containers so we had to do that. And that's one of
21 our lessons learned.

22 For us clearly communicate, reinforce, safeguard
23 information. That's always been an issue and we have to
24 make sure that our supporting agencies understand those by
25 NRC regulations. And, we have had unofficial press

1 releases and things of that nature that's undesirable at
2 that point in time.

3 Under transportation, we say pre-inspect
4 equipment prior to actual shipment. Allow plans for--allow
5 time for unplanned repairs, which we try to do.
6 Communication with the carriers to make sure they under-
7 stand their expectations. And that also means down to the
8 truck drivers, whether they are getting ready to depart.
9 And try to make sure that, as a validation, they understand
10 what we think they should--they understand.

11 Obviously shipping papers, placarding must be
12 complete. We had one issue with the regulation changes,
13 and not everyone is on board. We had left one state and
14 went through three states and got to the fourth state and
15 they had a problem with it. Things like that. So, we have
16 to be conscious of those changes and make sure that changes
17 get communicated all the way down through the corridor
18 states.

19 Consider rail crew changeover when you're
20 planning if you use rail. They work 12 hours a day,
21 however, the problem was they may work six hours because
22 they come from 200 miles away for you to put them on a
23 train before they actually start to work. So you get four
24 hours down the road and, "We've got to stop. Our day is
25 done." We have to make sure we do that. And what we do

1 is, no matter how much time they are there, as soon as we
2 get--the train leaves the Weapons Station at the first rail
3 yard, we change out and put a fresh crew on, no matter how
4 much time they've been there.

5 Surveying rail cars and trailers. One of the
6 things on the European side, as some of you may know, is
7 where they detect a contamination here and they are on rail
8 tracks and I don't know what they've done with their rail
9 cars that's been in use for those activities, don't know a
10 whole lot about it, but it's one issue.

11 We also do surveys of the ship after we take
12 material off, the footprint area to make sure there's
13 nothing there. And of course, we never found anything.

14 Early route approval. Of course, everyone knows
15 that. Again, we're by NRC going from the Weapons Station
16 to the Savannah River Site. Each shipper that does that
17 has to get route approval by NRC so I mainly use two
18 shippers in my campaign, although, and they maintain a
19 route approval. Each one has to get their own route
20 approval and keep it.

21 States and law enforcement agencies did not
22 receive notifications. Kind of said something about that
23 earlier. Plan around rush hours with extra time. If you
24 have a long CVSA state inspection in one state, that can
25 affect your rush hour, when this shipment gets to the rush

1 hour. And also, what you might think rush hour is and when
2 it actually happens may be a different definition. You
3 might have 5:00 to 8:00 o'clock in the morning time and
4 when you get to the state, the state officials at that
5 particular point in time thinks the rush hour is from 4:00
6 to 10:00. And so, consequently, that's a problem.

7 Ensure supporting escorts know when and where
8 they need to be. Of course, we've had problems or I
9 wouldn't have said it.

10 Contingency plans for transport monitoring.
11 TRANSCOM. We use TRANSCOM for our shipments both on rail
12 and truck, and it has worked well. We've had some
13 complaints as far as we turn the TRANSCOM off to a state
14 after it leaves that particular state because we don't have
15 a need to track that any more. But in some cases their
16 resources aren't available to support getting back to their
17 office and downloading the information before we cut them
18 off, things of that nature. So all that needs to be worked
19 out and make sure your stakeholders understand that.

20 On the security side, and I thought this is a
21 very good one here. Number one, the need to--if you go by
22 rail our SLED agents or SLED team uses the state law
23 enforcement representatives from various different
24 jurisdictional authorities, both department natural
25 resources, state transport police, SLED, or actually SWAT

1 team members. And the reason they do that is depending on
2 if an event happens in parts of the area of the state since
3 rail is so out of the way, that you need to make sure you
4 have jurisdictional control over that area or authority
5 over that area. So that's why that team is made up of
6 various different members from the security side.

7 Reduce visibility. Of course, we're pretty much
8 in isocontainers so it's not really an issue for us;
9 however, our Japanese casks do not. They look like casks
10 going down the road or on the train.

11 Designate safe parking areas if you use truck on
12 both sides of the state lots for security escorting
13 functions because the actual authority happens at the line
14 and you may need to stop on one side or the other.

15 Contingency plans for late escorts. Obviously
16 that's happened before in the past, too. Good coordination
17 between the security and the carrier, because we have some
18 issues with that.

19 And that's, Alex Thrower is the Headquarters
20 Representative for this program. There's only one full
21 time FTE up there also. So we're kind of--and then on the
22 other full time FTE, Jim Wade out in Idaho is a part-time
23 FTE for this program. So, as you see, we don't have a lot
24 of people working this program on a full time basis since
25 the program has been up and running, but we're trying to

1 carry on.

2 Now, to cover the last few things, on the
3 lessons, on some of these things I thought was important to
4 you, fuel types and compatibility. Some of our transport
5 packages, we had to go out of our way to get the packages
6 recertified with NRC with failed fuel, for instance, or
7 different fuel characteristics that we constantly have to
8 deal with. But obviously, I'm sure that your program would
9 look at that in some detail also.

10 For us the foreign reactor operators are all
11 different so we don't--we can't get into a routine. This
12 is probably more routine as we get on this end. Every
13 foreign reactor operator, every country does things
14 different. Any time we do a first-time shipment from any
15 country, we have to--I won't say each of them, but we have
16 to show them how we're trying to do things and they have to
17 work through this system, which makes it very difficult for
18 us, which is where our challenges really lie.

19 See if there's anything else really important I
20 want to say. Oh, there's one issue someone talked about
21 earlier as far as state versus federal escorts. We have
22 been in that same boat with the Oak Ridge, similar to the
23 Oak Ridge shipments. States can't support truck shipments
24 at various times and so we default to the federal escorting
25 opportunity in order to make it happen, and when they do

1 it, they take it all the way through. The other states
2 choose to participate with that, whether or not the federal
3 agents are there, that's something that I would encourage
4 everyone to look at as far as how you implement that.
5 Maybe it's a better thing to do to have federal escorts to
6 run your program. I don't know, but not for us, because we
7 do it so infrequently.

8 With that, I thank you very much for the
9 opportunity of talking today. Any questions?

10 ABKOWITZ: Thank you, Chuck. Questions from the
11 Board? Dan Bullen.

12 BULLEN: Bullen, Board. This is just a quick one.
13 And maybe it's more of a comment to the question.

14 It seems to me that there's a great deal of
15 effort in coordination and communication and organization
16 in trying to make sure that this relatively short shipment
17 takes place in a timely manner and, you know, without any
18 glitches or delays. The scale up to the magnitude that the
19 OCRWM national program is going to see should be sort of
20 forefolding here. This is going to tell you that it's
21 going to take a great deal of work. And, in your estimate
22 do you think it's going to be relatively easy to do or do
23 you think it's going to take a significant effort for them
24 to do the same types of things without a scale that's
25 probably 10 to the 3rd times larger?

1 MESSICK: Actually, I'm in agreement with you 10 to
2 the 3rd times larger to get the program up and running.
3 Now, it's a big cost initially and you have to rely on, you
4 get that up and it's sort of taking the chart of cost and
5 effort and initially get the program running and then the
6 stakeholders that support you as they become--routine is
7 not the right word--as they become more familiar in working
8 with you, then your level of effort and costs go down where
9 that communication and support from those organizations go
10 up to help level that out. And so I think that's your
11 benefit.

12 I'm not saying particularly the specific things
13 we use, like grants and what have you is the best way to go
14 for this program. That's just the way we do that. But the
15 one thing I would say is our program has gone, I'll call it
16 overboard, has gone to the extremes of what we do to
17 support the--to make the shipment happen. Security for
18 instance. After 9-11 we had the authorization to ship from
19 a ship that departed in, roughly the 1st of October, and
20 we're at, October, about 14th, in the United States right
21 after 9-11. Why? Because we--the things that NRC has put
22 in place, the ICMs and the supporting regs that come after
23 that, we've already had those in place. We have not
24 changed what we've done, officially what we've done, or
25 requirements based on 9-11 because we already do those

1 things. We put forth that extra effort to make it happen.
2 Because, again, it being foreign, there seems to be some
3 belief that the foreign research reactors is a different
4 animal than a universal reactor, which is the same fuel.

5 ABKOWITZ: Dick Parizek?

6 PARIZEK: Dick Parizek, Board.

7 Once the waste arrives and I guess DOE takes
8 title to the waste once it wants to move it, say to Yucca
9 Mountain, what does it have to do to know what's in the
10 waste? I mean is there a record of what's being shipped
11 and--

12 MESSICK: Yes, and we--

13 PARIZEK: --what's being received, and does it need to
14 be verified so there's no surprises--

15 MESSICK: Yes, and I'm glad you asked that question.

16 PARIZEK: --within the states, for instance?

17 MESSICK: I'm glad you asked that question. We have a
18 very rigorous document, what you call Appendix A that
19 characterizes the fuel. And what is done from that, it
20 takes the manufacturing drawings and data that they have,
21 that the reactor operators keep, their radiation history,
22 all the other specifications, and we take that
23 information--and what's more important, not necessarily for
24 its ultimate disposition, we have now which is only one
25 basin, L Basin in Savannah River Site, that houses 12,000

1 fuel assemblies. We have to do a criticality evaluation,
2 storage evaluation of that fuel, so we have to know what it
3 is before we can authorize it being put into our basins.

4 And, the other important point about that is, I
5 have to issue an authorization ship letter to each reactor
6 operator before that material can leave the reactor site,
7 and my prerequisite for that is I have to insure that we
8 have and can store that material safely in our basins
9 before we let it leave. It has to have a home before it
10 can leave that site.

11 ABKOWITZ: Thank you, Chuck.

12 MESSICK: Thank you.

13 ABKOWITZ: Maybe I can catch Chuck off line to find
14 out if he bought his caboos from EBAY Or Cabooses-R-Us.

15 I just wanted to mention a program change because
16 we are running behind. We are going to hear from our next
17 speaker, Barry Miles, and then I would like to interject at
18 that point the public comment period because I know that
19 there are folks here that have been very patient with us
20 and although we're not going to short-change any speaker on
21 the program, I want to make sure that we have an
22 opportunity to hear from all members of the public that
23 want to voice their views.

24 So, let me introduce Barry Miles.

25 Linda, I'll get with you to find out who will be

1 speaking during the public comment period.

2 Barry is the Senior Manager at the Headquarters
3 of the Naval Nuclear Propulsion Program in Washington D.C.
4 and has served in that program for over 34 years. The
5 Naval Nuclear Propulsion Program has cradle-to-grave
6 responsibility for all aspects of nuclear propulsion and
7 naval warships, including management of the spent nuclear
8 fuel generated by those ships. Mr. Miles' current
9 responsibilities include the safe and secure transportation
10 of Naval spent fuel from shipyards to a DOE facility in
11 Idaho. Barry?

12 MILES: Thank you, Mark.

13 I want to preface my comments to the Board and
14 apologize in advance. I've been suffering from a pretty
15 bad cold and I'm fairly hoarse already. And secondly, I'm
16 not a public speaker. And I don't normally make
17 presentations outside of our headquarters. It's the first
18 time I've been out to make a presentation to the public, so
19 if I cough and mumble, please bear with me and hopefully
20 the message will be there in spite of the messenger.

21 As Mark said, I'm Manager of Shipping Containers
22 and Spent Fuel Transportation at Naval Reactors which is
23 the headquarters of the Naval Nuclear Propulsion Program.

24 For the last 16 years I've been responsible to
25 oversee our spent fuel shipments. This afternoon I'm going

1 to be discussing our experience in shipping spent fuel for
2 the last 46 years and provide our prospective on some
3 lessons learned that may be helpful to the Board.

4 Our program is a joint U. S. Navy, U. S.
5 Department of Energy Program. It has its own authority as
6 established by executive order and is codified in public
7 law. And Mark mentioned some of the fundamental principles
8 that have governed our program since its inception over 50
9 years ago. Strong sense of technical authority with
10 continuous oversight. Protecting people and the
11 environment and cradle-to-grave responsibility. And all
12 those principles apply equally to our transportation of
13 spent fuel.

14 The nuclear freight is crucial to the nation's
15 defense and military presence. 40 percent of all our
16 nation's combatant ships are nuclear powered. That
17 includes all 72 submarines and 10 of our 12 aircraft
18 carriers. A nuclear-powered aircraft carrier like this one
19 here on the screen is one of the first assets that our
20 country turns to in times of diplomatic and military
21 crisis.

22 During the recent Iraqi Freedom campaign, three
23 of the five aircraft carriers on station were nuclear-
24 powered. And one of those, the Abraham Lincoln, was
25 deployed there for 10 consecutive months.

1 If you look at this screen, you also get the
2 typical view of our nuclear submarine and the stealth it
3 provides. 12 of those submarines fired over one-third of
4 the precision strike Tomahawk missiles that were used in
5 the Iraqi campaign.

6 So why do we ship spent fuel? When a warship--
7 nuclear-powered warship is refueled in a shipyard, we take
8 the spent fuel out, we put it in a shipping container and
9 we transport it to our facility in Idaho. Our objective in
10 making the transport is to examine the spent fuel in
11 support of our ongoing reactor fuel research and
12 development effort.

13 As you can see from this slide, this examination
14 program in our facility in Idaho has been successful in
15 extending the life of spent fuel or the reactor fuel so
16 that now our fuel can operate in the entire lifetime of a
17 ship, which is in excess of 30 years. The long-lasting
18 fuel minimizes the number of times a ship has to be taken
19 out of service to support refueling, which is strategically
20 important to our military, and obviously it also minimizes
21 the amount of spent fuel that's generated, and then that,
22 in turn, will minimize the number of spent fuel shipments
23 we have to make.

24 After we examine the fuel it's temporarily stored
25 in our facility in Idaho with the alternate plan to send it

1 to the geologic repository.

2 Our program has been working closely with the
3 Department of Energy on this disposition plan for the last
4 several years, and we've had frequent discussions with the
5 Department of Energy about our spent fuel shipment
6 experience.

7 What is our record? Since 1957 we've safely
8 shipped 754 containers of spent fuel by rail to the Naval
9 Reactor Facility in Idaho. This slide shows the typical
10 routes currently used by rail carriers when shipping from
11 our shipyards to the Naval Reactors Facility. We ship out
12 of New England from Portsmouth Naval Shipyard near
13 Kittering, Maine. Out of Tidewater, Virginia from Norfolk
14 Naval Shipyard, and from Newport News--Norfolk Grummond
15 Newport News. And from the West Coast, from Puget Sound
16 Naval Shipyard, which is near Bremerton, Washington. We
17 also remove spent fuel from ships in Pearl Harbor, Hawaii,
18 ship it on a ship to Puget Sound and then of course by rail
19 from there to Idaho.

20 I mentioned these are the typical routes that are
21 currently used by our rail carriers. In the history of the
22 program we've also shipped spent fuel from several other
23 places where we no longer are doing business. For example,
24 we've shipped from a Naval shipyard near San Francisco,
25 California, from Pascagoula in Mississippi, from

1 Charleston, South Carolina; from Groton, Connecticut, and
2 then from land-based facilities in Windscott, Connecticut
3 and Shipping Port, Pennsylvania and upstate New York, north
4 of Schenectedy. In over 45 years of shipping spent fuel,
5 we've never had an accident or incident, which is the same
6 story we've heard from the other people today, that has
7 resulted in any release of radioactivity or any increased
8 radiation levels on or near one of our shipping containers.

9 We continue shipping today. The rate depends on
10 the Navy's refueling schedules. Over the last five years,
11 for example, we've shipped anywhere from three containers
12 in one year to up to 20 containers per year, and we'll
13 continue shipping at that frequency over the next several
14 decades, with increases once we start going to a
15 repository.

16 I would note that we use all the major carriers.
17 UP, Union Pacific and Burlington Northern in the west, CSXT
18 and Norfolk Southern in the east. And also we use several
19 regional carriers. We also have a broad perspective of
20 traffic management from that of planning efforts in our
21 transportation office in Pittsburgh down to firsthand, on-
22 scene experience from our Navy couriers.

23 Bottom line is our program has a pretty good
24 understanding of rail operations and how to successfully,
25 safely and effective manage rail shipments.

