

UNITED STATES DEPARTMENT OF ENERGY

ENVIRONMENTAL MANAGEMENT ADVISORY BOARD

Meeting Transcript

April 17-18, 2001

U.S. Department of Energy
1000 Independence Avenue, SW
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Room 1E-245

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MEETING PARTICIPANTS

Board Members Present:

Dr. David Adelman, Natural Resources Defense Council
Dr. John Ahearne, Sigma Xi and Duke University
Dr. Lynn Anspaugh, University of Utah
Mr. Dennis Bechtel, Clark County Nevada
Mr. Joel Bennett, Parsons Brinckerhoff, Inc. (EMAB Co-Chair)
Dr. Edgar Berkey, Concurrent Technologies Corporation
Dr. David Bodde, University of Missouri-Kansas City (EMAB Co-Chair)
Ms. Linda Christenson, ICFA
Hon. Richard Church, Mayor, Miamisburg, Ohio
Ms. Kathryn Crandall, Alliance for Nuclear Accountability
Mr. Stanley Genega, Stone and Webster
Mr. Craig Hooks, U.S. EPA
Mr. Ken Korkia, Rocky Flats Citizens Advisory Board
Mr. Ron Kucera, Missouri Department of Natural Resources
Dr. Jeanne Logsdon, University of New Mexico
Mr. Todd Martin, Consultant
Hon. Linda Milam, Mayor, Idaho Falls, Idaho
Dr. Frank Parker, Vanderbilt University
Dr. Glenn Paulson, Paulson and Cooper, Inc.
Dr. Paul Rambaut, Consultant
Mr. Ron Ross, Western Governors' Association
Dr. Lorene Sigal, Oak Ridge Reservation EM Site Specific Advisory Board
Mr. David Swindle, EG&G
Mr. Tom Winston, Ohio Environmental Protection Agency
Mr. Jim Woolford, U.S. Environmental Protection Agency
Ms. Diana Yupe, Shoshone Bannock Tribes

Board Members Not Present:

Mr. John Applegate, Indiana University College of Law

Ms. Agnes Dover, Hogan and Hartson, L.L.P.
Mr. Russell Jim, Yakama Indian Nation
Mr. John Moran, Consultant
Ms. Kate Probst, Resources for the Future

Board Consultants Present:

Mr. Richard Begley, Consultant
Mr. Michael Mastracci, Techmatics
Ms. Jean Shorett, Department of the Army

Department of Energy Participants:

Mr. Michael Barainca, Office of Science and Technology (EM-50)
Ms. Helen Belencan, Office of Technical Program Integration (EM-22)
Mr. Eli Bronstein, Director, Office of Budget (EM-12)
Mr. Gerald Boyd, Deputy Assistant Secretary, Office of Science and Technology (EM-50)
Ms. Patrice Bubar, Associate Deputy Assistant Secretary, Office of Integration and Disposition (EM-20)
Mr. Fred Butterfield, Office of Policy, Planning and Budget (EM-10)
Dr. Ker-Chi Chang, Office of Basic and Applied Research (EM-52)
Ms. Martha Crosland, Director, Office of Intergovernmental & Public Accountability (EM-11)
Mr. James Fiore, Deputy Assistant Secretary, Office of Site Closure (EM-30)
Mr. Marvin Garcia, Director, Office of Project Management (EM-6)
Ms. Greta Gard, Office of Long-Term Stewardship (EM-51)
Mr. Mark Gilbertson, Director, Office of Basic and Applied Research (EM-52)
Mr. Arnold Gritzke, Office of Basic and Applied Research (EM-51)
Mr. James Herzog, Department Manager for INEEL Integration and Technology Utilization
Ms. Elizabeth Hocking, Argonne National Laboratory
Dr. Carolyn Huntoon, Assistant Secretary, Office of Environmental Management (EM-1)
Dr. Paul Kearns, Idaho National Engineering and Environmental Laboratory
Mr. Matthew Koch, Office of Congressional and Intergovernmental Affairs (CI)
Mr. John “Mac” Lankford, Director, Office of Technology Development and Demonstration (EM-53)
Mr. Bill Levitan, Office of the Deputy Assistant Secretary for Project Completion (EM-40)
Mr. James Melillo, Executive Director, EMAB (EM-10)
Dr. Linda McCoy, Assistant Manager for Research and Development in INEEL Operations
Mr. Chet Miller, Office of Basic and Applied Research (EM-51)
Ms. Beth Moore, Office of Basic and Applied Research (EM-52)
Ms. Kris Morris, Office of Safety, Health and Security (EM-5)
Ms. Tracy Mustin, Director, Office of Transportation (EM-24)
Mr. Michael Oldham, Director of Site Operations, COO (EM-3)
Mr. James Owendoff, Principal Deputy Assistant Secretary, Office of Environmental Management (EM-2)
Mr. Ed Rizkalla, Office of Basic and Applied Research (EM-51)
Mr. Gene Schmitt, Acting Deputy Assistant Secretary, Office of Policy, Planning, and Budget (EM-10)
Mr. Jeffrey Walker, Director, Office of Technology Application (EM-54)
Mr. Michael Weis, Office of Project Completion (EM-40)
Mr. Matthew Zenkovich, Office of Planning and Analysis (EM-13)

Other Participants:

Mr. Robert Barbel, ATL International
Mr. Jim Bridgman, ANA
Dr. Kevin Crowley, National Research Council
Mr. M. Griben, UNITEC
Mr. Stephen Langel, Inside Washington
Mr. Irving Leichter, UNITEC
Mr. David Levenstein, U.S. EPA
Mr. Greg Sullivan, UNITEC
Mr. Shawn Terry, Inside Energy
Mr. Eric Weiser, BPI

EMAB Support Team:

Ms. Peggie Burke, Coleman Research Corporation
Ms. Regina Creighton-Bey, Coleman Research Corporation
Mr. Greg Evans, Coleman Research Corporation
Ms. Michelle Lynar, Coleman Research Corporation
Mr. Michael Pfister, Coleman Research Corporation
Mr. Kenneth Smith, Coleman Research Corporation
Ms. Kimberly Stewart, Coleman Research Corporation

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PROCEEDINGS

Tuesday, April 17, 2001

8:00 a.m

**Public Meeting Opens, Welcome,
and Approval of Minutes of October 12-13, 2000 Meeting**

MR. BENNETT: We'll begin by welcoming you all today. Today, theoretically, we anticipate a very good attendance. Officially John Applegate has begged off for a business conflict, and John Moran will be joining us, I believe possibly by phone, but he's ill. Hopefully, we wish him a quick recovery. Agnes Dover sent her apologies and I think the others, hopefully, will drift in as appropriate, as we move ahead.

I'd like to also introduce Mike Mastracci, consultant to the TD&T Committee, who will give the Safety and Health and Technology Development Briefing for John Moran. And also Dick Begley, Consultant to the TD&T Committee, who will be the Co-Chair on a new Alternative Technologies to Incineration Committee. Welcome.

As you just reminded me, we'll try to use our microphones for this session to make sure we all are well heard.

Let's turn a minute to the agenda. We should all have our books in front of us. Looking at Tab 1, we've got a remarkably busy session, in addition to Carolyn's remarks, we have 12 briefings and three resolutions, some very interesting work and we've outlined those here. The format today will be to go through these Committee reports. Where there is a resolution, the resolution will be given at the time of the Committee report. We'll have some questions. We'll have an opportunity to respond at that time and then we'll do the voting on the resolutions tomorrow. That'll be the format.

So, you can note here the various resolutions, public comment, and then tomorrow, David will chair the meeting. We will kind of rotate between us, and won't hesitate to talk to each other during that session.

We've got some very interesting resolutions. I thought maybe I'd comment on that going in. A number of the resolutions today and reports affect science. That's been a major focus of the Advisory Board. And I'd like to particularly commend those in the Department who have been working closely with us, but particularly Gerald Boyd, for example, and Randy Scott another, but Gerald who's been open and cooperative and very actively engaged with the Board, and with the results gets the heat of that, but also, I think, brings out the best and most productive

1 results from this organization. So I'd just like to make that comment going in. I don't
2 know, is Randy here? I don't see him. Okay. Anyway, I'd just like to go on and
3 make that comment.

4 And lastly, tomorrow in the afternoon, excuse me, at the end of the
5 morning, we're going to talk about the path forward, suggestions that have come out of
6 the Committee and out of the Board, for how we focus our time in the future. Of
7 course, these are just suggestions and there's some very interesting comments in there,
8 particularly, at least in my own mind, noticing that the report we're going to see
9 tomorrow on the road maps and how that might relate to the path forward, particularly
10 in the area of an integrated plan for the disposal of waste, something that the various
11 committees talked about and seems to be welling up from the Board as an area of focus
12 as we move forward. So I'll be interested in our comments in that area.

13 With that, I'd like to move ahead. The first order of business would be
14 hopefully, the approval of the minutes from the October 12th and 13th meeting. That's
15 in Tab 2. These hopefully were circulated in an advance package. Do I have any
16 comments? And we'll entertain a motion. Yes, sir, Mr. Ahearne.

17
18 DR. AHEARNE: I have three minor corrections, which at least shows
19 I read them. First is page VI. Since we seem to be concerned about titles, I note that
20 Kevin Crowley and Greg Symmes have Ph.D.s, so they're Doctors.

21
22 MR. BENNETT: Duly noted.

23
24 DR. AHEARNE: The second on page 11, where Dr. Parker is noted,
25 at the end of it, it says, "He stated the certainty of clean up is too tenuous for DOE or
26 the Department of Defense to promise." And I thought maybe he had said it was too
27 tenuous for them to promise something.

28
29 MR. BENNETT: So perhaps Frank would provide the end of that
30 sentence.

31
32 DR. AHEARNE: Sure, the end of that sentence.

33
34 MR. BENNETT: Anything, okay.

35
36 DR. AHEARNE: Just "something". And then finally, on page 21, in
37 the second to the bottom paragraph, "Technology Development and Transfer
38 Committee Report", the fifth line down, "... recognized Greg Symmes and identified him
39 as the Chairman of an NRC Committee". He's the staff director of the NRC
40 Committee. Greg Sholton actually is the Chairman of the Committee.

41
42 MR. BENNETT: Okay, thank you very much. Any other corrections?
43 Glenn.

44

1 DR. PAULSON: I have three different ones but I won't take the time
2 to read them, I'll just give them to the staff, but I will offer a motion to approve the
3 minutes as distributed with the corrections of Dr. Ahearne and myself, and anyone else
4 who has them included.

5
6 MR. BENNETT: Okay, all in favor?

7
8 PARTICIPANTS: Aye.

9
10 MR. BENNETT: Approved. Thank you. Approved as amended.
11 Thank you. Next I'd like to introduce Dr. Huntoon to proceed with her
12 remarks. Carolyn.

13 14 **Opening Remarks**

15
16 DR. HUNTOON: Well, thank you and good afternoon. I'm pleased
17 to be here to talk with this group again, and I want to thank you not just for
18 Environmental Management, but also on a personal note, to thank you for your service
19 and dedication to us and to your country. I think it's very important work that you all
20 have been about, that we're about, and I think we've had some good outcomes this
21 year, the last couple years, so I offer my personal thank you.