1 Safety of our shipments results from these three
2 primary factors: First, the fuel is extremely rugged.
3 Remember, it's designed to withstand the severe operating
4 environment in a operating ship for decades and to
5 withstand battle shock conditions.

6 Secondly, the shipping containers in which the
7 spent fuel is packaged are extraordinary barriers to the
8 release of radioactivity. Even in severe accidents. We've
9 had discussions on that today.

10 And third, the shipping practices followed by our
11 program help avoid accidents, and in the unlikely event of
12 an accident, are intended to result in quick and thorough
13 response. Our carriers who accompany each shipment play a
14 major role in accident response, and I'll discuss that
15 shortly in reference to our periodic accident exercises.

16 These points are indicative of the inherent
17 design and manufactured ruggedness of Naval reactor fuel.
18 It's solid, it's built for battle shock, it contains all
19 fission products and it's safe to operate in close
20 proximity to sailors. So our fuel is exceptionally well-
21 suited for safe transport and storage in the geologic
22 repository.

23 Here is the Navy's spent fuel shipping container.
24 We call it the Model M-140 container. It's 14 inches of
25 solid stainless steel. It's about 16 feet tall and nine

1 feet in diameter. Weighs about 350,000 pounds. And very
2 importantly it's a Type B NRC-certified container.

3 We've heard this morning and I think Mr. Bullen
4 mentioned some of these attributes that the NRC specifies
5 stringent engineering performance standards and they
6 include a drop, immersion, fire and puncture.

7 The third factor contributing to safe Naval spent
8 fuel shipments are shipping practices. One, we use
9 government-owned rail cars to maintain--that are maintained
10 to meet all federal and railroad industry mechanical
11 requirements. We make advance arrangements for each
12 shipment with the involved railroad police and operational
13 departments. We want to insure that there's no surprises
14 between us, the shipper, and the carriers.

15 Our shipments are handled as national security
16 shipments. So our location and status is constantly
17 monitored by the same tracking system used for nuclear
18 weapons shipments. And finally, we escort every shipment
19 with specially-trained Navy couriers who monitor the
20 movement of the shipments from origin to destination and
21 who, in the event of an accident, provide the emergency
22 first response.

23 A little bit about emergency response. The
24 robust shipping containers provide a formidable barrier to
25 the release of radioactivity and that allows our couriers

1 to focus on the priorities on the screen. Emergency first
2 aid, summon assistance, prevent injury and verify
3 radiological condition.

4 Let me expand a little bit on the "summon
5 assistance" priority. The couriers are able to activate
6 resources throughout our program, from our national
7 laboratories to our shipyards to our headquarters in
8 Washington D.C. And then those activities can respond by
9 providing technical and management assistance by the phone
10 or we can dispatch a specially trained and equipped team to
11 the scene, if necessary.

12 The couriers also assist the incident commander.
13 And the incident commander would be the senior fire or
14 police official at the scene.

15 Earlier I mentioned that the couriers take part
16 in periodic exercises. We've been doing these since 1996.
17 Since our shipments are classified and they are not
18 subject to the planning and notification protocols of
19 unclassified fuel shipments, the exercise provide a fine
20 opportunity for civilian authorities to learn about our
21 shipments and what to expect from our shipment couriers.

22 And, we've also found that the exercises provide
23 value to the tribal, state and local authorities to think
24 through and practice their emergency response actions.
25 Including exercising the remote communication links that

1 they expect to see during such an event.

2 This is a picture from an exercise we ran in
3 Idaho in the summer of 2000. The basic scenario was that a
4 train was passing a railroad crossing, a truck runs through
5 the crossing, hits the rail car containing one of our
6 shipping containers. It derails the rear wheels of that
7 rail car and then the train goes down a couple hundred feet
8 and stops on the track with the rear wheels of the rail car
9 derailed.

10 Now, again, we've never had a derailment or an
11 accident of a spent fuel shipment. But, this is the most
12 likely scenario we think we would see during our shipments.

13 And, what you see here is two of our spent fuel
14 shipping containers, two of the M-140s, which you see
15 several local responders who are reviewing the survey data
16 taken by the state HAZMAT team. And they are comparing it
17 to the data that had initially been taken by our couriers
18 shortly after the incident occurred. The exercises take a
19 lot of time and effort, but we've got very positive
20 feedback from our stakeholders.

21 And, we haven't had any major surprises in terms
22 of lessons learned, but clearly, we find a lot of benefits
23 in thinking through and practicing a coordinated emergency
24 response to such an accident.

25 The next and the last three slides are lessons

1 learned, and before I get into them, I do want to preface
2 them. Some of these lessons are going to be, from what
3 I've heard today, direct opposite of some of the other
4 lessons from other people's perspective, and I'm not trying
5 to be argumentative up here. I'm just simply trying to
6 provide you folks our perspective from the way we do
7 shipments, and in fact give you an opportunity to weigh all
8 those things together.

9 The first one I think--you probably think I'm
10 harping on this a lot, but I think this is extremely,
11 extremely important in that the Type B packaging combined
12 with regulatory compliance by the shippers and the carriers
13 provide superior hazard protection under all transport
14 conditions. And, we firmly believe that that's the
15 critical piece of shipping spent fuel.

16 Secondly, a closed transportation system dictates
17 safe operations. I think we heard discussion on this
18 earlier today. All trains move over the same track and
19 therefore accident avoidance is critical for the rail
20 business.

21 Accidents shut down lines. A shut-down line
22 means freight doesn't move and railroads make money by
23 moving freight, so a derailed train, as you heard earlier
24 ripples throughout the rail system. And so there's a big
25 operating incentive for railroads to operate incident free.

1 And thirdly, on this slide, unencumbered
2 operations enhance safety. What I mean here is
3 unencumbered operations means that you're going to have
4 less risk of an accident/incident. And our experience is
5 any artificial constraints to the movement of rail freight
6 are likely to cause more problems than they solve.

7 And we have an example of that in our own
8 program. For years, we imposed a speed limit of 35 miles
9 per hour on all our rail shipments. Not only spent fuel,
10 new fuel, steam generators, main cooling pumps, whatever we
11 ship. We started doing that in the late 60s and early 70s
12 when we as a program had concerns about the dynamic
13 stability of the heavier, higher center of gravity loads,
14 and I think Bob mentioned that earlier this morning or this
15 afternoon. And, the industry was also having trouble with
16 some of their newer hundred ton hopper cars, so we imposed
17 that restriction. And then, even after testing the rail
18 cars and outfitting them with improved suspension systems
19 to insure dynamic stability, we considered it prudent to
20 continue the restriction.

21 After lots of discussion over many years with the
22 railroads and coming to recognize that we really didn't
23 need to regulate the speed since the FRA and the industry
24 was already doing that, and also realizing that our slower
25 shipments were sort of analogous to driving 40 miles an

1 hour in the left-hand lane of an interstate that's--we
2 concluded that we really didn't need to maintain that
3 restriction. So we dropped it and adopted the industry's
4 technically acceptable hazard materials speed limit of 50
5 miles and hour. And that's what we're doing today.

6 And this next slide is the one that's probably a
7 little bit controversial.

8 Our position is a dedicated train is not safer.
9 And I would like to provide a little bit of history on how
10 we've come to that conclusion. And, recognize, we're
11 coming from a little bit different perspective than Bob
12 Fronczak is coming from the railroad industry side.

13 This debate has gone on for over 25 years. The
14 issue has been reviewed extensively during proceedings
15 before the Interstate Commerce Commission, which preceded
16 the Safety Transportation Board, and the courts throughout
17 the 70s and the 80s. And it was determined in all cases by
18 the ICC and the courts that there was no significant
19 increased safety benefit to dedicated train service.

20 Now, one argument that we hear is that dedicated
21 train service lets us avoid rail yards where there are
22 frequent accidents. There's some realities of railroad
23 operations that would argue against that. It's difficult
24 to totally avoid rail yards if you're going to interchange
25 from one rail to another. You can do it outside of a rail

1 yard, but often it's done and--that's where it's done when
2 you're going from one rail carrier to the other.

3 But secondly, what kind of accidents would you
4 expect to have in a rail yard? They would pretty much be
5 fender benders. So, from our perspective, if you're going
6 to add extra dedicated trains to this to avoid fender
7 benders in a rail yard, and in the process you're going to
8 put more trains into this closed rail system that we've
9 heard about earlier today, that means more trains would
10 have to be followed and monitored and controlled to insure
11 that you don't have collisions on the main lines. We're
12 not sure that makes sense.

13 Now, just to be totally complete on this, though,
14 there are reasons to use dedicated trains besides--but not
15 for safety reasons. The industry, the utility industry
16 perspective gentleman this morning, Steve, indicated they
17 do it for logistical reasons, not safety. And we also
18 occasionally do it for logistical reasons.

19 For example, at that shipyard up in New England,
20 Portsmouth Naval Shipyard, the local carrier, Springfield
21 Terminal, doesn't regularly come into the yard. So when we
22 want to move spent fuel out of there, we'll arrange a
23 dedicated train from Springfield Terminal and tell them
24 exactly when we want to get picked up. They will pick us
25 up, move us on dedicated train for the few miles up the

1 line until we get to the main line and hook up with
2 Canadian Pacific and then we'll move on regular freight
3 across the country on Canadian Pacific.

4 Just one clarification. Bob mentioned that, Bob
5 Fronczak, that the railroads always move us in dedicated
6 trains. I think he said that. If he did that's not
7 totally accurate. There is one railroad, Union Pacific,
8 that does always. When they pick us up at Kansas City,
9 they always move us in dedicated train. Every time. Been
10 doing that several years.

11 But other carriers will move us in regular. In
12 fact, on a very last shipment, just last month, out of
13 Puget Sound, Burlington Northern moved us in regular
14 freight.

15 Now, Bob, don't call them up and give them a hard
16 time on that.

17 Again, this is, you know, the perspective that
18 we've had from doing this over the years that we're doing
19 it. We believe it's important to select the right rail car
20 and inspect it. We have a pre-use inspection procedure
21 that's based on industry standards and concentrates on
22 critical components like wheels and brakes, couplers, and
23 the truck assembly. And we do that prior to every
24 shipment. We obviously try to do that prior to loading the
25 rail car because if there is a problem it's a lot easier to

1 work on a empty rail car in a rail shop than it is to work
2 on a loaded rail car.

3 And, as I previously discussed, we do periodic
4 exercises, which are valuable to allow emergency response
5 organizations to practice their response and exercise their
6 communications.

7 Routing flexibility enhances smooth operations.
8 As a rail shipment, the Naval Nuclear Propulsion Program
9 will designate which carriers will handle a shipment and
10 will designate the interchange points where we hand off
11 from one carrier to the other. Our experience indicates
12 the shipper should avoid telling a carrier what track to
13 use between Point A and Point B on its own system. Routing
14 flexibility for the carrier enhances smooth operations
15 which enhances safety. Again, we're just trying to remove
16 any artificial operational constraints from the rail yards
17 for the railroads.

18 Extra railroad safety oversight is not necessary,
19 based on the inherent safe operating incentives for rail
20 that I described earlier, and which we heard earlier today
21 also. We've considered it unnecessary to duplicate the
22 kind of real safety oversight that's provided by the
23 industry itself and by the FRA. The safety of the
24 infrastructure and the crews is required for all trains and
25 all shipments.

1 So, I kind of harp on this, but we see no need
2 for Type B radioactive shipments which are safe by virtue
3 of the robust formidable packaging to result in, or be a
4 reason for extra regulatory actions.

5 And, on a final note, we work security issues
6 with the Chief of Police of the railroads. We've found
7 that they are extremely cooperative and that by maintaining
8 an active liaison with them, it's extremely valuable.

9 We're confident that if a security emergency
10 response is ever needed, that the railroad police will get
11 it there, either using their own resources or working with
12 local and state law enforcement.

13 That concludes my presentation. I would like to
14 just summarize.

15 We've shipped 754 large containers of spent fuel
16 over the past 46 years with no release of radioactivity or
17 adverse effect on the environment. The shipment safety is
18 driven by three factors: The rugged nature of our fuel,
19 the robust shipping containers and our proven shipping
20 practices using Navy escorts.

21 And finally, this is a summary list of our
22 lessons learned from our perspective from shipping Naval
23 spent fuel.

24 Thank you for the opportunity to share our
25 experience, and are there any questions?

1 ABKOWITZ: Thank you, Barry. Questions from the
2 Board? Dave Duquette.

3 DUQUETTE: Duquette, Board.

4 This is more a curiosity question. You send Navy
5 escorts in the caboose. How do you do that when you're
6 tied into a regular train and not a dedicated train? You
7 just put it at the end of the train?

8 MILES: Let me explain a little bit on the Navy
9 escorts. We have our own escorts. They are part of our
10 program. They go through our extensive training. And, the
11 answer is yes, what you just said. We supply the caboose
12 that they ride in to the facility that's about to make the
13 shipment. The couriers come in three or four days in
14 advance, they do an over-check of the rail car inspection
15 that had previously been done by both the facility and have
16 been checked by the local railroad company. And then, in
17 the tender or contract or whatever we're using to arrange
18 the shipment, we have that caboose as part of the train
19 consist. And so, when we go negotiate that we're going to
20 ship two containers of spent fuel, we'll also include that
21 we need two buffer cars and a caboose, and that's all
22 included as part of the package.

23 DUQUETTE: Duquette, Board. One last question. Are
24 these armed military personnel?

25 MILES: Yes, they are.

1 ABKOWITZ: Terry Cerling.

2 CERLING: Cerling, Board.

3 I was just wondering about your emphasis on the
4 exercises for emergency response and communication. And,
5 what I was wondering is sort of what faction of the
6 community that are along your transportation routes have
7 you guys been directly involved in in training and
8 providing these--

9 MILES: For our exercises, one of the primary
10 objectives is to improve the coordination of local response
11 organizations. So when we do an exercise, for example, we
12 did an exercise up near Portsmouth, New Hampshire. We
13 invite the local, or the states that are nearby, their
14 local fire and police people from the communities that are
15 nearby, and get them all involved in the exercise. And
16 they actually participate in the exercise because the
17 exercise primarily is to get the coordination among all
18 those groups and to get their familiarity with our shipment
19 and with our escorts.

20 I'm not sure--did that answer your question? Did
21 you want to add on?

22 CERLING: Well, I was just wondering, could you say
23 that all of the communities on all of your routes have had
24 the opportunity to participate?

25 MILES: No. No. I couldn't say that. But what we do

1 is we do spread the exercises out. We've had one in the
2 northwest near Puget Sound, brought in those states in that
3 area--Oregon, Washington, the communities around there.
4 We've had one in Idaho and brought in the states around
5 there, including the Shoshone Bannock Tribe which is close
6 by. We've had the Umatilla Tribe which we go through just
7 outside of Washington and participate in the West Coast
8 one. We've done an exercise in the Tidewater Virginia
9 area. We bring in the folks in that area. And we've done
10 one in New England. So we are purposely spreading the
11 exercises around, moving from one area to another to bring
12 in as many people as possible into the umbrella of having
13 been exposed to our shipments.

14 ABKOWITZ: Okay. The lineup is going to be Dan
15 Bullen, Bob Luna, Ron Lanatision and Dick Parizek.

16 BULLEN: Bullen, Board.

17 Just a final quick question from me and that is,
18 how do you convey the information you've learned in your
19 successful shipping campaigns and in your exercise to the
20 DOE? Is there a communication mechanism whereby you can
21 convey that information?

22 MILES: Yeah, absolutely. Absolutely. A lot of
23 examples, Gary Lanthrum mentioned the Senior Executive
24 Transportation--I forget the name, we had a representative
25 on that. We've been working to develop the protocols for

1 shipments that follow on to the REP shipments. We've
2 worked with the DOE on that. We have frequent meetings,
3 for example, with the DOE Yucca Mountain folks. We meet
4 approximately quarterly with them. And I'm sure I've left
5 out several other places where we've had interface, but we
6 have been working very closely to insure we're integrated
7 and on the same page.

8 John, do you want to add anything to that?

9 This is John McKenzie. He's Director of
10 Regulatory Affairs at Naval Reactors, and he is the primary
11 interface with the DOE force. He will probably have a
12 better answer than I have.