22 As you know, this Advisory Board plays a vital role to Environmental
23 Management and I was in a staff meeting this morning with the new management and I
24 was telling them that our Advisory Board was meeting and the role that you play in our
25 programs, and they were quite impressed that we had such an array of individuals with
26 individual backgrounds coming in to advise us and to learn about our program and give
27 us critiques and try to make it better. So I've already told them what good work you're
28 doing so no one else needs to do that now.

29 But I do appreciate the advice that you all have given and we have tried
30 to take what we could. Your recommendations have helped us shape various aspects
31 of the programs and I'm sure if you're here later in the meeting, your April 2000
32 recommendation on Safety and Health in Technology was made part of our policy
33 statement which I signed out in January.

34 Similarly, the Board's recommendations on Environmental Quality in the
35 R&D portfolio were incorporated in the advice we provided to the Secretary on this
36 issue. So we are taking heed of what you say, and we are putting it into policy and
37 programs. And I look forward to hearing you this afternoon on some of the other
38 issues that we've asked you to look at, including the assessment of technology
39 development and quality of our science.

40 The science program grants, I think, is something that we wanted to
41 hear from you all about, and the suggestions on shared savings. That's always an issue
42 that sounds like a good idea until people start digging into it and then we have all these
43 nits and gnats and puts and takes. I'm anxious to hear from you all on that.

1 The Ad Hoc Committee on Performance Measures, has suggestions to
2 make us safer and better around the complex. And I also know this Board played a
3 role in its efforts to form a Committee to look at alternatives to incineration, which is a
4 big issue we wrestled with this past year and I feel more confident now that the
5 Environmental Management Advisory Board is playing a role in the future of the science
6 work we'll be doing in that area.

7 As you know, the 02 budget was released last week and we just
8 enjoyed that so much. I said at the staff meeting this morning that we probably were
9 able to make everyone equally unhappy with that budget, so we didn't spare anybody,
10 and I hope you know that I'm teasing, because it was a tough thing to do. We had
11 some very specific issues that we had to deal with in formulating the budget, and I think
12 we did as best we could and we still, as you know, that was when the President and
13 OMB sent the budget to the Hill and now we have hearings coming up and we have our
14 site managers working on what they can do with the money that's been allocated to
15 them or will be in the budget, so we've still got a lot of work to come with it.

16 But I wanted the opportunity to discuss it a few minutes here today
17 since I knew that some of you would want to hear about it. And I also apologize to
18 some of you familiar faces that I think heard this last week, but you can keep score and
19 see if I say the same thing today I said about a week ago when I talked about it. I see
20 Jim Woolford over there laughing. You could be here doing this, right?

21
22 MR. WOOLFORD: I've heard it twice from Gene.

23
24 DR. HUNTOON: Well, Gene gives all the nitty-gritties. The total EM
25 program was put forward for \$5.91 billion, which compares to last year's budget of
26 \$6.26 billion. And this is a decrease from last year, and the good news is, though, that
27 \$5.91 billion is still a lot of money, and it can do a lot of work in our areas of
28 environmental clean up, of stabilizing materials, and dealing with restoration. And we
29 can continue to make progress. There are a lot of plans that have been put in place,
30 and we started making a lot of changes in the last couple of years on our project
31 management contracting; and those things, I hope, will stay in place.

32 We still, in formulating this budget, used the principles that I think are
33 something that we laid out and the Secretary agreed with wholeheartedly, and that was
34 to keep the highest priority that we had on protecting human health and safety and the
35 safety of the environment. And that was our number one priority that we laid out in the
36 budget. We also wanted to make sure that we did what we could to mitigate the
37 highest risk, and we put emphasis in the budget on risk, and on high risk issue. And
38 that includes making sure that the nuclear materials are properly managed, and
39 safeguarded.

40 We made maintaining compliance a high priority. Given all the
41 demands of the Federal budget, it will be a challenge at a number of the sites, but we
42 still know we can make commitments, and we have in our minds to try to keep those
43 commitments, or have discussions with our regulators if we're not able to. At some

1 sites, traditional environmental restoration work will be deferred for a while where we
2 have higher risk problems to deal with.

3 Secretary Abraham has challenged every program in our Department to
4 become more efficient and Environmental Management is one of those. That was a five
5 to ten percent efficiency he asked across the board, that he wanted to try to deal with.
6 When I first met with the Secretary, when he came into the Department, he and I were
7 talking about the Environmental Management program, and he said that he had already
8 been briefed on the size of the program and the cost of it being, you know, out 2075
9 and costing \$270 billion or whatever it is. I said, yes, those were the numbers that
10 were out there, and he said we've got to do better. Surely we can do better. I said,
11 well, I would hope we could do better. And so I think this is one of the challenges he's
12 put to us to do better with.

13 He's asked us to accept that challenge and in so doing he's directed a
14 top to bottom assessment of the entire program, and I think that will be a big endeavor
15 for us to undertake. He has asked me to get started on it, and certainly when my
16 replacement comes in as well as the Under Secretary, they will certainly get very
17 involved in this assessment.

18 They want to talk about strengthening project management, and I told
19 you we've been doing that, and can we do better? I'm sure we can. Our contracting
20 strategies that we began to put into place in some of our closure sites, we want to
21 extend those contracting strategies to other sites as well as to the major clean up
22 projects at sites that aren't closing, but do have specific projects that we could extend a
23 better way of contracting to.

24 We want to employ new technologies. We mentioned that before, and
25 it's one of our ways of using better science and technology is a goal we've always had,
26 which is using it to help us get our schedules and costs down. That will receive more
27 emphasis.

28 In implementing this approach, we're going to do it with an open
29 dialogue. We want to do a dialogue with the federal regulators, our state stakeholders
30 and regulators, and we need to go to each site, examine each site, examine where we
31 are with our agreements and our plans at those sites, and see if we're doing work as
32 efficiently as we possibly can.

33 The Secretary wrote to each governor where we have a site and asked
34 them to work with us as well as the administrator of the EPA, Christine Todd Whitman,
35 to work with us and to have their staffs work with us to make sure that we are doing
36 things that are in compliance, and that the framework is designed to do it in the most
37 efficient, effective, insightfully manner possible.

38 You know, it's been about ten years since a lot of these agreements
39 were signed, and a lot has happened in ten years. We know a lot more than we knew
40 then. We have better technologies. We've accomplished a great deal, but we've got
41 some other avenues to approach that we haven't done, and now's the time to go back
42 and have both sides look at these and make sure that we're doing things right.

43 The budget puts a priority on a number of key projects, and of course,
44 if everyone could have voted, we'd have probably had a different set of votes on each

1 of these projects, but I believe keeping the strategy the Secretary laid out, you would
2 understand that after we got through with making sure that health and safety was
3 primary, and took care of high risk, we wanted to keep the closure sites and individual
4 on schedule. We want to make sure that we get those closed and as you know, those
5 have been accelerated from what they were in years past and they're almost goals
6 because we don't know that we can get there in the year 2006 that we had put down
7 on paper, but we're trying very hard and want to complete some of these. We want
8 them completed and be able to tell the communities around those sites, we've agreed
9 with them, the regulators, to make that work, to get out of there, and we need to keep
10 our word. DOE, Environmental Management, needs to deliver on what they have
11 promised. These two closure sites are out there for us to deal with.

12 The Hanford retrieval project, which used to be known as tank waste
13 remediation system, out at Hanford. We want to keep that on schedule, and so that
14 was funded at a very high level, and they're still working with the contract on that.

15 The vitrification of high level waste at Savannah River was contained.
16 We're going to maintain the money we need to select the technology for the
17 pretreatment of that portion of the waste that we haven't been able to deal with. We've
18 put in to almost double the shipments of spent uranium waste, to WIPP, to support
19 closure or compliance requirements at other sites, specifically including Idaho, Rocky
20 Flats, Savannah River, and Argonne Laboratory East.

21 We've put emphasis on stabilizing spent nuclear fuel, on moving it from
22 wet storage to a site for dry storage, and there are a number of sites around the
23 complex, and we're continuing progress on disposing of waste and cleaning up the
24 various sites. We've put emphasis on making sure we have the cells ready for receiving
25 waste at several of our sites and that we have the receiving sites maintain their funding
26 to receive the waste, so we can keep the waste shipments going.

27 We're going to be completing active clean up at Weldon Springs in
28 Missouri, and we've maintained an effort in long-term stewardship in the budget, and
29 this was very important to me as I think I've told you all before, I think that long-term
30 stewardship is something we've not paid attention to for too long and we've got to
31 maintain visibility and a program in that area.

32 The budget continues to fund the development and application of new
33 environmental technologies that can reduce the cost of clean up and reduce schedules,
34 and we feel this is a priority to science and technology. The efforts that directly support
35 our specific problems that we have in our complex. You'll hear some more about that
36 later.

37 It certainly isn't the budget I would have liked for science and
38 technology, but I believe it's adequate to keep progress being made. Additionally, the
39 FY02 request funds high priority new responsibilities, which includes the turnover of
40 uranium enrichment plants at Portsmouth, Ohio, and the activities to keep it in a safe,
41 operable condition, and to provide assistance to displaced workers. This was
42 something that was put in at the end of our program this past year.

43 The Environmental Management program also will be responsible for

1 the design and construction of the depleted uranium hexafluoride conversion plants at
2 Portsmouth and Paducah, and that is also new work for us.

3 As I said, we recognize that we will face challenges at a lot of the sites
4 and our managers are just now, the end of last week and this week, dealing with exactly
5 what this budget means at each of the sites, and we'll be hearing back from them, and
6 there's not any one solution to these changes, or these challenges. I know you all
7 probably have a lot to say in specific areas, and I'll be glad to listen, but it's going to
8 have to be a joint thing.

9 We'll have to work together: the federal, state, the local folks, the
10 stakeholders. Our contractors are going to have to work with us and we're going to
11 have to work together side by side to successfully address these issues. It's going to be
12 hard. It's not going to be easy. But \$5.9 billion is a lot of money, and I believe a lot
13 can be done.

14 So thank you again for the work that you all do and thank you in
15 advance for helping us deal with some tight times that are going to be in front of us.
16 Thank you.

17
18 MR. BENNETT: Any questions, comments? John.

19
20 DR. AHEARNE: I think you did briefly mention, but perhaps can you
21 say any more words about this statement in the budget document sent out by DOE. It
22 says: "Secretary Abraham has initiated a sweeping Environmental Management mission
23 assessment to identify efficiencies and insure the fruitful focus on the clean up of those
24 sites with significant environmental health and safety risks." Since it was called out
25 explicitly, one of the few statements in this, can you say anything more about it? It
26 seemed to me to be fairly striking.

27
28 DR. HUNTOON: Yes, John, I did mention it briefly, but to be a little
29 more specific, I think we're sort of fortunate in that based on what the Secretary asked
30 us to do in that, and more will be coming out on that, but it's mainly he had said a top to
31 bottom assessment of Environmental Management and part of it has to do with the fact
32 that it is such a tremendously large program, not just in money figures, but in the amount
33 of time that we said it's going to take to do all this work.

34 And it has been about ten years since EM was formed and a lot of
35 these agreements were signed to do things by certain times in certain ways and all this.
36 His idea is let's go out and look at some best business practices across the complex,
37 and make sure that at every site, the things we're doing make sense and are done in the
38 best way. I'm not talking just compliance, I'm talking about contracts project
39 management. I'm talking about the way we have things organized, the way we have
40 shipping schedules, the whole program of EM to just take a top to bottom look. I
41 certainly agree with him. Now's a good time to do it. It's a new administration, and a
42 new person as the Secretary, a new person in Environmental Management, and now's a
43 good time to do a top to bottom review, and I think that's what he's talking about.

1 We're going to get started with it. But of course when the nominations go up to the Hill,
2 and these appointees are in here full time, then they'll take it over.

3 I mentioned he did write each governor and he wrote the Administrator
4 of the EPA and asked them to designate some senior staff people to work with us as it
5 pertained to their individual states, so a lot of the states will have work going on, so that
6 it's not just one sided, that we do meet with the other regulators on these issues.

7

8 DR. AHEARNE: Thank you.

9

10 MR. BENNETT: Any other comments, questions?

11

12 DR. HOOKS: Hi, Carolyn. Carolyn, you mentioned a letter that came
13 to the administrator of the EPA and some of the other states. In your letter you talked
14 about wanting to review the compliance framework under which we're working. I think
15 we've made a lot of progress over the last few years in the existing framework that we
16 currently have. Can you be a little bit more specific what sort of issues you think are on
17 the minds of the folks here, and why they need to make this review, and what's
18 necessary?

19

20 DR. HUNTOON: Well, only I can sort of repeat what I was just
21 saying. The letters did ask to look at the compliance framework and mainly because
22 most of that had been laid out. And not in every state, and not in every site the same.
23 That's why he wrote to each governor individually, because we are not. Our
24 compliance framework that we're dealing with in one state is not the same as with the
25 other. EPA, as you well know, has different regions, and regulates different ways. We
26 sign different agreements with different organizations. Years ago, for different reasons,
27 we had to do it. Some of them, at the time, we had to keep our work going. Others,
28 to keep them out of jail, or whatever.

29

30 So I think now's a good time. We have a few places where we have
31 some contentious issues going on, but in general we're getting along pretty well with
32 everyone, so let's sit down and talk. Hopefully, the regulators will come back to DOE
33 with some good ideas of things that affect us. In fact, I have heard regulators tell us
34 we're wasting money in some of our science. Let's hear that. Let's not whisper it over
35 coffee, let's hear about it, and if we're wasting money, let's fix it, because it's our
36 money. Yes, sir. You know, this isn't fair because you heard all this last week. You
37 had your shot at questions then.

37

38 MR. WINSTON: I stayed up the entire weekend formulating my
39 questions.

40

41 DR. HUNTOON: The ones you should have asked.

42

43 MR. WINSTON: That's right. Thank you for sharing information on
44 the budget and as Dr. Huntoon mentioned, she met with the states and the National

1 Governors Association Federal Facilities Task Force last week and I had given some, I
2 guess, collective comments back to Dr. Huntoon. In response to Craig's question, I
3 think the states stand ready to continue to work with the Department. We've made
4 some significant inroads in terms of utilizing the agreements that we have to be flexible
5 and to take into account, not only efficiencies, but technologies, so we stand ready to
6 do that.

7 I think the comments that we gave back were (unintelligible). Given
8 that, we still don't see a silver bullet there, we see some significant challenges and
9 downright concerns with the budget issues. I think part of our thought is that there's
10 been a continuing increase in scope that's associated with the EM program. In my
11 state, the cold standby for the Portsmouth facility is on the tune of \$100 million
12 additional scope to the EM budget. And we see that at a lot of places across the
13 complex.

14 So I think the message was that we see this as a troubling budget from
15 a compliance perspective. We stand ready to continue to work with the Department.
16 Some of themes that were in the Secretary's letter to the governors were some issues
17 that this Board knows have been worked on by the Department, and by EM.
18 Increasing project management, some things that we've been pushing at this level,
19 consideration of new technologies, and contracting improvements. So we support all of
20 those. I think what we do not want to see is this rhetoric of either over a top to bottom
21 review, or the issue of maybe relooking at the compliance framework. We don't want
22 to see that mask a budget that we feel has some significant problems from a compliance
23 basis. But, there again, we stand ready to work with the Department.

24
25
26 MS. CRANDALL: In looking at the budget, I was somewhat
27 surprised to see the emphasis on privatization, especially given some of the contract
28 problems in the last couple years with cost overruns and that kind of thing. Could you
29 talk a little bit about where specifically that money is going and why we're seeing an
30 increase in that area?

31
32 DR. HUNTOON: No. I can talk generally about it, but I can't talk
33 specifically about it. I could start naming them and I'd leave something out and then
34 you'd say, she didn't mention it. But let me talk just a moment about privatization,
35 because we've gone back and forth with it, as you all know. We've had some very
36 good successes with privatization. I'd like to talk with you more about those where
37 we've had huge cost overruns because I don't know what you're talking about. Yes,
38 we had a problem with the privatization effort that we were going to do on the tanks out
39 at Hanford, and I don't need to go over that, because there's been more in the papers
40 about that than we perhaps even knew. So we've stopped that privatization effort at
41 Hanford, and we did that up front.

42 But we've had some good privatization work going on. The advanced
43 mixed waste at Idaho is ahead of schedule. We're going to have that done and that's a
44 privatization and they're going to be in and out of there. And that's going to be a very

1 good success story. The privatization numbers that you see in the budget are things that
2 I can't be specific about them. But we're building cells at several of our sites so that we
3 can have a place to put this waste without having to haul all of it across the country.
4 And we're doing that with something that we know how to do, and I think that's been
5 one of the issues about using privatization appropriately, and not inappropriately to
6 solve an R&D issue, and something that's one of a kind that's never been done before
7 and go out and try to privatize that. I think the risk the contractors don't want to take is
8 evident there. On reproducing things, as in cells and all that we know how to do, that
9 we've done successfully, that we know what a good cost should be and all that, that's a
10 perfect example of something privatization can be used for.

11 So, I don't think that privatization deserves a unilateral hit on not being
12 a good idea. I think we've gotten smarter and the Department's gotten smarter about
13 where to use privatization, where not to use it. So that's why you see it in the budget.
14 And Gene will say exactly where it is and how much it is.

15
16 MR. BENNETT: We'll do two more questions. Diana.

17
18 MS. YUPE: Good morning, Dr. Huntoon. I'm just kind of curious that
19 there was a letter to the governors. What is the Secretary's position on addressing
20 issues to tribes, as generally the governors don't talk to the tribes, and especially when
21 the DOE issues and the projects are affecting tribal lands as well as Aboriginal and the
22 Indian lands?

23
24 DR. HUNTOON: I think the Secretary is very aware of our
25 commitments to working with the tribal nations. The letters that went to the governors
26 had to do with trying to comply because we are regulated by the states at many of our
27 sites, as well as EPA, it was more an issues with compliance and reassuring them we
28 were not walking away from compliance, but wanting to examine our compliance
29 agreements. But there is no intent not to work with the tribal nations as we have done
30 in the past, and as we go through these reviews to hear from them and from you all
31 about which issues ought to be addressed in making this program as efficient as it can
32 be.

33
34 MR. BENNETT: Last one, Frank.

35
36 DR. PARKER: You mentioned the privatization of the landfill sites...
37 (unintelligible).

38
39 DR. HUNTOON: I didn't call it landfill.

40
41 DR. PARKER: The rumors are from Tennessee, Portsmouth
42 (unintelligible) that at the landfill or disposal sites (unintelligible) the money is given to the
43 contractors who just sit there.
44

1 DR. HUNTOON: Well, I can't address rumors, because I really don't
2 know what you're talking about. I'm not trying to blow you off here. I know about the
3 disposal cell. I don't know anything about money sitting somewhere...

4
5 DR. PARKER: ... won't be enough money (unintelligible)

6
7 DR. HUNTOON: Well, we'll have (unintelligible)

8
9 DR. PARKER: (unintelligible)

10
11 DR. HUNTOON: I understand.

12
13 DR. PARKER: (unintelligible) Portsmouth, to do any clean up.

14
15 DR. HUNTOON: We'll have to talk about that, because I'm not on
16 the same wavelength with you on this one, so we'll talk.

17
18 MR. BENNETT: Okay, thank you very much. At this point, I'd like to
19 make a comment from the Chair, speaking for David...

20
21 MR. BENNETT: Sorry, about that. I'm my own worst enemy.
22 Speaking for David and myself, and I hope for the entire EMAB, Dr. Huntoon, we are
23 very appreciative of the dedicated efforts you have provided in your tenure as Assistant
24 Secretary. Now, obviously, there's a change going on, your title is Acting Assistant
25 Secretary. No one can say for sure what the next steps are, but we're in the middle of
26 a transition and it's very apparent to me, in particular, and I know with David, the effort
27 that you're putting into this particular transition to make sure it's done right. Also the
28 quality time and dedicated commitment that you have given to your job during the
29 period of your acting tenure, that's impressive. Some of us have been around for a few
30 Assistant Secretaries and it is very impressive and we're very appreciative. We
31 appreciate the quality time that you've given EMAB and hopefully, we've been able to
32 give you back some of the actions that you've needed to help do the job, the very fine
33 job that you've done. I just wanted to make sure that that was said. We don't know
34 that you will be with us the next meeting. We hope in some capacity, we'll be able to
35 work with you. Thank you very, very much.

36 (Applause.)

37
38 MR. BENNETT: Moving ahead to our first report, let's see. I want to
39 recognize Gene Schmitt has joined us, Acting Deputy Assistant Secretary for Policy
40 Planning and Projects. Do I have that right, Gene.

41
42 MR. SCHMITT: Projects is incorrect... it's Policy, Planning and
43 Budget.

44

1 MR. BENNETT: And Budget, alright, and I don't know if I've missed
2 anyone. Marvin Garcia welcome. Welcome Marvin. Let's move ahead to the first
3 report, under Tab 4. EM-1 tasked EMAB in April of 2000 to explore the role of
4 science within the context of the EM program, and the broader issue pertaining to the
5 funding for scientific research that impact the EM program. The Board received an
6 interim report and briefing at the October 2000 meeting from Dr. Ahearne and we're
7 going to hear today a report and a recommendation for resolution. With that, I'd like to
8 turn it over to John.

9
10 **Ad hoc Committee on Science and Innovation Briefing**

11
12 DR. AHEARNE: I think this is on. Yes. You know what this is,
13 obviously. And as Joel just mentioned, we were tasked last spring to try to explore the
14 role of science, and as I will mention, we ended up, for a variety of reasons, time being
15 one, but also because we concluded EMSP was the real focus in which we could
16 concentrate, we primarily looked at how the EMSP program has been functioning.

17 And I say we, you have a list of the members. There are several who
18 are not EMAB members: Tom Isaacs, Norine Noonan, and Al Sattleberger. Theresa
19 Fryberger, who participated in the early stages of our effort, obviously once she began
20 to become a member of EM, resigned from our Committee, and then eventually
21 resigned from EMAB.

22 A point that I should stress is that we did do a relatively short review,
23 so in a sense, it's a snapshot, frozen in time. But most of the people who participated
24 have had a lot of experience in looking at and managing research efforts, and as I just
25 mentioned, we primarily concentrated on EMSP.

26 We did meet four times, went out to Savannah River and to Richland.
27 We were urged to go to more sites, but again, time compressed. We were aiming at
28 getting a report to the fall meeting of EMAB. We did, at our meetings, we heard not
29 only from the DOE and the DOE contractor people, we also heard from PIs and we
30 mention some of these had been frustrated with the process. Our fourth meeting was a
31 meeting prior to the last EMAB meeting, in which we worked to come up with the draft
32 findings, conclusions and recommendations, and those were presented at that EMAB
33 meeting.