13 McKENZIE: John McKenzie. The only thing I would add
14 relative to the Senior Executive Transportation Forum is,
15 you know, there was an issue back in the '97-'98 time frame
16 and how the different DOE programs were integrated, where
17 practices were different and why they were different, and
18 that was a matter of confusion to the states. And they
19 approached DOE and asked the Department to try to reconcile
20 that, which was the focus of that work. And what came out
21 of that was a Radioactive Material Transportation Manual
22 that the DOE issued, I think two years ago which cuts
23 across all the programs both routine shipments and national
24 security shipments. And, to the extent that you can
25 describe that in a publicly-releasable document, goes

1 through the whole process of planning and the
2 transportation campaign, and what states should expect from
3 different areas of the Department.

4 BULLEN: Thank you.

5 ABKOWITZ: Bob Luna.

6 LUNA: Bob Luna, yeah. And, I think the manual he's
7 talking about is the protocols that we talked about at a
8 previous time.

9 I wanted to ask to follow up on Thor's question
10 quickly, I assume that you do do the same kind of one on
11 one interactions with local authorities that the WIPP guys
12 do to make sure that they are up on the shipments rather
13 than just the interactions with the--at the exercises. Is
14 that true or not?

15 MILES: We don't do the same type of one-on-one
16 interactions that the WIPP program does. We--in these
17 periodic exercises we have interactions with the local
18 communities. But again, our shipments are national
19 security shipments so we don't pre-notify the communities
20 we're going through, which is a different approach that the
21 WIPP people have to take.

22 LUNA: Thank you. That's what I thought.

23 ABKOWITZ: Ron?

24 LATANISION: Latanision, Board.

25 I'm interested in your comments about dedicated

1 trains, dedicated service. At the rates that you ship, it
2 looks like it's about a container a month over 46 years,
3 but you presumably accumulate containers and send, say two
4 every second month or something like that?

5 MILES: Yeah. Obviously, when we can we prefer doing
6 that, minimize the number of train shipments.

7 LATANISION: Right.

8 MILES: To give you the calibration, though, it really
9 works out that we have had about half as many train
10 shipments as container shipments.

11 LATANISION: Yeah, that's what I--

12 MILES: And, a couple reasons for that. We have a
13 limited M-140 fleet. We want to get those containers back
14 to Idaho, get them unloaded, get them back out to be loaded
15 again. But for a particular ship, if there's more than one
16 container on that ship that's needed, then we'll get those
17 together. A shipyard will only refuel one ship a year,
18 typically. So we'll get those one, two, three, whatever
19 containers and ship them all together.

20 LATANISION: Do you think your view on whether or not
21 service ought to be dedicated or not would be affected if
22 you were shipping more containers more frequently, as would
23 be the case in--

24 MILES: Not in the case of us shipping our fuel

25 LATANISION: I'm thinking of the Yucca Mountain. If

1 we were actually dealing with the sort of frequency that's
2 expected to load the repositories--

3 MILES: I still fall back on the point that--and this
4 could be a point of contention, but we look at 90, 99
5 percent of the security and safety of the shipment as the
6 package. That Type B package, and our program's philosophy
7 is that we're going to go design, model and test a Type B
8 package and make sure it has margin to the requirements. I
9 mean, this 14 inches thick could be overkill, but it's
10 effective. And so, the radiation limits, the radiation
11 levels on the outside of that container are two orders of
12 magnitude lower than the regulatory requirements. So, my
13 simple answer is I think you can do it without dedicated
14 trains.

15 LATANISION: Thank you.

16 MILES: Provided you don't have some logistic concerns
17 that would override that.

18 PARIZEK: Parizek, Board. Do states want to ride
19 shotgun on the trains through their state, like trucks?

20 MILES: No, sir.

21 PARIZEK: Nobody is asking to do that?

22 MILES: No, sir.

23 PARIZEK: And then, given the superior nature of your
24 waste form, which sounds superior to me, plus the
25 containers you already have, could say DOE pick up on this

1 and use at least the systems you've already put in place
2 over these many years? I mean it seems to me we also have
3 all these trucking experiences, although there may be some
4 other needs, and as the nature of the waste, but here's
5 30,000 trained people out there ready that DOE might, you
6 know, be able to use. So I'm just curious about how much
7 of a problem it would be to just sort of retrofit your
8 experience onto this DOE program, at least for the parts of
9 the rail system that you've explained it.

10 MILES: I think the principals that we use for our
11 shipments apply equally well to whether you're shipping one
12 container or 100 containers or a thousand containers. So
13 in that regard, that experience would be directly
14 translatable to what the DOE is doing. I guess I don't
15 want to pre-judge the DOE as to whether they want to do it
16 this way or not. There are other considerations that they
17 are having to deal with. Their shipments are not national
18 security shipments. That's a big difference to us.

19 PARIZEK: Thank you.

20 ABKOWITZ: Okay. And Barry, we appreciate it. I
21 thought you did an excellent job of getting--cutting your
22 teeth.

23 MILES: I'm sure you're much too kind.

24 ABKOWITZ: We'll have an opportunity to talk with you
25 again in the future. Appreciate it.

1 Okay, we're going to have our public comment
2 period now. And, as we did right before lunch I would like
3 to ask each commenter to get to the rostrum and express
4 their views. There are four people that we will be hearing
5 from in the following order: Dr. Jacob Paz, Harry
6 Zanville, Sally Devlin and Gracian Uhalde. And, I would
7 like to ask if you would keep your comments reasonably
8 brief and the questions on point.

9 PAZ: I will. First of all was a question about the
10 benefit for transportation for the county. I make comments
11 to the environmental impact statement, and following. What
12 happens if a truck were stopped to visit working girls of
13 Nevada for recreation purposes? I think maybe you have no
14 (inaudible) no customer. Maybe the state or the local
15 county should have an ordinance.

16 Second, I heard all the transportation. One
17 thing which I have missing is a medical surveillance.
18 What's happened short-term, long-term, epidemiological
19 study, this was missing.

20 Second, the following issue is just what you're
21 making as a (inaudible). I don't take any position, but
22 there is, in my opinion--I'm not a lawyer and this probably
23 will be decided by the Court. In June, 2001, the EPA
24 issued standards. The NRC incorporated EPA standard, too.
25 Is final 63 regulation which published November 2001,

1 about 64 and also the EPA; however, is very much
2 inconsistent with U. S. Code, Title 42, Chapter 6A,
3 subparagraph XII, Part B, Section 300g-1, a federal act.

4 And one further act, just very clearly, I'll skip
5 a little bit. The best available peer review science
6 supporting study conducted in accordance with sound
7 objective, scientific practice. They got collected by
8 accepted method or the best available methods. I approach
9 (inaudible) for five years. I can support myself in the
10 literature, and also I provide the Board, and I thank you
11 for the reply, DOE did not comply, and it's probably this
12 is an issue which going to be challenged.

13 The other issue is silica and silicosis. When we
14 have two cases in 140, it's unacceptable. I used to work
15 for OSHA. I work also in Yucca Mountains, and this is
16 raised in many people mind a red flag. I don't want to
17 accuse anyone, but is very serious issue.

18 Second, which can be also very serious issue, is
19 the question does DOE, is also planning to investigate
20 potential employee exposure. (Inaudible) from zeolite
21 fiber such as aconite, modonite, most reported as a
22 potential causative agent for malignant mesothelioma. And
23 if we have an exposure to silica, why we don't have
24 exposure? This can be some time along the line.

25 And, that's all. Oh, I forgot the surveillance.

1 For you is the medical surveillance. Now you can go to
2 DOE and use peer pressure.

3 ABKOWITZ: Thank you, Jacob.

4 Harry?

5 ZANVILLE: My name is Harry Zanville. I'm an attorney
6 from San Diego and I represent rail labor, and I listened
7 very carefully to materials presented earlier. I have a
8 few questions and a few comments.

9 First, earlier, there was a question posed by one
10 of the panelists to the AAR representative that did not
11 come close to answering the question about accident rates.
12 If you would just like to focus on the Burlington Northern
13 Santa Fe alone, just go to the website. On the website
14 they have incident and accident report statistics. The
15 last three years of reporting were 00 to 02 accident-caused
16 releases. Those were accident-caused releases of HAZMAT
17 materials, were between 14 and 17 per year. Non-accident-
18 caused releases were between 143 and 196 per year.

19 They also admit on their own forum that they have
20 two sets of books. They have a set of non-operator-
21 reported accidents. If you look at that you'll see that
22 it's there. And of course, none of this tracks close
23 calls, which is a matter of fortuitousness. It's just
24 luck. One thing you have in common with all these
25 accidents that cause releases and these non-accidents that

1 cause releases is that every one of them is preceded in the
2 course of carrying cargo with a promise, I won't spill it.
3 There won't be problems. There's no problem. We'll be
4 safe. And every one of those promises to carry things
5 safely, without spills and without incident has been
6 breached.

7 Now, it's wonderful to say to people, we want to
8 trust you. You all must know what you're doing because you
9 are in the business to do it and you are heavily regulated
10 so it must be safe. That's not necessarily so.

11 Let me give you an example, without picking on
12 BNSF particularly. BNSF in its 28 states has about 125,000
13 switches. Those 125,000 switches all have locks because
14 since the beginning of railroading, there have been vandals
15 who want to change the switches. All the locks have the
16 same key. You want to buy a key, go on the internet. Six
17 bucks, you can buy it. But if you're a regular track
18 worker, you probably don't even carry the key. You carry a
19 cotter pin and pop it with a cotter pin. We have head-on
20 collisions around the country, including the west, and you
21 need to ask yourself the question, why hasn't the FRA,
22 which is supposed to be in the process of making sure we
23 have rail safety apart from nuclear issues, why don't they
24 deal with these problems? How can people stand up in front
25 of you and say, hey, trust us. It's safe.

1 The problems go beyond that because you're also
2 dealing with contractors who potentially will tell you,
3 well, you know, if there's a problem, we'll fix it. And
4 you can trust us to fix it. And a non-nuclear example is
5 in Mandan, North Dakota, where the Burlington Northern--not
6 trying to pick on them--for 50 years has managed to drop
7 enough diesel into the aquifer that there's about 2,000,000
8 gallons of diesel in the aquifer. They were sued by the
9 State and they promised after they lost, okay, we'll
10 remediate. That was six years ago. They haven't
11 remediated. And now, when an enforcement acts, their
12 defense is, well, maybe we don't really have to remediate.
13 And these are the people who you want to use this prime
14 rail contractors to do this work. The "Trust me" mentality
15 seems to be, to me, not quite rational.

16 There are a couple of other comments I want to
17 make. I'll try to make this as quick as I can.

18 One of the questions that our rail labor people
19 have routinely is why are they out there in their non-
20 protective Sears Roebuck clothing next to a train that's
21 got a nuclear load with a guy that has a protective space
22 suit? One of them is either over-dressed or under-dressed.
23 And we really would like to know the answer to that
24 question, and we've asked the FRA and they say they don't
25 know. So hopefully you folks can answer that question.

1 Are there in fact any radioactive emissions that we should
2 know about? Are we concerned about this? If this is
3 happening now, what will happen when we have a lot more
4 volume that we're carrying? I think rail labor is entitled
5 to know the answers to these questions.

6 And lastly, I would like to respond to the
7 gentleman who is with the Navy program who said that,
8 "Gees, in rail yards, you just have fender benders." If
9 you would like to contact us we will show you videotapes of
10 non-fender benders that happen in railroad yards. The
11 biggest problem in railroad yards is you have lots of
12 switches. When you have lots of switches, you have lots of
13 derailments. Derailments are, by definition, serious.

14 So thank you very much for your attention. We
15 look forward to having some answers.

16 ABKOWITZ: Thank you, Harry.

17 Our next speaker is Sally Devlin.

18 DEVLIN: Good afternoon again. That's a hard act to
19 follow and I do know what a cotter pin is.

20 This is Sally Devlin, your favorite lady, and
21 you're my favorite people. And I do want to say thank you
22 again for coming here.

23 Before you go I want you to have dessert so if
24 anybody is awake get out your pencil and paper. I want to
25 give you a little information.

1 And that is, you met our friends from the other
2 counties in Nevada, and remember, we're not the bottom of
3 the barrel, we're only 49th. And I want you to know why
4 I'm so serious about this hospital that the Bechtel BSC
5 gave to us. And that is Nye County, and there's Les
6 Bradshaw, he can verify it. We have over 50,000, over
7 40,000 in Pahrump with no hospital. You're going to die
8 after 5:00 o'clock Friday until Monday morning at 7:00.
9 I don't know, Lincoln County has approximately 3,000
10 people. They do have a little facility at Caliente with
11 about 1,000 people. Lincoln County is a wonderful county.
12 They have over 900 kids in the Coop Extension Program and
13 125 leaders, so you know it is a lovely huge family-
14 oriented county.

15 Abby told me they have 1600 people in Eureka.
16 And, I don't know Lander County, but Esmeralda County has
17 about 800 people. It's 98 percent federal. In Fishlake in
18 that area, Dyer. They have no phones, no flush toilets.
19 It's really kind of fun. It's like our railroad valley.

20 So you see we are deprived, and I think it's very
21 wrong because any weather we cannot get over the hump to
22 Las Vegas for the hospitals. We are currently--the last
23 number that I heard was spending over \$78,000,000 in Las
24 Vegas for hospital care. This would be cut to more than
25 half if we had our own hospital. And, maybe if we could

1 have major surgery and grow like Fallon has, from 25 beds
2 to 40 beds, and they have less population than we have.

3 So, there's your dessert, my friends. Why we
4 need the hospital, I expect the entire Board to spend the
5 entire rest of their lives working on this. So I thank
6 you.

7 Now, one other thing. And that is, as
8 everybody's mother I do every year on the 1st of January
9 take out my new calendar and I do plan my entire year. And
10 that's how I got my kids through school. X's on the
11 calendar every year and so on. And so, I thought I would
12 give you a brief calendar of my life with father, and
13 whether NWTRB, and this started in '92-'93. And the reason
14 I got into this wreckage was because the only railroad plan
15 they have was for the train to come through Pahrump, from
16 Jane Sandy Valley to Pahrump on the Von Schimdt line
17 through Ash Meadows and Amargosa and up to the test site.
18 And I said, over my dead body, and that's when I went back
19 to school.

20 Now, the other thing that came about that time
21 was in the federal budget, and I don't know if Senator
22 Griet (phonetic) gave it to me or I gave it to him, but the
23 first thing I saw in the budget was for two repositories.
24 And you hear me say that every time. The first budget was
25 \$25 billion. The second budget was \$35 billion. So it's

1 in writing. There will be two repositories. No ifs, ands
2 or buts about it.

3 And this is what is going on. I've talked to
4 Russ Stier (phonetic) and we were at a meeting at the
5 Mirage. I said there was at that time 126,000 metric tons
6 of HOW. And of course, 14,000 metric tons of DOD
7 classified stuff which I understand now will go in my alloy
8 22 which the bugs will eat--thank you very much for
9 bringing that to everybody's attention. So I know that
10 will be corrected or whatever you do, and I'm anxious to
11 see that.

12 Now, the other thing that was mentioned today,
13 and again, it was something I brought up years ago when it
14 was \$6 to \$9 million dollars. And if you all remember it
15 was Price Anderson. And the last we talked about Price
16 Anderson, it was something around \$8-9 billion dollars, and
17 this was for accidents. And I'm hearing today that it now
18 has something to do with insurance. I don't know anything
19 about that.

20 And remember my boyfriend who is my mentor in
21 transportation who was with the Department of
22 Transportation here in the state mentored me all these
23 years, he was with Price Anderson Washington Group. So
24 anyway, that is something to look into. I don't know how
25 Price Anderson would be involved in insurance. I thought

1 just in claims.

2 And of course, I am not current, but I have
3 always been for years and years with the Governor's Board
4 on Licensing for Shipping of Nuclear Waste.

5 And I'm going to leave you again with the whipped
6 cream on top of the cake that you just ate. And that is,
7 the State of Nevada looks like this, a big C. Up here is
8 I-80, Interstate 80. Down here is Interstate 15. Here is
9 Interstate 95. And it's intrastate. It is only in Nevada.
10 And, it goes up north, it goes east, and it goes parallel
11 to the center of the state over to Ely through Austin. So
12 that's our major transportation. Three roads. And of
13 course, the interstates are pretty big. But the intrastate
14 is categorized as a nine hazard road because in most areas
15 it is only two lanes. And we had an oil spill and the
16 highway was closed north of Tonopah for 18 hours. So we do
17 have major problems with that.

18 And of course places like Tonopah, I believe,
19 Les, you can tell me, that they ship their very own by
20 plane to Reno. So that is the closest to them, not us.
21 And they are closer to Douglas County than they are to us.

22 The only other thing I can leave you with is
23 everybody, because it is the new year, say a prayer for our
24 \$25 million and hope we get it and I will look forward to
25 your support. And I look forward to, I hope next year, and

1 throw out no terrible cookies, real food, I guarantee, and
2 everybody be comfortable.

3 And, thank you so much again.

4 ABKOWITZ: Thank you, Sally.

5 Our final speaker is Gracian.

6 UHALDE: All right, I'm back again to bother you folks
7 some more. I think I regained my composure a little bit.
8 I have to tell you the truth, this morning it was somewhat
9 of a miniature shock and awe treatment for me. I think
10 there's only one description that makes it worse and that's
11 when we're gone.

12 Anyhow, there's a couple of things that came to
13 my light today that I would like to go over with you.

14 Since 1981 or '84 when, as Mike Baughman alluded
15 to, there were sounding meetings in Caliente, or whatever.
16 My family has never been contacted by anyone other than
17 the fact we pay taxes in four counties, Eureka, White Pine,
18 Nye, and Lincoln. And Eureka, which is the one that isn't
19 getting anything, is the one that called me on December
20 29th when the request for the withdrawal was done.

21 One thing I would like to clarify with you folks,
22 for your information, is that in the ranching industry, the
23 BLM does not want to recognize that we have a property
24 right out there on the grazing. There's a double standard.
25 The IRS, I've been through two estates. The IRS makes you

1 put the whole bundle together, the government, everything
2 that ties into your cattle, sheep, and then they tax you on
3 that. We've paid twice. My father, when he passed away
4 four years ago, we had done a few things to make that
5 better, but believe me, the IRS wants their money and the
6 BLM says you have no rights out there. But there's
7 improvement properties, things, many things, any rancher in
8 Nevada has done by himself--pipelines, wells. Those are
9 our property, and the grazing that goes along with them.
10 So the IRS is more than happy to make you put the whole
11 plan together. And we got audited, and they want their
12 money out of every AUM, animal unit month, that's out there
13 for their grazing.

14 So it's definitely not a free ride and it does
15 make you bitter when people comes in and just thinks they
16 are going to grab it up and tell you last.

17 One other thing I wanted to tell you is just for
18 your knowledge, the railroad MOE, which I think I've got
19 the map of the Caliente corridor, the toll map, day before
20 yesterday. The Air Force flies low-level flights through
21 there. You can see the pilots. Through Garden Valley, Coe
22 Valley, Worthington Pass. I mean these people are there in
23 live color, and you can definitely wave at the pilots.

24 And, the last thing I wanted to tell you was that
25 since the shock and awe treatment this morning, it looks

1 like my family is going to get 40 miles of the railroad. I
2 don't know whether to go rejoice, go bury my head in the
3 sand or what the hell to do, tell you the truth. But it's
4 just, after what I heard this morning was shock and awe and
5 what I heard this afternoon made me sick, from our county
6 officials, if that's what they were.

7 I vote in White Pine County so we're not really
8 that familiar with Lincoln and Nye. One of our main
9 headquarters is Nye County. And, I hear those people
10 asking for consideration from DOE and things and they have
11 failed to do the same for their people, for their
12 constituency.

13 Once again, I would like to thank you. And in
14 closing I would like to say that I'm a sheep herder and I
15 feel like the wool has been pulled over my eyes, and I ask
16 you, please, don't let people pull the wool over your eyes.

17 ABKOWITZ: Thank you.

18 Okay, we're going to resume with the program. We
19 have two more presentations to take care of the agenda for
20 today. The first one is the final prior transportation
21 experiences and lessons learned presentation, and the focus
22 of this one will be on the West Valley spent fuel campaign
23 and speaking on that program will be Alice Williams.

24 Alice Williams is with the Department of Energy's
25 Office of Environmental Management. And she will be

1 talking about that campaign. It involves the shipment of
2 spent fuel from the West Valley's facility in New York to
3 the Idaho National Engineering Environmental Laboratory.
4 And, I would like to welcome her. I think she has actually
5 spoken at a different microphone earlier today.

6 WILLIAMS: Thank you. Your day has been long and so I
7 will try and make this a short presentation, but I do want
8 to say that I'm honored to be here to do this lessons
9 learned.

10 The West Valley Demonstration Project lessons
11 learned is a little bit different than some of the other
12 lessons learned you've heard today because we are through.
13 We did our one-time only shipment of 125 spent fuel
14 elements, and with that our campaign is over and we are out
15 of the business of spent fuel shipping. So our lessons
16 learned are truly looking backward rather than looking at
17 continuing that shipment.

18 Before I get into the lessons learned, there
19 needs to be some background that I present so you can
20 understand a little bit about what was a very unique fuel
21 campaign. The West Valley Demonstration Project is a
22 cleaner project, and DOE pays 90 percent of the cleanup, 10
23 percent is paid by the State of New York, and it is on
24 state-owned lands in Western New York.

25 In 1995 in order to expedite that cleanup process

1 the Department took title to 125 commercial used fuel
2 elements. 40 of those elements came from the Robert E.
3 Ganay (phonetic) plant and the remaining 85 were from Big
4 Rock Point.

5 We had always planned on shipping that used fuel
6 to Idaho, but there were several things that had to happen
7 first. It was mentioned this morning about the
8 transnuclear casks that were designed, and eventually DOE
9 took ownership for. And also there were other issues of
10 NEPA.

11 In 1995, there was a legal agreement between the
12 Department of Energy and the State of Idaho that it would
13 allow this fuel to be shipped after calendar year 2000. In
14 light of that, we began serious preparations for that
15 shipment in 1999. The initial briefings were with the
16 potential corridor states and also with the tribes began in
17 early 1999 and we used the regional state organizations,
18 such as the Western Governor's Association, the Midwestern
19 Council, as well as the existing tribal liaisons to begin
20 those initial discussions.

21 We also began working with the FRA and these
22 corridor states and tribes in a consultory role with our
23 railroad evaluation studies that the Department had
24 prepared. And we also began sharing our initial shipment
25 plans, emergency management preparedness plans, and

1 communications plans, as well as the security plans, back
2 in the 1999 time frame.

3 In 2000 we began the negotiations with four
4 railroad carriers. That was Buffalo and Pittsburgh
5 railroad, a small railroad in New York and Pennsylvania,
6 Norfolk Southern, CSXT and Union Pacific, and that was an
7 effort that was one of the longer activities in the
8 project.

9 We also went back to the Nuclear Regulatory
10 Commission to renew the certification on the two casks.
11 And, we started that in 1999, late 1999.

12 In 2001 we declared operational readiness to
13 begin unloading the spent fuel pool for these 120 fuel
14 elements, had been in storage for the last 35 years, and
15 also continued working with the states and continued the
16 negotiations on the contracts.

17 By summer of 1990--or I'm sorry, by the summer of
18 2001, all 11 corridor states, two tribes, four railroads,
19 the FRA, as well as the demonstration project, and the
20 INEEL were ready to begin shipment and we had set our date
21 for early Fall of 2001.

22 Now, there's conventional wisdom out there that
23 the reason we stood down that shipment in September of 2001
24 was because of 9-11. And that is not correct. The reason
25 we stood down the shipment is because the Assistant

1 Secretary for Environmental Management wanted to place more
2 focus and more emphasis on regulatory requirements in the
3 State of Idaho and as such, directed us to stand down that
4 shipment at that time. So, what that meant was, is that we
5 had two fully-loaded fuel casks that remained at West
6 Valley on the railroad sitting, waiting shipment.

7 In 2002 DOE directed both the West Valley
8 Demonstration Program and the Idaho National Engineering
9 Environmental Laboratory to begin plans for shipment in
10 2003.

11 And what we did at this time is that we took
12 everything that we had worked on in the 1999 to 2001 time
13 frame and essentially reconstituted it. Amazingly, there
14 were very little changes from that plan to what we were
15 planning on doing in 2003, but there was one major change.
16 And that was because of the heightened security. Where we
17 had been very open about our shipment plans in 2001, we
18 went to a strict need to know basis with the states and the
19 state personnel. And in fact with our own people within
20 DOE.

21 All preparations were completed by the end of
22 June, 2003. And the shipment departed West Valley
23 Demonstration Project on July 13th, 2001. And it's a
24 little hard to see in the picture there, but the train was
25 configured exactly as was discussed this morning. We had

1 two locomotives, we had a ballast car, we had one cask,
2 another ballast, the second cask, another ballast car, and
3 then the personnel carrier at the end.

4 A little bit about the shipment. I believe that
5 this is one of the largest single fuel movements by rail
6 this country has ever seen. We did ship West Valley fuel
7 by rail in the late 70s so one of those shipments might
8 have been larger, but certainly in recent years, this is
9 the largest fuel movement that the government has made.

10 Although the Navy fuel shipments, as you heard
11 earlier today, might have been longer, this is one of the
12 longer fuel movements. As I mentioned, it crossed 11
13 states with the four railroad carriers.

14 Now, when we finished the project, which was
15 essentially when it arrived at the INEEL at 2:38 a.m. on
16 July 17th, the next and final step with the project was to
17 do a lessons learned, and we completed that in September.
18 So what I'm talking about now are the lessons learned which
19 reflect, I would have to say, continuous process
20 improvement because the shipment itself was a very
21 successful one that happened with essentially smooth
22 operations on all aspects.

23 But, the lessons learned that may be of use to
24 future shipments in that this country makes some times deal
25 with rail operations, communications, the shipment

1 schedule, emergency preparation training and inspections.

2 And I will hit these very, very quickly.

3 With regards to railroad operations, I mentioned
4 before that one of the activities that took the most time
5 was placing the contract with the rail carriers. There
6 were several issues that we worked there and this was a
7 very long and hard process and I'm sure if I had one of the
8 carriers here in this room that they would echo it was a
9 long and hard process from their perspective, too.

10 Our recommendation would be to develop an
11 accepted contracting approach, especially if it's not going
12 to be a one-of-a-kind shipment, and use that for the
13 multiple shipments. Don't keep reinventing the wheel over
14 and over again because of the amount of time and effort
15 that it takes.

16 Secondly, with regards to the route and alternate
17 routes, we believe that it's very important early on in the
18 process to have clearly-defined route selection criteria.
19 Some of the criteria we used was condition of the rail,
20 length of service, population centers, inspection points,
21 on and on. I think the models we used had about 14
22 criteria we looked at.

23 The map there is showing all the potential route
24 and route segments. It does not reflect the actual route
25 we used.

1 It is also important that once you have chosen
2 the route that you stick to that route as much as possible.
3 And that stakeholders along the route understand the
4 criteria for the route selection. We made no changes in
5 our preferred route at any time. The other thing is is
6 that in our protocol, if there had been a route change that
7 was needed during transit, that would have been the call of
8 the railroad's. It would not have been the call of the
9 Department.

10 Early on, there were those who wanted us to
11 inspect all of the proposed track segments, and it was the
12 Department's position that we would only do inspection of
13 the preferred route. And that was how it turned out.

14 Again, stating what I just said, our recommen-
15 dation is to use the clearly defined route selection
16 criteria, and there are some very good models, INTRALINE
17 and STRACKNET are two that are available at this time.

18 With regards to communications. The regional
19 coordination meetings in using entities such as Midwest
20 Governors Association, Western Governors Association, was
21 very, very helpful and very successful for us. All of the
22 regional organizations were most helpful to us and were, in
23 every step of the way, crucial to our success.

24 One of the things that we struggled with was
25 sensitive information and need to know. Who needs to know,

1 and why they need to know was something that we struggled
2 with and I think there were some people, especially elected
3 officials, who even to this day have concerns as to why
4 they were not on part of that need to know. What we worked
5 with is that the Governor's Office, the emergency
6 management professionals within each state, obviously law
7 enforcement, FRA were on the need to know, and most other
8 entities were not on that list.

9 TRANSCOM. We've talked about this several times
10 during the day. It is a wonderful tool and for the most
11 part it worked well on our shipment. Recommendation on
12 that one is to clarify guidelines for distributing and
13 controlling the sensitive information and enhance the
14 TRANSCOM communications within the states. As I said, it
15 worked very well, but it could have been better on our
16 shipment.

17 With regards to the shipment schedule, this first
18 bullet about the actual shipping date fluctuated. DOE owns
19 that and DOE alone owns that, and to the states, to the
20 FRA, to the inspectors, to the railroad, it drove them
21 nuts, and I don't blame them for being frustrated when we
22 were making requests down on shipment dates early on. DOE
23 could and should have done better on that.

24 On the enroute rad inspections, we had some
25 challenges on this because one carrier in particular was

1 able to go faster than the schedule that we had worked to,
2 which meant that we were scrambling to get the inspectors
3 where they needed to be on time. That was frustrating for
4 the inspectors. On the other hand, everybody was pleased
5 that we were able to make up scheduling to make this
6 movement faster than we had expected. But again, to the
7 extent possible, to the extent practicable, it is important
8 to adhere to the planned schedule.

9 Lessons Learned, Emergency Preparedness Training,
10 we did a lot of training along the routes. One of the
11 things that we could have done better and should have done
12 better is that the states lay out their plans in terms of
13 what they need for their training for, not only their full
14 time personnel, but for their emergency personnel about 12
15 months in advance. They do a yearly planning schedule. It
16 would have been a good idea and much appreciated by those
17 states if we could have coordinated earlier on with them so
18 that our training needs could have been factored into their
19 normal training modules. That would have made sense from
20 their perspective, and it would have made less impact to
21 those professionals along the way.

22 Moving on to inspections. This is one that we
23 struggled with quite a bit. And there are some things here
24 that were both good and bad. Doing inspections ahead of
25 time as much as possible is very good. We did inspections

1 on the rolling stock at the Buffalo Rail Yards two to three
2 days in advance, sometimes as much as seven days in advance
3 so that if there was any problems with brakes, brake lines,
4 those could be fixed and re-inspected without impacting the
5 schedule.

6 We also did advanced inspections where we had--
7 Ohio is an example--came on site and did their inspections
8 before the train left the West Valley Demonstration
9 Project. We also had some rad inspections that we had done
10 by non-FRA certified personnel.

11 In the future, if there are shipments like this
12 made, and I think the Navy alluded to this as well, one
13 needs to make sure that there's a protocol so that you are
14 reducing the number and perhaps in some cases even
15 eliminating enroute radiological inspections. It takes
16 time and not everybody sees the value added of those rad
17 inspections enroute.

18 In conclusion, shipments like this benefit from a
19 phased approach. You have the operations side of loading
20 the fuel on-site. You have the issues of contracts. You
21 have the issues of working with the affected corridor
22 states as well as the FRA, and the schedule needs to be
23 integrated with all those activities, well understood in
24 advance so that everything can come together at one time.

25 The contracting system with the railroads is

1 something that probably needs more work. This was a one-
2 time only shipment without a lot of history behind it, and
3 I would encourage those that come after us to make similar
4 shipments that this is something that needs to be worked on
5 early and very, very carefully and thoroughly.

6 Guidelines on distribution of sensitive
7 information. We've talked about that before. As I
8 mentioned before, when we were getting ready to ship in
9 2001, we were open with all information to any interested
10 party. Again, when the 2003 shipment was made, we had a
11 different protocol that we followed of strict need to know.

12 Process for establishing and maintaining
13 schedule. Again, if there were multiple shipments covering
14 several years, that would be something that I'm sure would
15 sort itself out pretty quickly.

16 National protocol on enroute inspections, I
17 believe that this is going to be a big item. Enough said
18 on that.

19 And again, the radiological training for first
20 responders needs to be integrated into routine training for
21 these personnel.

22 And I spoke fast, I covered a lot, but hopefully
23 I will be able to answer some questions and that your whole
24 day has not left you totally and completely exhausted.

25 ABKOWITZ: Thank you, Alice, and it is appreciated

1 that you spoke fast, but it was a very clear and
2 understandable presentation.

3 We're going to start with Dick Parizek.

4 PARIZEK: Parizek, Board.

5 I'm from Pennsylvania so we're kind of anxious to
6 know what's happening up there to the north.

7 WILLIAMS: You probably know very well what's
8 happening up there to the north.

9 PARIZEK: Well, but the question is, you said it's a
10 one-time shipment only, but the last logs are still there,
11 are they not.