34 However, after that, we then began to draft the report that you have in
35 front of you now. That draft was first developed by having some conference calls
36 among the Committee members to talk over how, and what approach we should take.
37 We then went through multiple drafts. I think we went... Mike, what was it? About
38 eight drafts? So that each draft was cycled back to the Committee members to get
39 more comments and occasionally we'd have our conference calls to discuss that. So
40 the final report is a consensus view of the Committee.

41 And I should mention that in this massaging, we boiled down some of
42 the material that those of you were here saw last fall. We also had some discussions on
43 how there were some members who thought we should be more positive, and there

1 were other members who thought we should be more critical. In the end, we reached a
2 consensus, and so that's what we have in this report.

3 So what are the primary conclusions we reached? EMSP has had a lot
4 of criticism, but we concluded that it has got some of the best scientists in the US
5 beginning to work on the problems that EM has to deal with. And we think it is an
6 effective means of maintaining core competencies in these areas. So that those who
7 conceived the program, going back five or six years ago, we concluded that of the
8 expectations that they had, many of those have been achieved. But we also concluded
9 that to actually apply the results of science is not really strictly a responsibility of OST,
10 of Gerald Boyd and his people. It really ends up being a responsibility, we believe, of
11 all the parts of EM. If the EM mission is going to be successful, it's going to be able to
12 use the information that is being generated by this science.

13 We think that through Gerald's leadership, that the science research
14 enterprise has to come from this, as we say, shared and compelling strategic view of
15 objectives, emphasizing priority, value and role of science. What we, in the Committee,
16 concluded, and we saw so frequently in the field, and as all of you who are familiar with
17 this know, these problems are not primarily ones that can be solved quickly, over a
18 very short time. Some of the problems require lengthy process of work and using
19 technologies we now understand. But unfortunately, there are many of the difficult
20 problems that underlie, have a knowledge base that is not adequate yet. We do need
21 better understanding. We do need better approaches.

22 So what do we end up recommending? We start out by noting the
23 science in the Department is always touted as one of the main business lines of the
24 Department, and there are a lot of words and budget documents, et cetera, pointing out
25 that the Department of Energy is the third largest funder of research in the federal
26 government, that NIH and NSF are number one and two, but DOE is third. There's a
27 very large office, the Office of Science.

28 The EM science program is this unique bringing together of both the
29 environmental management issues and the people who understand the problems. With
30 the science side, its people who hopefully have the talents and the confidence and the
31 background knowledge to be able to work on those problems, so we concluded that
32 EM-1 and SC-1, in other words, the Assistant Secretary and Director of Science,
33 should provide demonstrable support for the science programs. So the Assistant
34 Secretary for EM and... I guess currently it's the Director of the Office of Science...
35 they have to provide demonstrable support for the science program. So they should
36 champion programs with the other key decision makers in the Department of Energy, as
37 well as with Congress and in that dark cloud of organization called OMB, which some
38 of my friends call the dark side.

39 EM-1 should ensure that all the DAS's become proactive in insuring
40 science developed in OST gets applied in EM, that's the conclusion as I just mentioned,
41 that as talented and competent as Gerald is, it's not just up to him.

42 Now we also conclude that there should be a strategic plan developed
43 for the EM science program, and we recognize there are strategic plans in EM, and
44 Office of Science has a strategic plan, but what we were saying here is the two groups

1 should get together and develop jointly a strategic plan for the science program that can
2 very clearly identify investments in basic science that are important, what the program is
3 expected to accomplish, what incentives can be developed, and how promising bench
4 scale research can be transferred to field scale test and application. And this is to be
5 used both internally and externally. It's important internally in the Department. It's
6 important externally in the field and with Congress.

7 This last, of course, is how to make sure that the "valley of death" can
8 be bridged, terminology that has gotten fairly widespread use in certain R&D areas,
9 which, for those of you who are unfamiliar with it, means that you can get funding
10 frequently to do research and once an idea looks good and actually gets used enough
11 so that it can be shown to begin to make headway somewhere, where development
12 monies can then begin to come in. But how to go between those two places frequently,
13 there's no funding. That's called the "valley of death" because research ideas die there.

14 Dr. Huntoon put out a memo, I forget now if it was December or
15 January, in which she pointed out the need to develop incentives. We actually quote it
16 in our report. Particularly after the start of discussions of the budget, and for those of
17 you who know what has happened to OST's budget, we recommend that DOE and
18 EM-1 need to get adequate stable, predictable funding. Unfortunately in the past, the
19 science side of EM has tended to be one which now, as an external observer, it
20 appears that the Department attempts to game it in the sense of knowing that Congress
21 will bump it up or goes in low and Congress increases it. But that's a bad way to try to
22 run long term research programs.

23 The National Research Council did go through a calculation when
24 EMSP was being formed at Duffy's request and it concluded that to end up with a
25 stable program that would be able to provide enough renewals, but also keep bringing
26 new programs in, would end up having a budget on a stable plateau of about \$112
27 million per year, and as you know, we are a long way from that.

28 We also recommend that the DAS for OST should put out
29 requirements for the EMSP employee programs. The EMSP is a science based
30 program. We concluded you need competent science people to actually manage it and
31 operate it, so it should include the responsibility and the accountability for validating
32 science needs. There has to be some way that when the science needs come in, as
33 they're being looked at and end up being incorporated in calls for proposals, those
34 reviews have to be able to be done by the competent people. They also have to act as
35 a liaison between the end users and researchers.

36 The operational procedures should ensure focus area personnel and the
37 site user are involved, not only in the development of the calls, but as advisors in the
38 merit review of the proposals. Now we recognize there's always been a hazard that
39 getting the relevance review people too closely involved in the merit review might end
40 up in some way reducing the quality of the merit review. Nevertheless, we concluded
41 that getting a closer involvement could really, in the long run, benefit by elevating the
42 type of projects accepted, not minimizing the quality, but perhaps making sure that the
43 most relevant end up being selected.

1 And this is then the "valley of death" issue. We believe additional funds
2 have to be put in. That's not science program money. We heard many times that after
3 the science program monies got the research done, there were no monies then to carry
4 it across into the next phase.

5 The DAS for OST should require roadmaps be developed so that
6 could identify the paths for clean up. Roadmaps, as you know, have become a big
7 thing in the Department. I don't know if they're going to last the transition in
8 administrations, but we concluded they were valuable and so we thought more focus
9 should be put on them.

10 We recommend that EM-1 have EMSP grants differentiated between
11 core science and problem-driven science. And this stems from the belief that there
12 needs to be some way of making sure that the core science, basic science, that was the
13 underlying original idea for EMSP gets continued and doesn't get constantly cut back in
14 order to hit a problem-driven area. That's obviously a function of the budget also.

15 We say that there should be a clear recognition that EMSP is most
16 likely to contribute for intermediate and long term clean up processes. Short term, it's
17 not likely to.

18 We have italicized the next because clearly this is an ideal hope. Once
19 the program is stabilized at significantly higher funding, then the DAS for OST should
20 begin the process of broadening the research approach, so then you could have DOE
21 grants supporting teams of investigators and award competitive university or national lab
22 investigators to lead teams. This is a longer term goal if the monies ever get up.

23 So the overall conclusion: Science is needed. Very tough problems in
24 EM. Challenges to the mission are enormous. We conclude, science is needed. We
25 think EMSP has begun to address that need. It does have various problems, but
26 overall this very young program has been a real plus was our conclusion.

27 And so, we have sunset, and the science Committee, led by Frank will
28 then monitor progress. Now in your book there's also the proposed resolution that
29 tracks the wording of the report, and so now, I'm ready for any questions.

30
31 DR. BODDE: Thanks John. Just a comment at the beginning, if you
32 will permit me. I think this is a good model of one way of cooperation of EMAB,
33 which is to convene a particular Committee made up of our own members and some
34 additional expertise as needed, go after a tough problem, present a report, and then
35 sunset the Committee so that we don't impose a perpetual burden on those members,
36 but we get the job done. I think this is a very good way of doing that and certainly
37 want to thank you and your Committee for all your efforts in doing that. John, that was
38 very good.

39
40 DR. AHEARNE: I do want to comment that in getting this final report
41 done, all the Committee members made comments and helped us as we moved through
42 these eight drafts, but the most significant member's contribution was from Norine
43 Noonan. But the real workhorse who ended up getting this report done was Mike
44 Pfister, that's really the person who put in an enormous amount of effort to get it.

1 DR. BODDE: Well, thank you very much, Mike, and we all are
2 grateful from the Board's perspective as well. John, just one question if you will permit
3 me. You mentioned the possibility of bridge funding across this...
4

5 DR. AHEARNE: Valley of death.
6

7 DR. BODDE: This "valley of death" sort of thing, did you have
8 anything specific in mind for the way to accomplish that?
9

10 DR. AHEARNE: No, we did not. We did not go into any kind of
11 depth on that. We were struck by the issue being raised so many times, particularly in
12 the field.
13

14 DR. BODDE: The reason I ask the question, there is a corporate
15 model in which large corporations will have some control in providing capital funds and
16 they will co-invest with the division that will use the technology, and it's always a co-
17 investment to make sure that both sides are committed to the deal, so to speak, and
18 that goes forward. Do you think that sort of thing might be relevant here?
19

20 DR. AHEARNE: It's possible. I will defer to Ed Berkey, actually,
21 who spent more time thinking about these kinds of issues.
22

23 DR. BERKEY: John, thank you for the opportunity to comment on
24 that because I think to some extent this need has already been recognized by Gerald's
25 operation and the way that he has begun to shift internal to what he's able to do with
26 funding available, money into the middle parts of the development regime, where
27 projects come out of the research and development stage, and they need to be
28 captured by the focus areas, or they need to be captured by the science and nurtured,
29 and besides the OST funding, there's IRD funding and later the work that our
30 Committee did. We learned that there are bits and pieces of funding that people
31 creatively put together through co-funded programs at the sites, and so forth, that allow
32 this to be done. But not to the extent that it guarantees success through the "valley of
33 death". Not at all.

34 I think what John is really alluding to is that after all is said and done,
35 beyond what is currently being done, there is still a need. We may be losing some
36 good, good technologies, some good knowledge that we should be nurtured more. But
37 I would comment that I've seen Gerald's portfolio shift through the years, and this is a
38 need which he has certainly recognized.
39

40 MR. BENNETT: Any other questions? Dave.
41

42 MR. SWINDLE: Just one additional comment falling on Ed's point.
43 When the Committee examined other federal agencies such as the Department of
44 Defense and NASA they have a very prescriptive sort of formula that when R&D is

1 started, it is always planned out from a 6-1 to a 6-6 type process, looking at the full life
2 cycle. And I guess that's one of the gaps we didn't go into full details. But clearly one
3 of the observations of EMSP plays or has in the DOE and in the EM, and in particular
4 this "valley of death" is right now there is not this life cycle look at R&D to eventually
5 get it to forward a point, so there's that gap, again, that "valley of death".