12 WILLIAMS: These are only the spent fuel. We do have
13 the 275 high-level waste canisters that at some time in the
14 future will be shipped to the repository.

15 PARIZEK: All right, so the experience you got here
16 obviously may have great value to you for those others?

17 WILLIAMS: We would hope it would, yes.

18 PARIZEK: Yes. Thank you.

19 WILLIAMS: And, just to clarify that point, the other
20 mission that I did not talk about at West Valley is
21 vitrifying the high-level waste from the fuel re-processing
22 operations that were done in the late 60s and 70s. The
23 vitrification is completed. There are 275 canisters of
24 high-level waste that eventually will go to the repository.

25 PARIZEK: One more in terms of the inspection along

1 the way. Is that partly because maybe Ohio was anxious to
2 make sure it was doing its job and to learn how to do this
3 better? I mean there may be a lot of people who, the first
4 time or several times through it want to get involved and
5 later on it becomes streamlined.

6 WILLIAMS: I think because this was the first time
7 shipment of, and because it was so large, that all the
8 states were anxious to do the right thing and to
9 participate correctly. So, what you were alluding to, I
10 think is very much an issue. And, in some--and again, in
11 my lessons learned, I'm not saying that how we did the
12 inspections was wrong, but as a first time only one needs
13 to move on and learn from what they had there.

14 ABKOWITZ: Dan Bullen.

15 BULLEN: Bullen, Board.

16 I'm a little curious about your control of the
17 sensitive information with respect to need to know. And
18 was that an offshoot of the fact that the 9-11 event had
19 happened or because you mentioned that you wanted to
20 clarify the guidelines for distribution of that sensitive
21 information?

22 WILLIAMS: Okay. I'll go into probably more detail
23 than you want on that, but to answer the question on how
24 that came about, when we stood down in 2001, we did do a
25 lessons learned with the corridor states, FRA and the

1 railroads. And one of the things that they communicated
2 back to the Department is that we had been so open and we
3 had been so excited to tell everybody about this shipment,
4 and all the details of it, that we were actually making
5 problems, not only for ourselves, but also for them along
6 the route.

7 And, a case in point, we were within, oh, maybe
8 48 hours of shipment when we stood down. And the railroad
9 TRAINBUS, their website was telling the hobbyists when we
10 were shipping within probably four hours of when we were
11 shipping. So, we had essentially perhaps overdone this.
12 And so, we made the decision that, just in terms of the
13 logistics of this, that there were a lot of people out
14 there who did not really have a need to know what we were
15 doing, although they had a lot of interest for many
16 reasons. And so we essentially shut those communication
17 corridors off.

18 Now, what happened with that is that we had one
19 local elected official in Western New York who was very,
20 very upset that he was on that need to know basis. And
21 there was a call that was made at the Governor's Office as
22 to who would be told within each state, and so his idea is
23 it was his town. Why couldn't he know? And it got to be a
24 very emotional and critical issue.

25 BULLEN: Bullen, Board. Just to follow up to that.

1 It's a very fine line because you really do want to have
2 enough information that the people understand who the
3 material is being is sent to, but also you want to make
4 sure that they have an understanding of it, but there's no
5 reason to tell when it's going through. So it's a real
6 challenge.

7 WILLIAMS: And I don't know whether we--and this is
8 one where I don't really know the right answer. I was the
9 Project Director at West Valley at the time so this truly
10 resides on my watch. Could we have done it differently?
11 Yes. Should we have done it differently? I really don't
12 know.

13 BULLEN: Thank you.

14 ABKOWITZ: Bob?

15 LUNA: Bob Luna, Board Consultant.

16 Could you contrast for me the difference between
17 this shipment in which you decided to go out and survey the
18 rails from the yards to the destination and the Naval
19 Reactors Program where they say the railroads do their job
20 and maintain it to FRA requirements. Why should we bother?

21 WILLIAMS: Okay. First of all, a point of
22 clarification. When we announced our preferred rail route
23 where we said this is the route that DOE wants to use for
24 this shipment, that is the major departure between us and
25 the Navy. The actual inspection of that rail route was

1 done by the railroads and the FRA, so DOE did not do the
2 actual inspection. That was done by the professionals.
3 And, I think the Navy did a very good job of talking about
4 the fact of why there are differences between, say
5 something like this shipment and what the Navy does.

6 We, DOE, opted for the particular route that we
7 had here because it was not a national security shipment.
8 It had everything to do with cleanup and getting the 125
9 fuel elements out of an unlined pool so it was driven by
10 remediation, not by national security. It was a unique
11 shipment. It was going to be a large movement by anybody's
12 standards, and so those are some of the reasons why the
13 Department opted for this particular approach.

14 ABKOWITZ: Thank you, Alice.

15 The last word today belongs to the Department of
16 Energy, and that will be provided by Gary Lanthrum. Gary
17 has been formerly introduced earlier today, and he has a
18 formal talk on the status of DOE Transportation Planning,
19 but as I indicated in my opening remarks, we're also
20 encouraging him to use this occasion to respond as
21 appropriate to earlier presentations and discussions that
22 have occurred today.

23 In his Guide to Stakeholder Interactions--you may
24 not have seen this. The print was awfully small, but it is
25 an indication of the sensitivity to stakeholders, so he is

1 planning on letting everyone have dinner some time tonight.

2 LANTHRUM: My challenge is to talk quickly and yet
3 succinctly and understandably, and Alice set a pretty high
4 target for me to try and meet. I may go somewhat quickly
5 through some of the slides that are duplicated. If you
6 miss something because of the speed I try to cover some of
7 the subjects, let me know. I'll be happy to go back.

8 At the TRB meeting in September I was brand new
9 on the job, and I told everybody that my real focus was to
10 look at the scope of work and then to create an
11 organization that could support it. One of the challenges
12 I had was to reorganize the Office of National
13 Transportation with a project management focus. I wanted
14 to develop a project logic and assign project managers that
15 would be responsible for key areas.

16 I needed to develop an appropriate transportation
17 scope based on the available budget for this year. That
18 was complicated a bit by the fact that we under containing
19 resolution for a while and weren't really sure what our
20 budget was going to be. We do have it now. We are moving
21 forward.

22 I was committed to get the Transportation
23 Strategic Plan out, which we did in November. And to begin
24 working with the state regional groups on substantive
25 issues, not just on general issues talking about how great

1 the transportation was going to be, but on the--trying to
2 work into the details of addressing some of the concerns
3 that they had.

4 And then to start building the infrastructure
5 necessary to make this program work. I'll just go through
6 the check-marks here. Four out of the five are essentially
7 under way in good terms. And I'm just now beginning the
8 fifth activity, which is to build the transportation
9 infrastructure.

10 A quick slide that shows the number of sites that
11 we've got around the country to ship from. There has been
12 a lot of talk from other presenters today about the scope
13 of their shipping program. The program that OCRWM has will
14 be substantially larger, both in total scope and the number
15 of shipments. Naval Reactors does a lot of work and they
16 do it very well, and we are taking a close look at the way
17 they've organized. And, to the extent that their
18 experiences translate to what we're going to be doing, we
19 will try to adopt it.

20 We paid close attention to what EM is doing, but
21 as Alice indicated, they haven't had the number of spent
22 fuel shipments that we're expected to have to deal with.
23 The discussions made by the Secretary of Energy have
24 indicated that we could expect somewhere on the order of
25 175 shipments a year. That's roughly two a week.

1 So it's a very significant number of shipments--
2 actually, pardon me, it's 300 and some-odd shipments a
3 year. Let me get my numbers straight here. It's 130 train
4 shipments and 45 truck shipments, and so it would be about
5 two a week, roughly.

6 On the bottom of the slide it does show that
7 there's a number of 128 sites around the country that would
8 have spent fuel or high-level waste that would be moving.
9 That number has decreased from 131, which you might have
10 heard before. One additional university research reactor
11 has moved all the spent fuel off. That was Cornell. And
12 so the number of sites has gone down, but the amount of
13 content that we have to deal with is still the same.
14 There's just been some consolidation of storage.

15 We talked about the mission before and the focus
16 is on being able to support safe and secure transportation
17 of the contents that we're responsible for, and that has
18 not changed.

19 One thing that has gone a little bit more
20 forward, the blue outline is the overall organization for
21 the Office of Civilian Radioactive Waste Management. What
22 has been added to this is the fact that we've got a
23 transportation organization now that is broken down by
24 projects. And the print is really small, but the four
25 projects are basically a national transportation project,

1 and the project manager there is focusing on developing the
2 inventory that will be used for all of our shipments.

3 That's the casks and the rolling stock.

4 There's a Nevada Transportation Project that will
5 be responsible for developing the transportation
6 capabilities infrastructure just in Nevada, whether it's
7 rail or some other mode of transport.

8 There's a Special Projects Project Manager and
9 we've got a whole host of things we have to deal with on
10 the safeguards and security front, on the communication and
11 tracking front, and all of those things wind up being under
12 the Special Projects.

13 And then I've got an Institutional Program
14 Manager and I make some subtle distinction between that and
15 the Projects because that's going to be one thing that, as
16 we transition from building the infrastructure to
17 operations, the institutional program will continue to
18 operate through that transition period.

19 On the budget, we did get in OCRWM a fairly full
20 and robust budget for 2004. Of a \$580 million total for
21 the program the national transportation part of that, or
22 the Office of National Transportation, got \$63.8, and
23 that's broken down with \$44 million for the National
24 Transportation Program and that reflects the fairly high
25 costs of starting to acquire assets for that program.

1 The Nevada Transportation Program has \$18 million
2 scheduled to support their activities this year. And then
3 overall project management is \$1.8 million.

4 Under the key activities, and we'll skip the rest
5 of this slide because I will revisit each of those in
6 subsequent slides.

7 Here's an overall view of the budget that's gone
8 on with transportation over the past decade or so, a little
9 under a decade. And you can see a fairly high funding
10 level back in the mid-90s that dropped down significantly.
11 And even though it shows some continued level of funding
12 here, this was for waste acceptance and transportation,
13 which was the way things were organized in OCRWM in the
14 past, there was actually no transportation funding during
15 these years. It was all waste acceptance funding, looking
16 at collecting the data that was needed for their
17 operations. In 2003 there was a \$10 million dollar budget
18 and that has bumped up significantly in 2004. Again,
19 that's to support the beginning of our infrastructure
20 build-up.

21 On the project elements, one of the keys was to
22 organize the work elements and collaborate with
23 stakeholders. And we have broken things down into five
24 main projects.

25 One is the Fleet Acquisition Project, and this is

1 again the cask procurements or rolling stock procurements.
2 Ian from Cochema talked earlier today about the fact that
3 we're having initial one-on-one meetings with cask vendors
4 to ask them about ways that they might suggest that we
5 proceed with cask acquisition. Our goal overall is to find
6 ways to meet the entire population of materials that we
7 have to ship. The whole range of contents, and have the
8 vendors propose ways that we might do that most efficiently
9 and most effectively.

10 And, we're hoping that the experts in the field
11 can come in and propose some innovative solutions to
12 minimize the amount of infrastructure that we have to buy
13 as far as different designs. You've heard a couple of
14 folks say today that for casks you have to have a fairly
15 significant QA/QC program that is ongoing after you've
16 acquired the assets. The fewer different designs that we
17 have to deal with, the more simple our procedures will be
18 for the maintenance program.

19 And again, those meetings start next week. We
20 would expect the two days of meetings with the initial set
21 of vendors that expressed an interest in talking to us to
22 ultimately lead to a draft request for proposal that would
23 go out in the Federal Register. We would then have pre-
24 qualification meetings with the vendors or pre-award
25 meetings with folks, and before our final request for the

1 final RFP would go out, and then hopefully, by the end of,
2 actually about the middle of the summer this year, we would
3 expect that the first awards would be made for conceptual
4 design for casks.

5 And our general approach is not to try and buy
6 casks right from the beginning. But to try and keep the
7 competition among the vendors and to make progress while
8 ultimate decisions on what the configurations of our
9 initial shipments will be, what the exact fuel is going to
10 be, and where it's going to be coming from.

11 We would like to start off with conceptual
12 designs to incentivize the vendor industry to propose a
13 suite of casks that could support all of our needs. And
14 then from that suite after we get proposals, we would down-
15 select to a smaller subset that we would actually pursue
16 detailed design and certification of, and out of that set
17 of answers we would pursue an additional, again, reduced
18 set that we would actually pursue for fabrication. But the
19 idea being that we would be able to make technical progress
20 before a lot of the decisions that go into effect what we
21 ultimately have to have in place when shipments start to be
22 made.

23 We talked a little bit earlier about the Fleet
24 Management Facility Project. And we call it fleet
25 management rather than maintenance because it's going to be

1 for more than just the maintenance function. There's going
2 to be a fairly significant fleet of both casks and
3 transport vehicles that we'll have to have. Not all of
4 those will be on the road at all times, so we'll have to
5 have a storage area as well as a maintenance area. And
6 again, we have been doing studies about where this facility
7 could be or should be located. We're getting lots of
8 feedback from the counties and the affected units of local
9 government, as well as other folks in the industry that
10 have had some suggestions about where a facility like this
11 could be located, I'm expecting that some time this Spring
12 a decision on location would be made.

13 Again, that's going to be a policy decision as
14 much as it is a technical decision. And part of the
15 interface for that has been working with the repository
16 itself to see if there's any significant benefit that
17 should be part of our consideration where the capabilities
18 of this maintenance facility for transportation might also
19 serve some purpose for repository.

20 There's a significant amount of operational
21 infrastructure that we're going to have to develop. A lot
22 of folks have talked about TRANSCOM, the tracking system
23 that Environmental Management uses. And you've heard a
24 couple of folks talk about the significant upgrades to
25 TRANSCOM that were made in the early 2000 time frame. It

1 went from a dial-up system where folks had to pay a long
2 distance phone call to connect to a web-based system. This
3 still has the security that's necessary, but all the folks
4 that have proper access authority in the corridor states
5 and tribes do have access to the tracking information for
6 shipments coming through their lands. And that's good.
7 But, by the time we start shipping in 2010, I suspect
8 there will be a whole lot more that will be available.

9 There's another system that's in use by the
10 Department. It's called SECOM, and that's the Secure
11 Communications and Tracking System that the folks that move
12 the nuclear weapons use, and I believe that's the same
13 system that Naval Reactors uses to track their shipments.
14 There are some subtle difference between SECOM and TRANSCOM
15 and so we'll be looking at the benefits of both systems.

16 And we've been talking to the Military Transport
17 Management Command, MTMC, about tracking systems that they
18 are looking at, so we're trying to figure out what the best
19 technology would be to serve our shipments beginning in
20 2010. No final commitments will be made until we get much
21 closer to actually starting shipments because the tech-
22 nology is evolving so fast that it would be nice to be able
23 to accommodate as many of the new innovations that would
24 have benefit as possible before we actually start shipping.

25 Another thing that we're doing in this regard

1 under the operational infrastructure as part of the Special
2 Projects Group is looking at cask vulnerabilities. We're
3 participating in a multi-national effort to assess the
4 threat posed to casks. It's a cooperative effort with
5 France, Germany, Britain and the U. S. The Nuclear
6 Regulatory Commission is also a participant in this study
7 but DOE has got certainly a vested interest. And we're
8 looking at what the real threats might be out there as we
9 reassess the design basis threat that we should be able to
10 respond to, as well as looking at ways that that threat
11 might be mitigated.

12 And, I'm trying to think of this one other thing
13 here. I think that covers the operational infrastructure,
14 at least at this point.

15 Institutional is something that has been a big
16 focus here, and there has been a whole range of comments--I
17 was writing furiously on a little notepad I've got.
18 There's a lot of comments that we've got. It's sometimes
19 difficult when you're sitting in an office and you see the
20 amount of communication that goes out, it's easy sometimes
21 to think that that communication is touching everybody that
22 it needs to. And it has been very obvious from the
23 comments here that there's a long way to go in making sure
24 that we can cross all those Ts and dot all those Is.

25 I was out Monday talking to an artist out in--

1 along the routes that's got a very, very large structure
2 he's working on and I was completely unaware of that
3 sculpture's existence until we got a call from the art
4 foundation that's sponsoring it.