6 I think one of the aspects that's out there, you know, going back, I
7 think to answer, David, part of your question, is that there's an opportunity to take
8 some lessons learned from other large scale R&D programs to examine this. Again, 6-
9 1 to 6-6 model, the life cycle of R&D through deployment and application. And I think
10 that's one of the key features. It's certainly well recognized from the federal funding
11 standpoint, and it's an opportunity that we didn't go quite that far into the assessment.
12

13 MR. HOOKS: Actually, John I had a follow on question to the "valley
14 of death" issue. Is it purely a fiduciary issue? Could there be other issues involved,
15 other than monetary issues to traverse that bridge, if you will? Are there efficiencies in
16 the process where technologies could be recognized that clearly stand out in front of
17 others so that it's not necessarily just monetary?
18

19 DR. AHEARNE: Ed, did you want to answer that?
20

21 DR. BERKEY: Thanks, I actually grew up near Death Valley, so I can
22 comment on this. You wouldn't begin a trip through Death Valley without doing some
23 planning, without having enough gas in the car, water, food, maybe a map, some of
24 those kinds of things. So, that's just a simple way of saying that getting through the
25 "valley of death" is much more than just a fiduciary matter. There's mentoring involved.
26 There are many non-technical, administrative, business management related issues that
27 have to be looked at. Is it focused on the ultimate end user needs and a lot of those
28 kinds of issues? It really is a multi-faceted process that, as you move through, further
29 through the "valley of death," it becomes far more oriented through the user needs and
30 far less oriented towards the technology-driven needs. You have to have money, you
31 know, money is kind of like the gas in the car. You know, you need a lot more things
32 than that to make it through.
33

34
35 DR. AHEARNE: Craig, the funding is necessary, but not sufficient.
36 But unless the funding is going to be there, a lot of the other things Ed just talked about,
37 won't get talked about.
38

39 MR. BENNETT: Alright, that looks like our...
40

41 DR. AHEARNE: Dave.
42

43 DR. BODDE: Just a final comment. You can see that one of the things
44 that money does though is set up an internal incentives system and one of the things I

1 noted from the report is like incentives on the part of end users to adopt the technology.

2

3 DR. AHEARNE: Right.

4

5 DR. BODDE: And there may be a way that these investment funds will
6 motivate users and on the part of somebody else to invest, could be part of the
7 incentive structure to avert that hazard.

8

9 DR. AHEARNE: Money is critical, which unfortunately, is getting in
10 short supply.

11

12 MR. BENNETT: I'm not sure that's a comment. Ron.

13

14 MR. ROSS: Yes, I would like to pursue that just a bit with Dr. Berkey
15 if I could. Are there any models out there that we really should be looking at, such as in
16 the biotech industry, that kind of thing? Because those things are moving forward.
17 There's some private focus, as David was saying. But you know, I've been listening to
18 this "valley of death" going on 12 years now and I'm still trying to figure out why it's so
19 prevalent here and other industries may or may not have been able to figure it out.

20

21 DR. BERKEY: Ron.

22

23 MR. BENNETT: Hold on just a moment.

24

25 DR. BERKEY: The answer will be right up.

26

27 MR. BENNETT: Okay.

28

29 DR. BERKEY: In the environmental technology industry, this is an
30 issue that has not been solved, so there are no really good models that guarantee this
31 process. But I think Dave, in his comments, really alluded to something that the
32 Department can do internally because in a sense it is its own customer. And so it can
33 look at the process of technology development and application or utilization in the life
34 cycle mode, and not simply feed part of the system and starve the other part of the
35 system, but recognizing that there is conservation of energy, conservation of technology
36 flow that you do need to pay attention to every step of the process. And I think, it was
37 a nice way for Dave to say that the Department has historically not looked at this in a
38 life cycle way and not made sure that it has fed every step of the process. There is
39 nothing magic about getting through the "valley of death" as I implied in my analogy. It
40 is simply the rigor of planning for it and making sure that there is sufficient funding to
41 make it through.

42

43 MR. BENNETT: And I'm going to hold... okay, we have one more.

44 Last one. Richard.

1 MR. BEGLEY: If I can just make a comment on the "valley of death".
2 It's clearly a problem endemic to industrial R&D, but in that case, industry can make a
3 judgement on the product value. They can do a long term analysis on the business line
4 of what it can accrue. And with DOE, because of the annual budgeting process, it's
5 very difficult to get life cycle cost considerations fully evaluated as they are for projects,
6 and that really is the key. To some extent, the budget crunch does make people take a
7 harder look at life cycle cost because they've got compliance agreements that they have
8 to meet, and if there is a better way to do it, projecting out a few years, there is more of
9 a willingness, I think, to adopt a new technology. But I agree with Dr. Berkey, that the
10 life cycle focus is the real key to providing an incentive to bridge that "valley of death."
11

12 MR. BENNETT: I'm going to cut the discussion off at this point.
13 Again the process will be that you'll have an opportunity for further discussion
14 tomorrow and then we'll be voting. Just a last comment, this is a very extensive report,
15 thought provoking, and I really appreciate the hard work that went into getting that
16 together and boiled down.

17 Jim reminds me that we want to put the resolutions up. Do you want to
18 show it on the board?
19

20 PARTICIPANT: No, read it.
21

22 MR. BENNETT: Alright, our process will be to read that resolution
23 today. Can we go back to this, John and run through it?
24

25 DR. AHEARNE: You want to read the whole thing?
26

27 MR. BENNETT: That's been our process in the past. I gather that's
28 what we have to do. Read it into the record.
29

30 DR. AHEARNE: If I can find it.
31

32 MR. BENNETT: I'm getting some extra help here. We might shortcut
33 that by asking have we all read this? Good. Are there any specific comments that have
34 come up at this moment? Alright, there aren't any. Alright, so let's consider that it has
35 been read and we'll come back to it tomorrow.

36 With that, thank you... hang on just a moment. We're at Tab 5 in the
37 report, and in response to an October 2000 Staff Report by the House Commerce
38 Committee, the TD&T Committee offered to conduct a high level review of the OST
39 program. EMAB was subsequently asked by EM-1 to review the impact of OST
40 investments on DOE's ability to achieve clean up goals. And Dr. Berkey will give us a
41 report and another resolution.
42
43
44

1 **Technology Development and Transfer Committee Briefing**

2
3 DR. BERKEY: Alright, Joel, thank you very much, and I think the
4 mike is on and you can hear me back there? This is a status briefing, if you will, of an
5 activity that we have completed on reviewing the Office of Science and Technology
6 Program.

7 Some history for some of the newer members of the Committee that I
8 think is quite relevant and important here. EMAB as a group, especially this
9 Committee, the TD&T Committee, and the science Committee that you'll hear from
10 later, and then the Ad Hoc Committee that John Ahearne just talked about and EMAB
11 as a whole has been reviewing elements of the OST program since 1995. Along with
12 NRC and GAO, it's fair to say Gerald, that you probably have the most reviewed
13 program in Washington, with the possible exception of the Campaign Reform Bill.
14 That's close.

15 Each EMAB review has generally focused on only an element of the
16 OST program, but over time we've looked at all aspects of the program. As Joel
17 indicated earlier, OST management has been very cooperative in seeking these
18 reviews, and in considering the recommendations that have come out of the reviews, as
19 well as implementing a number of the recommendations.

20 Just to give you a feel for some of the historical perspective, going all
21 the way back to 1995, these seven elements of the OST program have been looked at
22 and in some cases, more than once. The number of recommendations that have come
23 out are listed in the column on the right, and they total 61. So maybe there's more than
24 campaign finance reform. I don't know, we'll see. But that gives you a flavor for the
25 fact that this program has definitely been looked at.

26 The important matter is that it's not only been looked at by internal
27 groups in a sense like EMAB, but also external groups. The House Oversight
28 Committee has had several opportunities to look at the program, in May '97, and May
29 '99. And those hearings, you know, a wise man said I guess I can assign this to Leo
30 Duffy, former EM-1, who said, when you go before the House Oversight Committee,
31 it's not a matter of whether you win or lose but how much are you going to lose by.
32 And those hearings were critical of the program.

33 In October 2000, the House Committee on Commerce issued a report
34 entitled "Incinerating Cash" et cetera, obviously a report that a number of us who have
35 read it recognize that it focused on a number of historical deficiencies in the OST
36 program, but did not take into account, or did not give OST credit for what had been
37 done. And therefore, as Joel has indicated, we did offer back in December, to look at a
38 high level system review of the program, not elements individually, if you will, not the
39 stovepipes, but rather the whole program, you know, from a high up level, 10,000 foot,
40 to see if the system as a whole is functioning, to see if the improvements that have been
41 individually made make sense when you consider the system as a whole.

42 In January of this year, Assistant Secretary Huntoon formerly asked us
43 to go ahead and conduct this review, but to look at some of the impacts of the OST
44 investments on the clean up mission. Well, we formed a working group from the

1 Committee, and the working group members are indicated here on this slide. In fact,
2 four of the five members are present in the room, and I'd certainly like to acknowledge
3 their presence: Dick Begley, whom you've heard from just a few moments ago,
4 responding to the previous presentation; Andy Paterson is back there in the audience,
5 and Dave Swindle, of course, a member of the Board.

6 This working group responded to three charges that were provided by
7 Assistant Secretary Huntoon. The first charge involved comparing the EM science and
8 technology program to other similar environmental technology R&D programs, and
9 while one could spend a lot of time researching a charge like this, we realized that in the
10 time available to us, that we were going to have to respond based on the experience of
11 the working group members. And as you noted from the slide on the working group
12 members, many of them had extensive experience in managing and conducting and
13 carrying out scientific and environmental technology R&D functions. So we felt we had
14 the basis to respond to that charge.

15 Charge number two had to do with how the investments in the Office of
16 Science have impacted the DOE's clean up mission. And we decided that we would
17 develop a response to this by interviewing people who were involved with program at
18 the field level, and by reviewing current documentation. We did not intend the response
19 of this charge to be a quantitative response, but rather in keeping with the high level
20 review, we were looking more at the kinds of impacts that qualitative and
21 semiquantitative impacts that the investments have led to.

22 And that really led to addressing the third charge that was provided the
23 working group, dealing with the question of whether the current structure and operation
24 of the OST program was adequate for the future. Basically, was it set up to continue
25 doing in the future what it has been doing in the past in a better way. And we
26 determined internally that we would respond to this charge based on high level
27 assessment of the system as we reviewed it, and its operations as we interpret them
28 from discussions with members of the management and staff of OST.

29 Our methodology is summarized here in this slide. It involved a very
30 productive session at headquarters in early January, shortly after we received the
31 charge to proceed. I might add here that we didn't do this on purpose, but in
32 retrospect, it turned out very well. Those two days Gerald Boyd was not available, and
33 so his management team was forced to deal with us. And they loved it. But I think it
34 was very good for the working group to interact with the management team and to
35 determine for ourselves the kind of reactions and information that we got from them,
36 compared with what Gerald had been communicating to us over the years.

37 Those were, in fact, two very good days. I think there was a lot of give
38 and take. We met with all of the management team. We discussed the results of
39 previous reviews. We also conducted conference calls with several technology
40 vendors because that had remained an issue.

41 We also did two field trips, one to the Savannah River site in February,
42 and then in mid-March to INEEL (Idaho Engineering and Environmental Laboratory).
43 We selected the Savannah River site because it has been very active and has the
44 Savannah River Technology Center on site. We have extensive knowledge of that

1 operation, historically, because of Dick Begley's presence. He was a former director of
2 that Center, and Joe Spencer who formerly worked there, so we really could look at
3 historically how that program has evolved.

4 And one of the things that we learned in reviewing the OST program,
5 or even the EMSP program, is that they're not static programs, these are programs that
6 are in flux, and as I've already indicated, on a path of continuous improvement. And so
7 you've got to be very careful about what slice in time you're reviewing, because things
8 that were true four and five years ago are no longer true. So that's why we picked
9 Savannah River.

10 And why did we pick INEEL? Because I hope all of you know by
11 now that the INEEL is the EM lead laboratory. It has been so formally designated on
12 an official document by Assistant Secretary Huntoon last year. It has taken the
13 leadership role, with other so-called core labs in the National Laboratory system that
14 can address EM problems, and so it was very important for us, as a group, to go to the
15 EM lead lab to see how science and technology was being implemented there.

16 Well, now to the findings of this first set of findings comparing the EM
17 science and technology program to private similar, private programs. This slide
18 presents mostly the contrasting differences, if you will, between these programs, and
19 why it is often very difficult to take a model that has worked or seems to be working in
20 the private sector and take it over into the EM program. There's some very distinct
21 differences, especially the second bullet there, under the EM program, the presence of
22 radioactive and nuclear weapons materials, changes a lot about this program and how
23 you need to approach it.

24 There are further, many unique applications which may only be one
25 time, or are few in number which make the economic considerations less relevant. I
26 mean we've got to clean it up. It's a societal or stakeholder-driven requirement, not
27 necessarily market-driven or a need where you can apply strict return on investment
28 kinds of analyses. Many of the benefits that we get from the EM program, besides
29 being tangible, are also intangible. Our citizenry, as the two mayors who are here will
30 attest, can rest easier at night with the knowledge that the program is moving forward
31 and making progress. That is often less important in private programs.

32 The private programs can be far more structured and centrally directed.
33 It's often, as people here at Forrestal know, directing the field is like pushing noodles
34 sometimes, and there's not the same kind of headquarters/field integration. There is a
35 strong desire in many programs to make decisions based on risk. Risk is often not the
36 driving force in the EM program.

37 But these contrasts here are important. We should not overlook that
38 there are many characteristics of well run R&D programs that both programs share.
39 Let me just mention a couple of them. In order to be successful, any good auditing
40 program has got to be focused on the operational needs of the problems that it is trying
41 to solve, and we think that that is true of the EM program. Technical peer review has
42 got to be an integral part of making sure that an R&D program is moving in a direction
43 which is making sense, and that's something that more and more technical peer reviews
44 are part of the OST program.

1 But there is a prioritization process so that decisions are transparent,
2 they're based upon end user needs that are articulated well, they're vetted and again,
3 here, we'll see that the OST program is moving in that direction. That the end user
4 community is not saying 'what the hell are you doing with your R&D program?', but
5 rather is saying 'can you speed your R&D program up because we really need what
6 you're doing?' When they're integrated with the program, then you have a well covered
7 thing.

8 There is a system in place to track progress and to identify when
9 success is being attained, and in each of these cases, I think, we're seeing that the OST
10 program has many of the characteristics, to a greater or lesser extent, of a well run
11 program.

12 So our conclusions about this program that are relevant for us this
13 afternoon, we nevertheless cannot forget that there are many unique and differentiating
14 aspects which make it difficult to put this program in the same well as other kinds of
15 programs, and that's always going to be the case, and I think really driven by that
16 second bullet about radioactive and nuclear weapons materials, coupled with the
17 implications on the people who live in the vicinity.

18 Nevertheless, this program is the largest remediation program. It's a
19 major force spurring environmental technology developments. Far and away the largest
20 factor in that area. It has worked best, and we saw numerous examples of this in our
21 visit, when the R&D program is integrated with field operations, where it is evident that
22 headquarters and site management support exists, where contract incentives can be
23 identified. We were given pieces of paper where the incentives were clear, and it was
24 part of the contractual commitment between the contractors and the Department.

25 And where OST was a major facilitator of the process, perhaps
26 through money, perhaps through personnel, perhaps through knowledge, perhaps
27 through organizing the national laboratories. But where you had all of these things
28 coming together, the net result was some pretty dramatic examples where people are
29 putting into place clean up operations at several of the sites which are achieving rather
30 extraordinary gains.

31 Nevertheless, and the last bullet here, it is clear that the S&T program,
32 now this is not the OST program, but the S&T program, this really echoes something
33 that John said in the previous presentation, and we concur wholeheartedly with this,
34 science and technology is not going to reach its potential in EM unless it's operated as a
35 program in an integrated, coordinated manner throughout all of the EM offices. When
36 every single office under EM recognizes that it needs a strong science and technology
37 program to be successful, then it will be successful, fully.

38 For finding number two in the impact of OST investments on the clean
39 up mission. We, as I indicated, we did not necessarily mean this to be a quantitative
40 response, but here's what we found: that the investments that OST has made, they're
41 being linked and prioritized to support the mission as never before. You can look back
42 at some of the recommendations or findings that we had three and four years ago,
43 where we would say something like "it is not clear that the program is linked to the
44 mission. It is not clear that the end users even know what the program is all about."

1 That's not true anymore. These program investments are liked and
2 there is a well charted process by which clean up needs are linked to technical
3 responses, and to the development of technologies that respond to that. Where field
4 data collection comes in and is analyzed, and where the results of that are linked in a
5 quantitative system to allow management decisions to be made. All of this is not to say
6 that this process that I just outlined here is working perfectly, but there is a process, and
7 it is transparent. And it can explain why decisions were made.

8 The result of the OST investments, and this can be quantified, if any of
9 you are interested in these quantifications, I think we'd certainly be happy to share the
10 information that was given to us, but the number of technologies aimed at clean up has
11 increased dramatically and it's compounding at a rate which the Dow Jones average
12 used to compound at. It looks like a dot com stock before the fall. There are many
13 more examples of significant cost savings from the use of new technology. And we're
14 not saying that these examples are perfect or that they're plus or minus one percent or
15 anything like that, but are they yielding cost avoidance? Are they dropping the ultimate
16 cost of cleaning? The answer is clearly, yes.

17 Another result of the OST investments have been that there are many
18 new site-based efforts that are resulting in creatively developed technologies over the
19 last couple of years. And they are each, in their way, leading to individual decisions at
20 individual sites, where the result is that a problem is solved and a technology has been
21 used.

22 And we're listing here just a couple of those efforts: the Accelerated
23 Site Technology Deployment program, the ASTD program. The fact that there exists a
24 specific co-funded activity where the user puts up some money and OST puts up some
25 money, and there is an amazing thing that happens when you have money in the game.
26 And it is that you're very interested in success, and that's exactly what ASTD has done.

27
28 The deployment assistant teams involve people actually helping on site,
29 decisions to be made to get technology used, and the site teams are where there are
30 people that are assigned now individually to sites that are linked to OST, part of
31 Gerald's organization, that have responsibilities at individual sites and know about the
32 problems there and can facilitate site-based solutions.

33 The second bullet there, there's often desire to be quantitative in
34 responding to an OST investments question, but let's not forget as John Moran, who
35 unfortunately is not with us today, has helped EMAB to understand and Carolyn and
36 her enunciation of principles that have guided EM since she arrived. OST technologies
37 have also had a pretty marked impact on increasing worker safety and productivity, and
38 these are just two of many examples: personal ice cooling systems and the remote
39 dismantlement of glove boxes.

40 Continuing, then we concluded that OST investments are increasingly
41 contributing to the clean up mission by reducing cost, schedule, and risk to workers and
42 the public, as well as providing solutions to problems that couldn't be solved before,
43 and we really appreciate the time and effort that the people at the sites took to bring
44 forward example after example where this is being done.

1 And again, this is not to say that every investment has led to this. You
2 don't expect perfection of any program, but there were certainly enough examples
3 where this was happening, to gratify the working group.

4 There is a lot of objective evidence supporting what I've just been
5 saying, is becoming available, but if we were, rather than at 10,000 feet, if we were on
6 the ground as GAO or IRS investigators, we would want some more data and we
7 would want some more detailed information. But at the level we were at, we're at least
8 satisfied for the moment.

9 OST investments, as I indicated, are encouraging co-funding and that,
10 by its very nature is making the EM science and technology program a corporate
11 program. It's not just the EM-50 program, it's not just the OST program. It is the EM
12 program. That paradigm shift in the mind of everybody, is a remarkable thing. I don't
13 know, Frank, when you talk about the science Committee, whether you'll mention the
14 delightful moment that we had in seeing three deputy assistant secretaries sit in front of
15 us, together with Gerald, and give us a number of major examples of where their
16 programs are now succeeding because of the investments that have been made out of
17 the OST program. We always thought that the big defenders of the OST program
18 should not come from OST, they should come from the rest of EM, and we saw it.

19 And what that is leading to, or has led to, is and it was clear to us
20 because we saw it, a positive new attitude about OST inside EM.

21 The last charge, the adequacy of current structure and operations. I
22 said the program has evolved, partly in response to previous recommendations.
23 Gerald, it was easy to accept some of our recommendations I know. But it's tough to
24 implement them. But nevertheless, you've done so and you have put into place what
25 we call a coherent management system and process that is codified in the management
26 plan that became available in September of 2000. More importantly, that plan is
27 worked and lived every day by the staff.

28 Compared with the situation that existed a few years ago, in '97 and
29 '99, we can point to a lot of benefits that have accrued from the recommendations that
30 have been implemented and the coherent system and processes that have been put in
31 place, and we just list here a number of those kind of things that we looked at in each
32 case.

33 The OST program has established better linkages with the rest of EM,
34 not only here at Forrestal but also in the field, and we noted by talking to field
35 operations people that there are many, especially those in the most challenging areas,
36 and in fact it's really the ones in the most challenging technical areas that are receptive
37 to these new technologies.

38 The final bullet that we found and that the OST management and staff
39 recognizes, we think, that they have made improvements and that they have a different
40 mode about them than they did a few years ago, but they, nevertheless, continue to
41 recognize the need for additional improvement in the process of carrying that out.

42 So, what have we concluded? The program has begun to function as
43 what we call a corporate EM program. And that is a characteristic within the industrial
44 sector or other Government sector. If you have a science and technology program that

1 is a corporate-wide program, addressing corporate or organizational-wide needs, that
2 is a successful program, when you function that way. And we do believe that the
3 current structure and operations is a direct response to questions Dr. Huntoon asked
4 about the structure and operations there. We think it does provide a very sound basis
5 for increasing the use of science and technology in the future. And obviously, this is
6 going to take care and feeding, so we are going to encourage that you continue paying
7 attention to all aspects of the program.

8 A number of recommendations here, and I won't go into them with any
9 great detail, because they do mirror a number of things that you already have
10 underway. The Department, EM, should expand the use of contract incentives. We're
11 aware they're in place. They're working, and not simply as a way to use new
12 technologies, but as a way to solve problem, that's really the focus. It's working where
13 it's present, but not all places have it yet in place.

14 We think that EM should really needs to think out a communication
15 plan related to science and technology that describes the progress you've made, the
16 status and plans that you have, particularly directed to Congress and the sites and to
17 answer the questions that keep coming up about whether science and technology is
18 really valuable.

19 EM should make greater use of complex-wide integration and
20 disposition tools. And those of you who are new to this Board, are wondering where
21 did that come from. Well, I guarantee you, by the end of tomorrow morning you'll
22 know about complex-wide integration and disposition tools because we'll have a
23 presentation from Dr. Linda McCoy from Idaho who will talk about the work that has
24 been going on at Idaho for a number of years in this area. EMAB, our Committee, has
25 been highly supportive of those activities, particularly in times of budget stress and
26 budget need. It's a way to identify efficiencies and priorities and for us to encourage,
27 once again, a greater use of that.