5 And so there's not any lack of desire on DOE's
6 part to avoid communication. In many cases we just don't
7 know who to communicate with. And, as we find out more the
8 interested parties, to get people onto mailing lists and
9 broaden our communication spectrum, there will be more and
10 more people that will be touched by the long-range plans
11 that we have. The NEPA mailing list that we have for a ROD
12 that would be going out, I'm hoping some time soon, right
13 now has 5,000 names on it. That's a fairly large number of
14 people that get contacted. But there's always the
15 opportunity to grow those lists so that's one of the things
16 we'll be looking at.

17 We've got the Nevada Transportation Project and
18 they will be engaged in developing whatever infrastructure
19 is necessary in Nevada to support the transportation
20 decisions that are going to be made in the near future.

21 One of the challenges I've got is to make sure,
22 not only do we have integration among the projects that I'm
23 responsible for, but that those projects themselves are
24 integrated well with the repository and with other programs
25 within DOE, both the Naval Reactors Operations and the

1 Environmental Management Operations. So there's a fair
2 amount of integration that has to go on in addition to
3 developing the basic infrastructure for the projects that
4 we're responsible for.

5 Under the Fleet Acquisition Project, I've already
6 talked a little bit about the fact that we're having vendor
7 meetings. They are scheduled for Monday and Tuesday of
8 next week. The first step, though, in the DOE project
9 management is to establish the mission need, and that was
10 basically created by the issuance of the final
11 environmental impact statement and then the site
12 recommendation that went from the President to Congress,
13 and finally wound up being supported with a congressional
14 override of the Nevada veto. That basically established
15 the mission need for developing the infrastructure.

16 The next step on the process is just to do a lot
17 of our internal looks at the alternatives analysis. And a
18 number of folks have talked about in transportation
19 planning you need something that looks like a NEPA process.
20 Well, for the cask acquisition effort, we have to develop
21 a cask acquisition strategy that looks at a number of
22 options. Those options wind up being vetted in a
23 recommendation for the option to pursue gets made, and
24 that's part of what's called a CD-1 package. It's a
25 critical decision 1, and we're going through the CD-1

1 review of our cask acquisition efforts right now. We've
2 had an initial review of our CD-1 package with the
3 Management Engineering Group in DOE and we expect to submit
4 the final package some time this Spring.

5 We'll also be getting input from stakeholders in
6 the cask industry as I had indicated. But it's not just
7 the vendors that we'll be looking for input from. As we
8 talk to folks around the country we've had a number of
9 meetings with the state regional groups already. We've
10 met with the Southern States Energy Board.

11 In November just after the strategic plan came
12 out, there was a meeting--I'll get it a little bit later I
13 think, but the Midwest and the Eastern Regional Conference
14 of the Council of State Governments, we met with them in
15 Chicago in December, and next week there's a meeting with
16 the Western Interstate Energy Board in San Diego. We're
17 getting input from the states through these regional groups
18 as they've got input on what our mode and cask
19 configuration ought to be.

20 As I mentioned, that our initial procurements
21 will be for conceptual designs. We want to get ideas about
22 how to move the process forward without locking ourselves
23 into a final procurement commitment.

24 We have done a lot of work on documenting our
25 project scope, our schedules and our resource requirements.

1 And that has been this whole approach of doing project
2 ties to the management of the transportation development
3 effort. We've got, I think at the TRB meeting in
4 September, John Arthur had a piece of what he called his
5 decision logic diagram for the repository, and there were a
6 number of activities on there with milestones. That's
7 becoming a more important internal management tool, and
8 since the September meeting the transportation lines on
9 that effort have been filled in with a considerable amount
10 of additional detail and milestone data.

11 Also part of the Fleet Acquisition Project is our
12 Rolling Stock Acquisition. That's a little further behind.
13 In fact, when we started developing our CD 1 package, we
14 initially tried to include both the casks and the rolling
15 stock. The rolling stock situation was not nearly as well
16 vetted as the casks. We've divided the two now. We're
17 pursuing the casks before we do the development of our
18 rolling stock, partly because a lot of the decisions that
19 are going to affect our rolling stock acquisition haven't
20 been made yet. Until the decision on whether to use mostly
21 rail or mostly truck is made it's pretty hard to tell
22 whether we should be buying truck trailers or rail cars.
23 So some of the decisions that our predecessors do to moving
24 out on the rolling stock haven't been made yet.

25 And we are working on that CD 1 package.

1 The other thing we're looking about is the
2 impact, as Bob Fronczak and others talked about, this new
3 AAR standard for rail cars. There was some pictures shown
4 of a car that's being developed by Trinity Manufacturing
5 for the private fuel storage system, and they indicated the
6 car had been built and some of the model testing had been
7 done and the static testing, but the dynamic testing was on
8 hold until some decisions were made about what the status
9 of that actual project was.

10 That's just one of the car designs that we would
11 need, though, would be the load-bearing car. The standard
12 applies equally to the buffer cars and to the security car
13 that we would have in any train construct that we might
14 use. And, how we might acquire either rights to existing
15 designs from somebody like Trinity or start developing our
16 own designs is something we're doing a lot of thinking
17 about.

18 It's probable that our initial approach is going
19 to be to say that we are interested in the AAR standard
20 design. We would like to have proposals from, again, the
21 industry on ways to meet the design. And since Trinity is
22 the only company out there that's done any work on it, they
23 would be a prime competitor, but I suspect that there would
24 be others that would step up to the plate and might have
25 different approaches or different answers to meeting the

1 standard than the one that Trinity has come up with.

2 On the fleet management facility, we're looking
3 at the functional requirements, the size of the cask fleet.
4 The maintenance requirements for casks are outlined pretty
5 thoroughly, 10 CFR 71, Subpart H. That's the QA/QC
6 requirements that the RC establishes. And, in those
7 requirements, it's pretty easy to see what we'll have to do
8 with each of the casks we have to have.

9 The other thing that we're looking at very
10 closely is trying to model the time it takes to get a cask
11 from a storage facility, wherever it's located, to a
12 shipper, how long would it take the shipper to load the
13 cask, how long it would take to get enough casks loaded to
14 construct either a train or a set of truck shipments, how
15 long would it take those shipments to get from the shipper
16 to the receiver at Yucca Mountain, how long it would take
17 Yucca Mountain to unload the cask, and how long it takes to
18 return the cask from Yucca Mountain to the maintenance
19 facility, and how long it takes to do the maintenance. And
20 that cycle of looking at the flow of our assets is
21 important to understand how many assets we need to have.
22 If the casks are tied up for significant periods of time,
23 either in loading or unloading or in the maintenance
24 aspects, then the size of the fleet that we would
25 ultimately have to have would have to increase over a model

1 of our operations that might shorten the durations at both
2 the shipper receiver and the maintenance facilities.

3 There's a lot of work going into assessing what the
4 flow of casks would be and that's going to drive, to some
5 extent, the size of the facility, both in terms of storage
6 pads and in terms of maintenance bays.

7 We have similar challenges with the rolling
8 stock, although for the rolling stock we don't anticipate
9 doing heavy maintenance and repairs of any rolling stock at
10 this facility. It would be only for the ongoing routine
11 maintenance that we would be targeting.

12 Inventory control and inspection, that ties into
13 this whole idea of modeling the flow of our assets through
14 the operational system. We are looking at the drivers on
15 the acquisition strategy that the maintenance facility
16 would have. Again, that's primarily on the number or
17 quantity of casks that we would need of any particular
18 design to make sure we could support the operational
19 desires of the program.

20 Again, it's the same issue of capacity and turn-
21 around time. And we've done a fair amount of looking at
22 what the costs and benefits would be associated with where
23 the facility would be located. If we do build a facility
24 outside the land withdrawal area, a separate environmental
25 impact statement would be required for it, and that is part

1 of the decision-making process that would have to be
2 considered before a siting location decision is made.

3 We are working with the repository about the
4 extent to which this maintenance facility might support
5 some of their needs as well as transportation needs. And
6 after we've gone through most of that we will prepare our
7 acquisition strategy package for the fleet rolling stock.

8 We are holding the integration and technical
9 exchange meetings with the Yucca Mountain staff. As I
10 indicated, we had our first major meeting back in December.
11 And our next meeting is tentatively scheduled for the week
12 of February 9th.

13 This is an extract that comes from data that was
14 presented in the final EIS, and it shows largely what's
15 driving our preference that was stated in the EIS, for a
16 mostly rail scenario for our mode. If you have a mostly
17 rail scenario and you've got a target of roughly 3,000
18 metric tons per year through-put to the repository, with
19 the capacity we anticipate for each rail cask and with an
20 estimate of three casks per train, you wind up with about
21 130 trains a year, and about 45 trucks a year. Again,
22 that's a very wild guesstimate right now because we don't
23 know what the specifics of the material that would be
24 shipped initially are. But that's a ball-park estimate
25 based on current cask design capabilities and operational

1 assessments.

2 There was a lot of talk earlier about a holistic
3 approach to rolling out the transportation program. I've
4 got two main areas I'm concerned about right now. The
5 first is the procurements of my infrastructure and this
6 just shows some of the considerations we have to take into
7 account. For the size of our fleet, both for casks and
8 rolling stock, we certainly are getting vendor input.
9 That's starting next week.

10 The facility capabilities, and that's--a facility
11 capability isn't a very broad construct. What the shipper
12 sites, both the commercial power plants and the DOE sites,
13 what they have in the way of lifting capacity, ingress and
14 egress capabilities for transportation, other basic
15 infrastructure capabilities that the facilities have is
16 going to drive some of the considerations I have to take
17 into account for procuring casks and rolling stock.

18 The maintenance facility, the capabilities of
19 that for through-put is going to drive the decision.

20 There's a lot of talk about risk mitigation
21 strategies, and again, that's in the context of the design
22 basis threat that we feel that we have to address. And
23 that will be something that evolves over time.

24 And waste acceptance schedules. Now, out of all
25 these things that drive our needs, the facility

1 capabilities is something that I don't control. The waste
2 acceptance schedules is something that I don't control.
3 And those are probably two of the largest drivers about the
4 size and configuration of the fleet that I have to procure.
5 And that's part of why we're trying to pursue a strategy
6 that would let us move forward technically without making
7 ultimate commitments about what the actual configuration of
8 the materials we would buy would be.

9 On the operational drivers, there are certainly
10 regulatory requirements. We will have to have casks that
11 are certified by the Nuclear Regulatory Commission. There
12 are other regulatory drivers that would affect our
13 operations. Those are going to affect the operational
14 planning.

15 The operational protocols. A couple of folks, I
16 think the Naval Reactors folks mentioned the protocols, the
17 DOE manual that talks about how shipments are made by the
18 Department. That's one of the areas that drives into us.
19 But also in there the stakeholder needs routing decisions
20 that would ultimately get made based on interactions with
21 our stakeholder community and where we go with the
22 emergency preparedness operational planning.

23 We've got equipment and facility limitations on
24 operations. We've got enroute security questions that
25 haven't been completely answered yet, and we've got

1 interaction and integration with other DOE elements for
2 consistency. I don't think anybody would like to see
3 different operational requirements or significantly
4 different operational requirements for spent fuel shipments
5 that are done by EM as opposed to spent fuel shipments that
6 are done by OCRWM. So we're trying to make sure that
7 whatever is done is done in the context of the protocols
8 and that there is as much a uniform approach as possible
9 within the constraints of the fact that some of the
10 shipments the Department does are covered in our national
11 security while others are not.

12 This is a slide, I think you've seen a number of
13 times before in a number of different contexts, probably,
14 but it gets back to the heart of the fact that what OCRWM
15 will be doing is not completely new; that there is a
16 significant history and good safety record for shipping
17 spent fuel. There has been roughly 3,000 shipments in the
18 U. S. over the past 30 years. And our numbers may not
19 completely jibe with the Naval Reactors on the 738
20 containers shipped, and over a million miles since 1957,
21 but again, it's a significant safety record.

22 Internationally, there's an average of 650
23 shipments per year in France and Britain. Although that
24 number seems a little bit low based on the information that
25 Ian presented earlier today for Cochema. And so we may

1 have to revise that upwards.

2 All the changes, though, so far have indicated
3 that the experience is growing and that experience has been
4 successful as far as the transportation of spent nuclear
5 fuel. We will continue in OCRWM to review the experience
6 and the lessons learned from other programs and as we build
7 our operational infrastructure make sure that we tap into
8 that as much as possible.

9 On the security we will, and we had a commitment
10 for some time to work with state regional groups and tribes
11 in developing approaches to securing the shipments. And
12 we're exploring a number of options currently. I know
13 there were some challenges with the shipment out of Oak
14 Ridge that EM did last year because of the escort
15 requirements.

16 Very, very early in the planing process there was
17 consideration to using essentially rent-a-cops. But if
18 you're required to have armed escorts, the only way that
19 you can use a private security force is for them to get
20 weapons permits from every jurisdiction they would pass
21 through along the way. That's a nightmarish proposition
22 if you're looking at a couple of shipments a week to try
23 and get that level of permitting across the country becomes
24 basically unmanageable.

25 Now, there's significant experience, both with

1 the Naval Reactors and with the Office of Secure
2 Transportation under the National Nuclear Security
3 Administration, the NNSA folks, they have federal agents
4 that they employ to protect their shipments. And as
5 federal agents, they have arrest authority, their weapons
6 permits are good in all states around the country, and
7 that's one of the options that we're looking at, as well as
8 a host of other things that might be possible to provide
9 the level of security that I expect will be necessary to
10 2010 when we would start shipping.

11 We're also tapping in to the Department of
12 Homeland Security, and our last meeting with our
13 international partners looking at cask vulnerabilities. We
14 did pull DHS in. That was a first substantive involvement
15 with them, but we will expand on that as we move forward in
16 operational planning as well.

17 The routing issues. For highway, there's been a
18 lot of highway shipments, particularly within the
19 Environmental Management Program for both the transuranic
20 waste and, to a lesser extent, other fuel shipments. The
21 DOT requirements are pretty explicit for highway; that the
22 routes are selected to reduce the time in transit, that the
23 vehicles operate over a preferred routing system that
24 includes interstate highways, including the bypasses and
25 beltways that are available. But that states and tribes

1 may designate alternate routes in addition to or in lieu of
2 the interstate system.

3 There's also allowance to go from a shipping site
4 to the interstate system, and from the interstate system to
5 a receiving site that would get you off of what would
6 normally be preferred routes.

7 For rail it's a little bit different. The reason
8 that states and tribes have a lot of latitude in choosing
9 routes that are on the highways, those shipments go through
10 their lands. The property is either tribal property or
11 it's state property that it crosses. With rail, the
12 shipments are on private property. The railroads own that
13 land. And so it's a little bit of a different situation.

14 And if you go with the standard industry
15 practices for rail shipment, you have the same basic
16 guidance where they try to minimize time, distance, they
17 try to minimize the number of carriers, the number of
18 interchange point. They try to maximize the use of best
19 track, which loosely correlates to using the interstate
20 highway system for highway shipments. But there's not the
21 latitude for states and tribes to contribute to routing
22 decisions. You basically tell the industry, this is the
23 site we want it to be picked up at, this is the site we
24 want it to be delivered to. Do the right thing. There are
25 other options for influencing those decisions, but if you

1 use standard industry routing practices, this is the
2 procedure that would be followed.

3 It's a map here that has been shown a couple of
4 times during the day in several different presentations
5 that shows the routes that were in the final EIS.

6 When the corridor preference came out there has
7 been some challenge to whether DOE had a rationale for
8 stating a preference for one corridor over another. That
9 rationale was in the notice of intent, in the Federal
10 Register notice, and it did indicate that the primary
11 guidance was to minimize land use conflicts. And we had a
12 number of comments that were contributed at--based on the
13 final environmental impact statement.

14 The State of Nevada and the City of Las Vegas
15 have been unwavering in their opposition to any shipments
16 through the Las Vegas valley and so we took that into
17 consideration, understanding that any attempt to choose
18 either the southern routes, either the Jean, down in here,
19 or the valley modified route, both of those largely would
20 go through what could be loosely looked at as the Las Vegas
21 valley. The challenges that were issued there would result
22 probably in land use conflicts that would inevitably lead
23 to litigation and would delay our ability to move forward.

24 There has been a number of folks that have talked
25 about the advantages of using what's called the Caliente

1 Chalk Mountain route that would go actually through the
2 Nevada Test and Training Range and through the Nellis
3 Range. The Air Force made as much noise about that not
4 being a viable option as the State of Nevada and the City
5 of Las Vegas made about routes that would go through Las
6 Vegas Valley. They made it clear in no uncertain terms
7 that they could take us on and lick us if we tried to move
8 them through that area.