28 We talked about field data gathering, and you know, OST has got to
29 face up to the fact that the quality of technology-related data coming from the field
30 needs to be improved beyond what the current situation is. It's critical to prioritization,
31 it's critical to allocating funds, more importantly, above everything, it's critical to
32 credibility.

33 Again, OST should define and use a rational and defensible life cycle
34 cost savings reporting system. Still a need for it. People still ask for it. What bottom
35 line? Are you saving money or are you avoiding cost? There's a system needed to
36 answer that.

37 And OST should have more ways to measure progress. We've come
38 along from where we just used to measure deployments to other corporate measures.
39 A science and technology program is a complicated program, and it isn't just something,
40 as we said, that's within OST. It needs a variety of performance measures and
41 performance measure also have a magic associated with them. When you're being
42 measured for certain performance, people respond and are encouraged to perform in
43 ways that are intended by the performance measure.

1 OST should make greater use of the EM lead lab and the core labs to
2 fill gaps where the focus areas are not operating now. And these areas tend to be in
3 long-range, longer range, strategic issues. The lead lab has an opportunity to do this
4 and this is something that OST should make greater use of.

5 Finally, we're recommending continuous improvement as part of any
6 quality program and we highly recommend that you continue to pursue the path of
7 continuous improvement that you've been on. Our bottom line is that OST has come a
8 long way. Thank you very much.

9
10 MR. BENNETT: Thank you, Ed. Let me open the meeting to any
11 questions or comments. Todd.

12
13 MR. MARTIN: Joel, this is kind of a squishy comment, so I don't
14 really know what you do with it, but in reading through the three resolutions that we are
15 considering in a row...

16
17 MR. BENNETT: That's right.

18
19 MR. MARTIN: ...that all have to do with essentially the same or close
20 to the same issue, you know obviously the word integration is used several times and
21 it's obviously a theme of the EMAB to try to drive DOE towards integration.

22 I look at some of the recommendations we're making within the
23 resolutions and I see things like, in the one that John presented, the strategic plan that
24 raises very important sub-bullets and is a great idea, I think. At the same time I look at
25 what Ed has just presented and I see the recommendation for a communications plan to
26 demonstrate the increasing use and important use of a good science and technology
27 program. And I think, well that's something that's certainly a requirement and should be
28 driven out of a strategic plan.

29 One other example for the point I want to make is, as Ed presented,
30 the sweep of corporate performance measures, that promote intended outcomes.
31 When we look at what Frank is going to present, we're seeing stronger interim quality
32 assurance measures for EMSP, which seems to be a sub-bullet to what Ed just
33 presented.

34 And so when I read these three, I don't see anything contradictory, so
35 that's really the good news. But what I want to ensure that we are doing, and folks
36 wiser than me who have been on this Board for a long time, this is emphasized by Ed
37 pointing out there's 61 resolutions over the history of the Board on this topic, to ensure
38 that we're not duplicating work for DOE and increasing the number of boxes that
39 Gerald has to check off, and that we are actually giving resolutions that are a force
40 towards integration, and that all of these EMAB resolutions, 60-plus, and that each
41 piece actually fits into a greater puzzle. And if folks feel that it does, then I'm okay.

42 But if we don't feel that it does, I would suggest that at some point in
43 time, in the future, we collect and distill those in such a way as to provide a really
44 concise, coherent picture of what the EMAB thinks a great science and technology

1 program will look like for EM, so that there's kind of a template there. We can still do
2 these Ad Hoc approaches to say, check how they're doing, but at least Gerald has a
3 several-page piece that he can always just kind of look back on. And maybe that
4 already exists. So, do with it what you will.

5
6 MR. BENNETT: Okay, just a comment back on that from the Chair
7 side. It's very difficult to sometimes generate from a group like this an integrated,
8 overall picture that's a solution to a problem. We get at those solutions through a series
9 of bites, and there were different charges here, and looking at this one from my point of
10 view, they did kind of come together. They overlapped in where they were going and I
11 saw that as very encouraging in that from slightly different angles, in attacking a problem
12 that overlaps, there was a consensus and I think sometimes that's even more valuable
13 than seeing the great big integrated solution, because that integrated solution may
14 change from time to time in the view of this group.

15 So, you know, I hear where you're going and I think we ought to take
16 that under advisement, but I think there's another side to the value of seeing these
17 different attacks on a similar problem.

18
19 MR. MARTIN: And I'm not talking about a solution. I'm not talking
20 about an over-arching solution because that does change, and I think that's why the
21 EMAB has the ability to create these Ad Hoc committees that can look for solutions,
22 and Ed has presented some here. And that's exactly what I think. I'm just saying I
23 would assume what doesn't change is the characteristics of a good science and
24 technology program. In other words, all good science and technology programs do
25 these ten things always, and they never do these ten things. And I was curious if such a
26 picture has ever emerged from the history of this Board taking those small bites.

27
28
29 MR. BENNETT: Anyone else want to comment on that? Or
30 respond? Frank.

31
32 DR. PARKER: I think it's a very good point that you've raised, but I
33 couldn't address it head on. Not only are we members of each other's committees, we
34 talk to each other frequently in the field, so despite our remarks, we're going to see a
35 slightly different focus in each of our reports. The common thing is about how to get
36 better science and technology into the program, so I think we're reinforcing each other,
37 rather than competing with each other.

38
39 MR. MARTIN: Great, great.

40
41 MR. BENNETT: Alright, any other?

42
43 DR. BERKEY: Joel, if I may I'd like to respond to Todd's statement
44 because I was ... by what you said. I think there is a lot of merit, and probably by

1 picking on Frank's comments, there are enough of us on similar committees that maybe
2 without a formal thing, that you've set a challenge for us. I mean, after all, if we're going
3 to be asking EM to integrate and they're telling us it's tough, and you're saying EMAB
4 should integrate, and we're telling you it's tough, we should... no, we should think
5 about that a little bit. I think your point was well made, and I certainly took it to heart.
6

7 MR. MARTIN: I'm also getting it, themes that I think all of you are
8 making, assumptions that everybody knows them that are in the back of your head, but
9 some of the new folks like myself, themes that were built into the resolution but might
10 not be written down there in that body of 61, that might be nice to have on the table.
11

12 DR. BERKEY: In fact, when I asked Michelle Lynar who was really
13 instrumental in getting this whole briefing and working group to function, when I first
14 asked her to go back through history and see how many there were, I said well, gee,
15 we can't have more than about maybe 30. I was shocked with the number, myself.
16

17
18 MR. BENNETT: Alright. We've got everyone. We've now, I think,
19 had an adequate exposition of the specific recommendations on this one, so I think
20 that'll carry us over through into tomorrow.

21 I just might draw your attention to the book I think it's the last letter or
22 note in here, a letter from Gerald Boyd. It's taking note of the EM-1 acknowledgment
23 of the resolution on the Adequacy Analysis of the EQ portfolio. That should be at the
24 end of the section.

25 With that, I'd like to keep rolling and go to Frank's third leg of this
26 same story, if you will, and go to Frank's report. That's under Tab 6, and this briefing is
27 the EM Science Program "quality of science, initial review." EM-1 asked the EMAB
28 to review the EM science program for the quality of science displayed in reports of
29 grants completed. This is an initial report. The Committee reviewed 16 of some 300
30 grants. Frank.
31

32 **Science Committee Briefing**

33
34 DR. PARKER: You don't need to have that in front of you, but I do
35 want to call your attention that this is a work in progress. This is the initial review, and
36 also want to point out something that I don't think was said, but which answers one of
37 the questions that you've raised, and John has in his report that he put up on the screen
38 that the EMAB or the EMSP, Environmental Management Science Program, is actually
39 a very small program if you look at the dollar cost which are on page five in John's
40 report. For fiscal year 2000, EMSP had \$32 million. The focus areas had \$177
41 million, and the EM program had \$6 billion. So we're really having great expectations
42 from a really small amount of money. So I think they've done a wonderful job of that.
43 But it is important to realize that we're not talking about enormous sums of money in the
44 program.

1 And like any of the other programs that you've heard reported on, this
2 was started by a request from EM-1 to look at the quality of science in the EMSP
3 program. And at the request of the office responsible for EMSP, we looked only at
4 two particular areas, two of the focus areas for this review, and that was because the
5 call for proposals was going to deal with just these two topics. And so we only
6 reviewed the research that was available to us.

7 Despite the fact that 30 EMSP awards were given in 1996 in these two
8 focus areas, at the time we did the review, which is not that long ago, only 16 final
9 reports were available, so it's quite amazing to me that we could go that many years
10 beyond the three year grant period and still only have 16 final reports available. As you
11 can see, you can see there were three in decontamination and decommissioning, and 13
12 in high level waste.

13 We met only one time. We heard from Gerald and the other EMSP
14 manager. And also from the other EM DASs, the other offices and we were delighted,
15 as Ed's already pointed out. I think for the first time we heard the other DASs say that if
16 there is a cut in the program, in the EM program, we want to see the cut across the
17 board, we don't want to pick on EM-50. I think all of us were really gratified to hear
18 that total change. I think Carolyn, and Gerald, and the other DASs deserve a lot of
19 credit for having a total change of culture, at least at their level, and we hope to see it
20 percolate all the way down the system.

21 We talked of criteria fashioned after the NIH and National Science
22 Foundation, and the guidelines that were given by the EMSP program for the final
23 reports, and they're in your binder there, but they're pretty standard, asking about
24 what's common... these are common to almost all of them, and so we spent some time
25 talking about those in the Committee, but we elect to go now to the findings. And deal
26 first, of course, with the positive findings.

27 I already mentioned that the other DASs now are not only sharing the
28 responsibility, but they're also looking to promote and integrate science and technology.
29 And we've already heard about some of the outstanding results that have been
30 produced by the EMSP, and in John's report, which he didn't have time to talk about,
31 there were numerous examples of that, and Ed's already referred to other examples.

32 The other things that EMSP has done, which has not been referred to
33 quite directly, is that there's some problems that are so unique to DOE that they would
34 not have been tackled without the EMSP program. Most of the focus areas have their
35 money so totally tied up with compliance agreements that they don't have the
36 opportunity to do basic research. And so EMSP, even though it's a small fund or
37 amount of money, it plays an enormously important role as referenced numerous times,
38 from the investigators in the field.

39 Now, the negative findings. I've already alluded to the fact that the
40 reports, the final reports, are late. The fact that we could only look at 16 out of 30
41 three years after the cessation of the grant money...

42
43 DR. AHEARNE: Some were continuations...
44

1 DR. PARKER: Well, they were not required to turn in a final report
2 before they were awarded the new grants, and as you can see, we have a
3 recommendation on that. We don't think that's proper. We think that should be one
4 way of exerting leverage on them.

5 The other thing that we found that many of them don't report the
6 submittal guidance. If I remember correctly, we had one report that stapled together
7 four or five published papers in very reputable journals, and that was it. And that puts
8 an enormous burden on the program people to be able to find out what took place and
9 what they could report to the rest of DOE, what they could report to the Congress as
10 to the advantages of the program. And that was another problem.