9 That left basically two options left to us. The
10 Caliente route that comes in from the southeastern part of
11 Nevada and wraps around the Nevada Test and Training Range
12 to the repository, or the Carlin route that comes in from
13 the north. And then from the northwest corner of the
14 Nevada Test and Training Range is concurrent with the
15 Caliente route. Of the two routes, the Caliente corridor
16 had the fewest land use conflicts. There was more private
17 land that would have been impacted by this route than there
18 was by the Caliente. So it was a fairly straightforward
19 guidance that directed our stated preference.

20 We did, in our Federal Register notice and in the
21 letter to the State of Nevada, ask for comments that would
22 pertain to an ultimate decision that would be made on a
23 route and a record of decision, and we're still waiting for
24 input.

25 Now, recently, we started getting I think some

1 comments in from a number of folks. We've been getting
2 calls from, again, the Air Force and the Department of
3 Defense trying to clarify areas of the Nevada Test and
4 Training Range up around Goldfield and down further around
5 Scottys Junction. We're working with them on those, but
6 they will be accommodated through the public process if in
7 fact we do select rail as our mode--or mostly rail as our
8 mode of transport. There will be a fairly lengthy process
9 for doing an EIS for that rail alignment. And the Air
10 Force, private parties that would be affected, there's a
11 significant opportunity for influencing the actual detailed
12 routing of that rail within the corridor.

13 Here's a comparison, roughly, of the five
14 corridors. And actually, if you go to the EIS for the
15 repository, the final EIS, if you look at just purely
16 environmental factors, the overall environmental ranking
17 for the five corridors did not make any significant--did
18 not provide a significant driver for a decision one way or
19 the other. The overall environmental ranking for
20 disturbance, for effect, was pretty much even, and to the
21 noise level for the difference between the five corridors.

22 The lifecycle cost certainly is a big difference,
23 and a number of people have pointed that out; that the
24 range in 2000 was from \$880 million for Caliente down to as
25 low as \$283 million for construction costs for Valley

1 Modified.

2 In our Federal Register notice for our
3 preference, we addressed that issue as well, indicating
4 that the anticipated damages for not picking up fuel and
5 starting our shipments in 2010, there have been a number of
6 estimates and claims from the private sector on the costs
7 that they would incur and the damages that they have
8 claimed. The private sector is claiming damages on the
9 order of a half a billion dollars a year. EM in an earlier
10 estimate looking at the facility costs, if their high-level
11 waste started to be picked up in 2010, estimated a capital
12 cost of \$500 million for facility costs just to provide
13 ongoing storage capability for these wastes.

14 And so, looking at the impact of not starting to
15 do shipments in 2010, we're looking at on the ball-park of
16 a billion dollars for the first year and half a billion
17 dollars each year after that. And that makes a strong
18 argument that if you pick a corner that would be cheap to
19 construct, like Valley Modified and yet had significant
20 land use conflicts in trying to exercise that corridor, the
21 delays in being able to actually start construction could
22 easily wind up costing much more than picking a route where
23 the construction costs would be higher, but where you
24 anticipate the land use conflicts to be less.

25 That said, we fully understand that any decision

1 is going to have an impact, and that we will--as we go
2 through an alignment EIS process if rail is selected, there
3 will be every effort made to accommodate the folks that
4 would be impacted by decisions that are made as the actual
5 alignment itself is plotted out.

6 This captures the sequence of events that, on
7 December 23rd there were a number of phones calls, faxes
8 and other communications made that a Federal Register
9 notice was coming out. That notice was published on
10 December 29th, and on the same Federal Register notice was
11 the publishment of a land withdrawal to protect the lands
12 in which we, or at least the corridor that we had selected,
13 from any other encroachments, and the land withdrawal
14 itself only prohibits additional action on that land. Even
15 though the corridor was stipulated as a half mile on either
16 side of the center line for the existing alignments within
17 the EIS, that withdrawal was only for the BLM portions, and
18 it's fully anticipated that as we go through the actual
19 alignment process, the amount of land ultimately affected
20 would be considerably less. We needed a fairly wide swath
21 so that there was some flexibility on the exact alignment
22 of the corridor if in fact rail was chosen, so there was
23 some latitude and we weren't locked into a very narrow
24 statement of where the actual track would be built. And so
25 we want to keep as much flexibility as we can as we get

1 into the process, as we enter the process if we wind up
2 choosing rail. The actual widths of land affected would be
3 considerably less than the portion that was withdrawn.

4 The next steps are to issue a mode and, as
5 appropriate, a Corridor Record of Decision. And I say, as
6 appropriate, because if we don't select mostly rail then
7 there's no need for any corridor selection in Nevada. It
8 would be back to a discussion of highway routing or heavy
9 haul routing.

10 After that, if we do select mostly rail there
11 would be an additional NEPA process. We anticipate that
12 process would be approximately 24 months long, but there
13 would be another notice of intent that would be published
14 In that notice of intent there would be a scoping period
15 that tries to get input from the public and everybody that
16 would be affected to how we might scope the process for
17 dealing with, ultimately, rail alignment. And we would
18 anticipate that would start some time in the next couple of
19 months if we can get the decisions made. That's something
20 that we're working on diligently now.

21 On the institutional project, we have the four-
22 state regional groups that we deal with. With one
23 exception it's the same groups that EM deals with. That
24 one exception, as Ralph Smith indicated, works with the
25 Western Governors Association. OCRWM deals with the

1 Western Interstate Energy Board. The two are tightly
2 joined at the hip. A lot of the same people are on both
3 the WIEB and on the WGA groups, and so there's good
4 communication between the two and that's not a significant
5 deviation.

6 But the four groups were invited, the four groups
7 that OCRWM deals with, were invited back for a meeting with
8 the Under Secretary of the Department of Energy back in
9 November. That was when we rolled out the strategic plan,
10 which, as a couple of folks have noted, is largely an
11 institutional plan.

12 And in that meeting a commitment was made to work
13 substantively with the state regional groups on issues that
14 they have, and open the door for vendor-proposed projects
15 that would move both their desires forward as well as
16 helping to better inform the OCRWM decision-making process
17 on development or transportation infrastructure. We talked
18 about that at the meeting of the Midwest and the Eastern
19 Regional Conference of the Council of State Governments
20 back in December and I'm hoping that some project will be
21 proposed in the near future, but there are a number of
22 areas where we could collaborate on developing both the
23 decision-making process and the infrastructure necessary,
24 and I'm hopeful that that's going to be successful.

25 And these are some bullets that address to that.

1 We did get the transportation strategic plan issued. There
2 was a meeting actually the day after the meeting with the
3 Under Secretary with the Southern States Energy Board. We
4 did have a December meeting with the Midwestern Office and
5 the Eastern Regional Conference, the Council of State
6 Governments, and there is a meeting next week with the
7 Western Interstate Energy Board.

8 What our strategic plan did was that it fulfilled
9 a commitment by the Secretary to get a plan out in 2003.
10 It does again reiterate what the transportation mission is.
11 It commits to developing a safe, secure and efficient
12 transportation system and the real goal is ultimately to
13 operate in a way that the public can rely on the system
14 without question. And that would be approached through
15 three goals. And one is the open collaborative planning
16 process, and based on the comments today, I understand that
17 there's a fair amount of work that needs to be done to make
18 sure that we reach out to all the affected parties.

19 To develop a safe and secure system and the
20 related infrastructure based on that collaborative
21 planning. And then, to complete the transportation system
22 development and validation in time to begin operations in
23 2010. And I think that's all achievable.

24 We are talking to other DOE programs about their
25 past experience. OCRWM did participate in the lessons

1 learned meeting that was held in Las Vegas for the EM
2 shipment out of West Valley. There's going to be ongoing
3 participation with decisions that are made both in the EM
4 side and even Naval Reactors, despite the fact that they
5 are working with national security shipments has been very
6 generous in sharing some of their planning activities and
7 the approaches that they've got to them. There has been a
8 lot of discussion about the relative merits of dedicated
9 trains and what drives the decision-making process in both
10 the Naval Reactors and in the Environmental Management
11 Program.

12 OCRWM is committed to working with all the
13 interested parties. That's not just the states and
14 regional groups and tribes, but also individual
15 stakeholders. We do have a meeting that we co-sponsor with
16 EM, was held last time in August of last year. It's the
17 Transportation External Coordinator's Working Group. It's
18 a chance to bring a lot of people with different
19 disciplines from both industry, the private sector and
20 government sectors in to talk about transportation issues.
21 There will be a number of other meetings that go on. I
22 believe next Thursday there's a tentative meeting--in fact,
23 I think it's a lot more than tentative now, with the
24 affected units and local government out at the Yucca
25 Mountain project. I'll be back in Las Vegas to meet with

1 folks for that discussion. We are open to other meetings
2 on an ad hoc basis with interested parties and groups, and
3 the challenge is just going to make sure that we reach out
4 and identify all the groups that could be affected and get
5 enough communication to them so that they can provide their
6 input. And that's not easy. There's a lot of people out
7 there that are affected by it, particularly when you look
8 at the national spectrum of where our shipments could
9 ultimately go.

10 One of the benefits of this being a program with
11 a repository that will ultimately have an operating license
12 issued by the Nuclear Regulatory Commission is that there
13 is a culture of compliance that's associated with going
14 through that certification process now, that licensing
15 process. And even though the transportation piece of OCRWM
16 is not going to be licensed, per se, or certified, per se,
17 by the NRC, being under a management chain that has to
18 develop a culture of compliance is affecting the things
19 that we're doing in the transportation arena. And we will
20 be part of that same corporate culture, and I'm hoping that
21 that will help build confidence as we develop the
22 operational details with folks. And I know when we issued
23 the Transportation Strategic Plan, there are a lot of
24 people that didn't want to see an Institutional Plan, and
25 didn't want to see a Strategic Plan.

1 What a lot of folks want to see is an Operational
2 Plan. They want to know what's going to be done, when it's
3 going to be done, where it's going to be done, how it's
4 going to be done. But we can't do that by ourselves. We
5 can't just develop behind closed doors an operational plan
6 that we issue and then try to defend with the rest of the
7 world. What we would prefer to do is to develop an
8 operational set of approaches with our interested
9 stakeholders so that when we do announce something it
10 already has a certain level of buy-in and acceptance.
11 That's certainly my goal.

12 The Institutional Program Activities, we'll build
13 on an established regional planning process. There was a
14 lot of work that went on before OCRWM got back into the
15 transportation business. We will participate in and
16 support the Transportation External Coordinators Working
17 Group. We are working cooperatively to develop
18 transportation, institutional and communications
19 approaches. We will work together on the routing
20 assessment and the methodology for establishing routes. I
21 don't think the routes themselves will come out any time
22 soon, but the process for selecting routes and the criteria
23 for selecting routes is something that we can have
24 substantive discussions on.

25 We will work on identifying and summarizing

1 existing emergency response capabilities. Back at the last
2 TRB meeting in Amargosa Valley, I had discussion with a
3 couple of folks from the smaller counties in the state, and
4 as was indicated today, a lot of emergency responders are
5 volunteers. And if those volunteers have to take time off
6 from work to attend FEMA training and possibly now
7 Department of Homeland Security training, if OCRWM puts
8 additional training on top of that that's not well-
9 integrated, it becomes a burden rather than a benefit. And
10 our goal is to make sure that whatever we develop in terms
11 of emergency response planning and training through the
12 grants to the states, is integrated well with what
13 currently exists in the states.

14 And that was one of the activities that I had
15 suggested to both the Midwest and the Eastern Regional
16 Conference in the December meeting was a good project would
17 be to develop assessment of what currently is in place,
18 what in that process works, what doesn't work, and to build
19 on that rather than to start from scratch in trying to
20 build something just for OCRWM that's not well integrated.

21 Along with that the approach to 180(c) funding.
22 A couple of folks had alluded to the draft 180(c) funding
23 report that came out in the 90s. And in that it proposed
24 coming out about four years in advance of the initial
25 shipment time with the initial planning grants. I think

1 that might still be a good planning time frame, but again,
2 we're open to input from the state regional groups and the
3 tribes about how we might proceed and if a more accelerated
4 schedule would be appropriate, would be more than happy to
5 address that.

6 This goes a little bit more into the Nuclear
7 Waste Police Act. It does require the Department to
8 provide technical assistance and funds. There's a bit of a
9 difference between what we are required to do under the
10 Act, and what EM has done. EM is actually chartered to, not
11 only to provide, but actually to conduct the training.

12 And so, Ralph Smith and the folks at the Waste
13 Isolation Pilot Plan have been out doing a road show around
14 the country. OCRWM's charter under the act is to provide
15 grants to the states and tribes.

16 And the states and tribes will be responsible for
17 how that funding is rolled out through their lands and with
18 their affected groups.

19 We will work as proactively as we can to make
20 sure that that's well-integrated with the local
21 communities, but that's really not the OCRWM call. And
22 under the Act it's something that--it's a bit of a
23 challenge, because again, the states do have decision-
24 making authority in that regard.

25 Again, the original proposal for the policy and

1 procedure, the draft versions came out in '98. We've
2 gotten lots of feedback from folks that would participate
3 in this effort to not start from scratch, to dust off what
4 was already done, to clean it up and to revisit that as a
5 starting point rather than starting from scratch, and we're
6 happy to do that.

7 We will work with the state regional groups and
8 tribes. And again, the strong goal is to make sure that we
9 do a good assessment of what's currently in place, what
10 does and what doesn't work about it and build on that
11 rather than starting from scratch.

12 And we will finalize our policy and procedures
13 based on this ground work and do it as a bottoms up effort
14 rather than a top down effort, which is often the mistake
15 that's made in large projects.

16 Our communication is going to be two-way. We
17 will try to communicate with the affected parties early and
18 often. Again, to the extent that we know who all the
19 affected parties are. And that's going to be a constant
20 challenge is to make sure that we have done everything we
21 can to reach out and identify new players that might want
22 to be involved now that were not involved in the past.

23 We will build on our past experiences and the
24 lessons learned. We're analyzing both the successes and
25 the challenges. There's lessons to be learned both in the

1 positive and the negative. Both will be taken into
2 account. And, we will work with all the stakeholders in
3 moving the process forward.

4 The selection of transportation routes. If it's
5 highway shipments, there's a very clear process for how
6 routing would be developed and deployed. If it's rail
7 routing, the process is not as clear as far as the role
8 that states and tribes would have in making routing
9 decisions. Again, if it's rail routing, we will use
10 industry practices. And we would charter or contract or
11 work through tenders with the railroads to pick up at one
12 place and deliver at another place. The railroads do have
13 industry practices that mirror the DOT requirements for
14 highway transport, but it's a different process as far as
15 the amount of input that's allowed from the states and
16 tribes.

17 We will be looking at the emergency response
18 planning and our operational practices.

19 Here's a brief look at some of the projects and
20 the priorities that we're working on in 2004, 5, and 2006
21 and beyond. We're still heavily involved in assessing what
22 our infrastructure needs are going to be in 2004. Looking
23 at maintaining and expanding, possibly, the cooperative
24 agreement activities that we fund. Developing our
25 acquisition strategy. The actual procurements won't go

1 very far this year, but also paying a lot of attention to
2 the interface with the repository.

3 In 2005, we would transition more from the
4 acquisition strategy to more actual procurements, both for
5 casks and for rolling stock. We expect to expand on
6 looking at the existing infrastructure capabilities at the
7 shipping sites, both the DOE shipping sites and the
8 utilities. Working with the SRGs, that's the state
9 regional groups, on projects that they bring to the table
10 that would help further their needs as well as develop the
11 approach that OCRWM would take. And developing any needed
12 Nevada transportation infrastructure will be big focal
13 points in 2005.

14 And, 2006 and beyond, we'll be transitioning
15 slowly from primarily building the infrastructure to moving
16 into operational planning and operational agreements with
17 all the affected parties. That's the rough layout of the
18 program.

19 Again, just a quick summary that I committed last
20 September to reorganizing the Office of National
21 Transportation with a Project Management focus. We've done
22 that. Developing a project logic and assigning project
23 managers. That project has gone quite a long ways towards
24 completion. The decision logic diagram that John Arthur
25 maintains does have a whole lot more milestones for

1 transportation now. And we have issued the Transportation
2 Strategic Plan. We have begun with the state regional
3 groups on some substantive issues and we've challenged them
4 to come forward with projects that can help move the
5 process forward. We have stated a preference for the
6 Caliente corridor with Carlin as the backup.

7 And in a NEPA process typically what's done, as
8 you go into a NEPA effort, you analyze a range of
9 alternatives that could support what you're trying to do.
10 Typically at the end of the NEPA process when you issue
11 your final EIS, you frequently come up with your preferred
12 alternative and then at some later point you make your
13 record of decision.

14 In the final EIS for the repository, when that
15 was published the preference for mode was stated in the EIS
16 and it was for mostly rail. But no preference was stated
17 for corridor. And, we felt it was appropriate to follow
18 along with traditional NEPA process to state our preference
19 for corridor before final decisions for either mode or
20 corridor were made.

21 And that's pretty much it. Questions?

22 ABKOWITZ: Gary, thank you very much. That was a
23 lot of material briskly delivered and well received.

24 We're going to have questions, I'm sure. So if
25 you will bear with us as we go through those. Before I

1 turn it over to the Board I do have a question from the
2 audience that I would like to ask you first.

3 You mentioned that in the DOE Federal Register
4 this notice of preference, and carefully used that word as
5 opposed to notice of intent, and that you asked for
6 comments. And it has been pointed out that a close reading
7 of the Federal Register notice does not indicate the DOE
8 specifically requesting comments. And so, the question
9 that has been brought forward here is whether DOE has asked
10 for comments in the notice and what they would do with them
11 and why this was the notice of preference instead of the
12 notice of intent.

13 LANTHRUM: Well, it was a notice of preference because
14 that's what we do. We issued a preference for corridor.
15 And, I thought I had indicated that we had communicated
16 with the State of Nevada in the letter to the Governor
17 asking for any comments that they would have in this
18 regard. The notice of preference that came out in the
19 Federal Register did not ask specifically for comments. It
20 did indicate that there would be no less than a 30-day
21 period between when the preference was stated and an actual
22 decision would be made. And comments have come in based on
23 that allusion, but there was no specific request for
24 comments.

25 ABKOWITZ: So we're not formally in a comment period

1 then?

2 LANTHRUM: No, we're not formally in a comment period.
3 When we issue a notice of intent if a record of decision
4 comes out for mostly rail, that would be followed up with a
5 notice of intent for conducting a rail EIS. And, we would
6 enter into a period then of doing the scoping process,
7 which would be a 30-day period of getting input on the
8 scoping--the scope of the rail alignment EIS. And that
9 would be more like a comment period.

10 ABKOWITZ: Thank you. We'll start with Dave Duquette.

11 DUQUETTE: Duquette, Board.

12 I'm looking at your time line a little bit, and
13 if you want to start shipping by rail in 2010, that means
14 you've got to start building in 2006 because it's 46 to 48
15 months to build a line. Your request for license
16 application is going in no earlier than December 2004, and
17 even that may be delayed. I would be surprised if the NRC
18 likes it 100 percent. So I can see a delay with asking
19 you--asking you, the DOE, for more information. And that
20 could stretch out for some period of time. What are you
21 going to do if it stretches out past 2006?

22 LANTHRUM: Well, I would fully expect it will stretch
23 out beyond 2006. This schedule would require start of rail
24 construction before construction authorization for the
25 facility. And that's a decision, it's a policy decision

1 that hasn't been made. We haven't entered into discussions
2 about that. And I don't think it is the right time.

3 There's a whole lot more information that will be
4 available as we get close to '06 about whether pre-CA
5 construction for a rail line would be appropriate or not.
6 And I don't think it's a decision that needs to be made
7 now, but I have made it very clear with our project
8 planning that if we're going to have rail available in
9 2010, it would require pre-CA start of construction. And
10 if we don't start construction of the rail line before
11 then, there would be essentially a day for day slip when
12 rail could be available as opposed to when it would be
13 available if you did start in the 2006 time frame.

14 DUQUETTE: Duquette, Board. Just one other comment.

15 This was brought up by the local officials from
16 the counties. Who is going to own the railroad? Or the
17 rail line.

18 LANTHRUM: Haven't determined that yet. There are a
19 whole bunch of issues associated with operations that have
20 not been determined yet. Back a year and a half ago, in
21 the Fall, there was an effort, an initial request for a
22 proposal for a transportation integration contractor. That
23 was then pulled back off the street. That's one of the
24 options that's being considered. There's a lot of options
25 that could address how that rail line would be operated.

1 You could contract with a number of rail operators short
2 line and others that would perhaps be interested, but those
3 decisions haven't been made. And there's a lot of work to
4 be done on decisions on scope.

5 Again, since we don't know what the actual scope
6 of the initial shipping program is going to be, it's
7 premature to talk, having discussions with folks about who
8 would be interested in operating. The volume of work that
9 we will be doing, the number of shipments, it's a big deal
10 for the Department, but for overall transportation it's a
11 very small scope of work. And, that's going to be one of
12 the challenges as we look for operators that would be
13 actually interested in taking care of the day-to-day
14 activities.

15 There's a whole bunch of questions along that
16 line with the, not just the operation of the rail line, but
17 operation of the maintenance facility, where we try to do
18 that with an M & O contractor or have a special contract
19 just for that facility. All those questions will be
20 answered somewhere further down the line as we get a little
21 better informed about what the scope of work is going to
22 be.

23 ABKOWITZ: Dan Bullen?

24 BULLEN: Bullen, Board. Could we go to Slide 9,
25 please? The question that I have basically deals with the

1 procurement of casks. And I'm assuming that you're going
2 to have essentially already NRC-certified casks for all of
3 your fleet?

4 LANTHRUM: We have to use an NRC-certified cask.
5 That's part of the Nuclear Waste Policy Act.

6 BULLEN: I guess I'm a little bit confused by the
7 initial procurements for conceptual designs are expected
8 during this calendar year. Aren't those designs already
9 complete?

10 LANTHRUM: No. There are certified casks available
11 out there, but the casks that are available currently don't
12 support all of our needs. We anticipate some brand new
13 designs from scratch would be required to support our
14 shipping program.

15 BULLEN: Bullen, Board.

16 I understand that, but will you also be procuring
17 designs that are already complete? I mean there are more
18 feasible and workable casks out there that you--

19 LANTHRUM: There are. That's part of the feedback we
20 want to get from the cask vendor industry. As they come in
21 and talk to us they will hopefully have good advice about
22 what would be an efficient suite of casks that would
23 support our needs, and if that would be made up of some
24 casks that currently exist.

25 There's actually three types of tasks that we've

1 thought about. There's casks that already exist that are
2 already certified that might support some of our needs.
3 There's casks that already exist that could have minor
4 physical or licensing modifications made that could support
5 more of our needs. And there's casks that could be
6 designed from scratch. And that range and that mix is
7 something we'll talk to the cask vendors about, about what
8 their recommendations are, how to move forward most
9 efficiently.

10 BULLEN: Bullen, Board.

11 This is a much easier decision after a record of
12 decision on the mode is completed. Is that not correct?

13 LANTHRUM: Well, right. Well, the initial discussions
14 with the cask vendors on these suite of casks is going to
15 be here's the run of material we have to move. What are
16 your recommendations of how best to move it with casks?
17 And with either of the mode decisions that are pending,
18 whether we go with mostly rail or mostly truck, the option
19 is there for the other mode to still be used. And so we
20 would expect, regardless of what ultimate decision is made
21 on mode, you could buy some rail and some truck casks. And
22 certainly from a conceptual design standpoint it would be
23 viable to move forward. And, as we make a decision, the
24 mix of the fleet of casks will certainly become clearer,
25 but I think in any case there will be need for some of each

1 type.

2 BULLEN: Thank you.

3 ABKOWITZ: I have a couple of questions I would like
4 to ask you. If we could go to Slide 21 for just a moment.

5 The second bullet says OCRWM will work with
6 interested parties through a collaborative planning process
7 before developing specific policies and procedures and
8 making transportation decisions. And then on Slide 24 you
9 say communication will be two-way, early and often, and
10 there's some, certainly, intimations of that type of dialog
11 throughout your presentation.

12 And yet, I contrast that with the information
13 that you put out or the DOE put out and the Bureau of Land
14 Management put out on what was essentially Christmas Eve
15 and then right before New Years. And also I hear
16 discussion from you about how the mode and corridor
17 selection or decision may be made as early as two months
18 from now. How do you respond to someone who will, you
19 know, question whether or not DOE is prepared to walk the
20 talk?

21 LANTHRUM: It's a challenge, but we have had
22 significant input from the states and from the counties.
23 The EIS process, there were comments that were made. There
24 have been a number of comments made. Bob Halstead gave a
25 presentation in NAREG last summer in which they came out

1 strongly in favor of a mostly rail scenario. There are a
2 number of comments on the record on both the mode and the
3 corridor options that are available to us. I don't think
4 there is a lot new to be gained, but we do have an open
5 process. We did give the letter to the State of Nevada on-
6 -again, it was with the actual announcement, but we asked
7 them for any germane input on the process before we would
8 do an actual record of decision. We've not gotten any
9 additional feedback even though we've requested it.

10 Our primary access for dealing with the states is
11 through the state regional groups. We don't anticipate in
12 most cases having significant one-on-one discussions with
13 the states. And we do have our ongoing meetings with the
14 state regional groups. We expect them to bring their state
15 perspectives to those meetings. Those are open
16 discussions. There's lots of opportunity there.

17 We are meeting with the AUG members next week
18 here at the Yucca Mountain project.

19 Can we do more? There's always an opportunity to
20 do more. Have we gotten input? Yes, I believe we've
21 gotten input.

22 ABKOWITZ: Abkowitz, Board.

23 So then I guess my interpretation of that answer
24 is that the lowest common denominator from the standpoint
25 of DOE's interest in state and local input on

1 transportation planning issues are the state regional
2 associations, the four-state regional associations. Is
3 that correct?

4 LANTHRUM: That's our primary means of interacting
5 with the states.

6 ABKOWITZ: Okay, thank you. Priscilla?

7 NELSON: Nelson, Board.

8 I want to ask a question about how the internal
9 organization of the project is evolving now that the Office
10 of Science and Technology is funded. How would you expect
11 our office to interact with that office? Because I know
12 markedly that they had no projects that bore directly on
13 your activities, that I could see.

14 LANTHRUM: There are a number of projects--

15 NELSON: Will it be a force for you?

16 LANTHRUM: Yes, they are. We are funding a number of
17 projects that were recommended by them, but since it's
18 funding the transportation is providing, it's not on the
19 radar screen as a Science and Technology project. If it's
20 coming out of their funding pot, it's a Science and
21 Technology project. We're working on burnup credit for
22 high burnup fuels. That's was a project that they
23 recommended that we might undertake in Transportation.
24 There are a number of things that they've come to us and
25 recommended, and we are funding a substantial number of

1 those through the laboratories this year.

2 NELSON: Nelson, Board.

3 What's your understanding if they came to you and
4 said, these things need to be done and you should do them?
5 Presumably there's something that could be done using
6 their terminology on a zero to three year vision sort of
7 window. But for their longer term vision, would you expect
8 to be able to go to them with longer term questions?

9 LANTHRUM: We've gotten a number of inputs from the
10 vendor industry where, on a number of occasions, they have
11 said that there is no new technology that's needed just to
12 do this work, that the capabilities exist currently. Just
13 find this and we will provide you with what you need. As
14 we have discussions with them about how to do it more
15 efficiently, there may be ways to push the design that
16 would still give you a package that would be able to be
17 certified by the NRC. There may be some long-range efforts
18 to increase the through-put per cask, and if the vendor
19 industry provides input that there would be some good R and
20 D projects with longer term payoff, we would be more than
21 happy to take that back to the Science and Technology group
22 and think they would be supportive.

23 NELSON: But you would expect those things to be
24 identified by the vendors?

25 LANTHRUM: They are the experts on the cask front.

1 There are other folks that we will be interfacing with that
2 may have suggestions for the, just the basic transportation
3 infrastructure. There aren't huge science problems that
4 will allow us, that make a binary switch. Can you ship,
5 can you not ship? So most of it is refinement rather than
6 basic capability.

7 NELSON: If you're looking for problems, that's not
8 what Bob is looking for. I mean I think he's looking to
9 develop opportunity. So it's a different mindset.

10 LANTHRUM: It is.

11 NELSON: I was trying to get a feel for where you
12 think that interface is because it sounds like it's young
13 and may evolve a lot.

14 LANTHRUM: Pardon me?

15 NELSON: It's a young interface and it may--

16 LANTHRUM: Yes. Yes.

17 NELSON: --evolve a lot in terms of being able to
18 think about longer term science issues that maybe vendors
19 aren't thinking about right now.

20 LANTHRUM: Okay. Thanks.

21 ABKOWITZ: Abkowitz, Board. I wanted to follow up
22 with one other question and comment, Gary.

23 Certainly, the plan you laid out is ambitious.
24 And I was curious as to how many people you are staffing
25 this activity with from DOE and what kind of contractor

1 support you have.

2 LANTHRUM: The DOE staff sits at right--it's in flux
3 right now. I do have the Institutional Program Manager is
4 a slot that I have just gotten through the approval
5 process. There's an announcement that's either just out or
6 will be coming out. So I will be adding that person to the
7 staff. And it's a fairly small federal organization. The
8 primary support comes from contractor staff. Most of the
9 significant technical capability and a significant amount
10 of the work is going to be done by contractor staff. And,
11 a lot of that contractor staff balloons and shrinks based
12 on the individual projects that we're working on.

13 Now, when I came in the work for Transportation
14 had not been projectized. And so the work scope that we
15 have for 2004 was less well-defined as far as the specific
16 resource requirements than it will be in 2005. What I've
17 developed as far as project planning, we're going through
18 the resource loading requirements for those project plans.
19 That will be the basis for our 2005 budget request.
20 That's in development now. But right now we've got about
21 12 federal staff, and again, the contractor staff balloons
22 and shrinks based on what the requirements at any
23 particular time are.

24 ABKOWITZ: Okay. Just as an observation, I think that
25 it's going to be quite a challenge to sustain the number of

1 balls that you have begun to throw into the air. And the
2 Board will certainly be watching that with interest.

3 And, I would also point out that there is a very
4 similar slide that Jeff Williams presented to us I guess
5 about seven or eight months ago called Moving Towards 2010
6 Transportation Priorities, and on the right-hand column the
7 language in your slide today and the language he used is
8 verbatim except that his slide said FY 2005 and beyond.
9 And yours says FY 2006 and beyond. So in eight months
10 we've already slipped one year. And, I just wanted to make
11 that observation.

12 LANTHRUM: Well, I might respond to that by saying
13 that we've taken a different approach in some regards. At
14 one time the idea was that the cask procurements for
15 example would be done as a single contract that would be to
16 design, certify and fabricate.

17 Since there's a lot of decisions external to
18 Transportation Group on what the waste receipt requirements
19 and schedule is going to be, what the repository capability
20 is going to be, I made the decision that we need to phase
21 that so we do a conceptual design followed by a detailed
22 design and certification followed later by actual
23 fabrication procurement. And so there's a lot of things
24 that there's been a conscious decision to slip out or to
25 phase the approach to, and that does color the way the

1 program looks.

2 What I hope to bring to the table is the fact
3 that these schedules that we're developing are supported by
4 a project schedule which has scope, has resource
5 requirements and has, I think what's going to be a lot more
6 defensible than what was provided in the past.

7 ABKOWITZ: Thank you.

8 Well, the day is long and the hour is late. And
9 I want to apologize for such a lengthy program; yet, at the
10 same time I want to recognize that the Board is extremely
11 interested in this subject and plans to spend a lot of
12 energy trying to understand and work with DOE and other
13 stakeholders to get the proper issues identified and
14 evaluated.

15 So I do want to thank all of your presenters
16 today. I want to thank our public commenters, the audience
17 and everyone else that has been involved in organizing this
18 effort. And, also just remind folks that as a panel on
19 waste management systems, we have several meetings that
20 take place outside of the regular Board schedule, and we
21 anticipate having several more of these meetings over the
22 next several months and years, and you know, please try to
23 keep apprised of when we're going to schedule those things.
24 There's a lot of people that we were unable to hear from
25 today that we would like to hear from in the future.