11 In the Office of Science, that is the measure of success, but we don't
12 believe that Congress set it up that way, and the guidelines don't set up that way, and
13 it's only the published papers. It's putting that science into use, and so there has to be a
14 change in the way it's reported so they make that very clear, and we have some
15 recommendations on that.

16 Despite the total commitment that we saw by the DASs and EM-1 to
17 this program, we don't see that all the way down the chain of command, and that's
18 something we know is a problem. Hopefully that will change over time.

19 And you've already heard enough about declining budgets, and that is a
20 major problem and I'm not sure that we can do anything about it, but I think we should
21 still keep talking about it.

22 And so despite the fact that we've only met once, and we expect to
23 continue, we felt that some conclusions were so evident and recommendations were so
24 necessary, that we want to go forward with those at this time.

25 And John's already referred to this, the quality of the final reports is
26 very, very mixed. We had some outstanding examples of the quality of the science and
27 the quality of reports. We had some examples of the opposite end of the scale, and we
28 have a lot in the middle, or even slightly below the middle, and to some extent, it's not a
29 fair representation. We say that this is not a statistically valid review of the program,
30 even in these two areas because those who were invited to submit their proposals for
31 renewals or for new grants did not turn in final reports, most of them did not. I think
32 only two or three out of the 16 actually were people who got renewals, or got new
33 grants, and so we assume, but we have no proof because we don't have those reports,
34 that the ones that we didn't get may be better, but of course they could be worse, that's
35 why they're afraid to turn them in. We'll see, we hope, when we get them.

36 And without the principal investigator's documentation in their final
37 report, the results that stem from their project and how they are being used or will likely
38 be used, then there's no way that you can brag to the rest of DOE and to the Congress
39 and to the interested people outside, as to what the program is accomplishing. It's hard
40 for the program people to pull that out and to make it clear. The people who are doing
41 the work ought to know better than anybody else, and we're recommending, as you'll
42 see in a moment, that they use all their leverage to require the people preparing reports
43 to do that.

1 We had great difficulty, and so we're sure that other people will have
2 great difficulty. And I want to say, give my thanks to the people at Idaho, and Linda
3 particularly, making reports easily available to us. All reports should be easily available;
4 this means they should be posted on the web, and they should be posted in the form
5 that's searchable, so that if you want to find out about a certain topic you can search.

6 In addition to that, we heard, and John's Committee heard it even more
7 than we heard it, that the people in the field are so wrapped up with their own
8 concerns, putting it on the web doesn't help them very much. And so those results have
9 got to be disseminated in a form that is readily utilized by the DOE contract managers.
10 They won't use it otherwise.

11 So with that, we have a few recommendations, if I can find the
12 overhead. That's it. Okay, and so what are we going to do are the next steps. The
13 thing we need to do, as we've done in the past is to have some on site and field visits,
14 and peer review the EMSP project final reports in other focus areas, and determine if
15 the barriers to the utilization of the science developed by EMSP have been reduced.
16 How to get the science that's been produced, and some very excellent things have been
17 produced and we know of some major impact that it's already had, how to make sure
18 that the rest of the good work that's done, and how to get that action put into practice.

19 I'll be happy to try to answer any questions.
20

21 MR. BENNETT: I think again, your recommendations as summarized
22 follow very closely the exact wording on the formal recommendations, so I think we're
23 in pretty good shape with regard to that. Any questions, any comments, questions?
24 Okay, I think. Thank you, Frank, and we'll come back to that tomorrow.

25 Right now, I think it's a good time to take a break, but before we do
26 that, Gerald, I understand you're going to have to be leaving us shortly, is that correct?
27 Any comments or response?
28

29 MR. BOYD: What'd she say? No, Joel, thank you. I would just like
30 to thank these three committees for the work that you've done. We certainly know that
31 there are a number of things that we yet need to do. We've worked very hard over the
32 last few years, especially under Carolyn's leadership, since she's been here, to try to get
33 better integration, and that is a very long road to go down, as you all know who know
34 this Department. We do feel like there's been progress made. We do recognize there
35 are a number of other things that yet need to be done.

36 It is very helpful, however, as was pointed out a while ago, when the
37 multiple groups that are advising us are at least consistent with each other, and that's
38 just in this room. When you add the National Academy of Sciences, the General
39 Accounting Office, the Congressional staff to that, we quite often get conflicting
40 guidance. But I think in this case, these three committees have given us some very
41 good things that we need to look at. One of the first things we did after John Ahearne
42 started his review, was to hire Theresa Fryberger from under him, and I basically told
43 Theresa that she has to fix all this that is broken, so you know, we're going to see how
44 well she does with that.

1 But I'd just like to thank you all for what you've done and I think as we
2 move forward, there are things that we can do to make some improvements. I won't
3 pretend that given the budget numbers that it will all be easy, or it will be very fast,
4 because a number of issues do relate directly to available dollars, and the budgets are
5 tough, so we have to work within those constraints, which quite often means that it
6 takes a little bit longer to accomplish what we're trying to do. And we don't see a lot of
7 relief from that budget picture over the next few years either. I mean regardless of what
8 happens on Capitol Hill, it will still be marginal, and we may go back through the same
9 cycle again as we go into the 03 budget. So there are some real roadblocks ahead, but
10 that's the nature of the game and we just have to keep working with it. But the advice
11 you've given us will be very helpful, so thank you.

12
13

14 MR. BENNETT: Thank you, Gerald. With that, let's take a break and
15 we will start sharply at 25 after. Thank you.

16 (Whereupon, a 15 minute recess off the record was taken.)

17

18 MR. BENNETT: I think we'll begin. John Ahearne has asked for
19 about 30 seconds. Come to the microphone, John.

20

21 DR. AHEARNE: Thank you. In the report, there is a list of the
22 members. Unfortunately in the overhead, there was one member left off. Paul
23 Rambaut, who was a very active participant in our meetings and in redrafting many
24 times, for some reason that I cannot other than to say some genie, removed his name
25 from the overhead, so I did want to make sure you recognize that Paul was a very
26 active member of our Committee.

27

28 MR. BENNETT: Thank you, John. Alright. I refer you to Tab 7 in
29 the book. John Applegate, as I said earlier, John Applegate was unable to attend
30 today and Tom Winston will give the report, and their briefing was circulated in the
31 advance package. The Long-term Stewardship Committee has met with and
32 conducted a dialogue with the Acting Director of the EM Office of Long-term
33 Stewardship, and representatives from Grand Junction and many of our Long-term
34 Stewardship offices. As a result of that dialogue, the Committee has reorganized its
35 structure and intends to redirect its efforts. This briefing is a status report on those
36 activities. Thank you.

37

38 **Long-term Stewardship Committee Briefing**

39

40 MR. WINSTON: Thank you. Just refer you to Tab 7. I'm giving the
41 report, obviously, on behalf of my co-chair, John Applegate, and a number of members
42 of this Board which are on the Committee. We have Dick Church, Linda Milam, Ken
43 Kokia, Ron Kucera, Dennis Bechtel, Lorene Sigal, Linda Christenson, Jim Woolford

1 who are here today and Kate Probst and Russell Jim who are not here. Diana Yupe is
2 here as well.

3 We've had an interesting time since our last meeting. There's been
4 some transition, obviously with the new administration. What I'm going to be sharing
5 with you today is in general, an update on what we've been doing, but more
6 importantly, where we're headed at this point. We are creating three subcommittees,
7 and I think we wanted to make sure the Board was well aware of that. In addition, we
8 do have a ringer in here. I've got a slide that's going to be out of order, this is going to
9 be a task for those of you who after break tend to sort of nod off, well, this will be...
10 the winner gets, well, we're not sure. That'll be announced later.

11
12

13 PARTICIPANT: A trip to Fernald.

14

15 MR. WINSTON: A trip to Fernald, that's good. The loser gets to
16 stay in the waste pits.

17 Dave Geiser is the Acting Director and there's been some transition in
18 the area of Long-term Stewardship. Dr. Huntoon is no longer here at the meeting, but
19 clearly we wanted to thank her for putting Long-term Stewardship on the map, clearly
20 giving it the attention at the Assistant Secretary level that it deserves and this Board
21 supported.

22 In addition, Jim Werner was sort of the key cheerleader for the Long-
23 term Stewardship concept, and was responsible for a significant amount of planning as
24 this program took shape.

25 Dave Geiser has been appointed as Acting Director. I spent a day in
26 March, early March, meeting with him, and Dave seems both well positioned and has
27 the right disposition to take long-term stewardship to the implementation phase.

28 We have some planned activities that you can see up here on the slide.
29 There's going to be some continuation, as this still immature program, matures. So
30 we're going to be working as a Committee of the whole on a broad range of issues.
31 And in addition, we are going to be forming three subcommittees on some areas that
32 are of joint interest to the Board and to Dave Geiser and the staff.

33 One of the things we did in March was sit down with Dave and say,
34 you know, these are a number of issues we have that are concerns to the Committee,
35 maybe ten or 12. We also asked Dave and his staff what issues were important to
36 them in the coming year and the issues we came up with are a blending of much more
37 task-oriented maybe, than some of the sort of broad, big picture work and
38 recommendations that the Committee has prepared.

39 There are some changes in the EM program and the long-term
40 stewardship program as it transitions more to implementation. It's a partnership
41 between three offices. In January of this year, Secretary Richardson announced that
42 INEEL would be the lead field site for guiding long-term stewardship. He also
43 reassigned the Grand Junction office, which now administers long-term stewardship for
44 30 or so sites to the INEEL office. Dave has been working with those two offices to

1 sort out how to most effectively utilize the resources of those three offices in a way that
2 advances implementation of the long-term stewardship mission.

3 There's a number of activities, for those of you that are scientists and
4 engineers that are looking at your handouts, this is the ringer. This slide was added at
5 the last page of your handout in Tab 5, but this is a listing of, in fact, there's two slides
6 here: LTS office activities and then activities continued. And here again, I think, as the
7 LTS office moves more to implementation after they have completed the report to
8 Congress, and hopefully if they can ever get to the concurrence process, final release of
9 the PEIS lawsuit national study and implementation of the national study.

10 This includes some sort of what I would consider ongoing program
11 maintenance, the Grand Junction activity is for 30 sites. It also includes finalizing some
12 of the work such as the national study. There's strategic planning initiatives. There are
13 initiatives to develop guidance for site Long-term Stewardship plans. You can read
14 down the list.

15 If you look to the second page, there's a number of initiatives in the
16 technical assistance area, performance assessments, training, transfer of sites into Long-
17 term Stewardship, and an evaluation of some non-federal or non-DOE sites. Dave and
18 his staff have a very hefty set of activities on their plate, and part of our Committee's
19 work will continue to be providing some big picture interaction on the broad work of
20 the Office of Long-term Stewardship.

21 Now we're going to move right back to that next slide which would
22 have been number four, on the second page. The Committee work plan is going to be
23 primarily in two areas in the big picture sense, providing feedback to the office of Long-
24 term Stewardship on some of those deliverables at the national level. There will be a
25 strategic plan. You may have heard about the strategic plan that was sort of out on the
26 streets, or at least being distributed amongst interested parties. Kind of scrap that.
27 There's certainly some good aspects of that, but this is going to be a much more
28 interactive process within the Department, and much more field involvement as a
29 strategic plan is created.

30 In addition, as I mentioned, there's guidance to the field on their own
31 preparation of Long-term Stewardship plans, and the Office of Long-term Stewardship
32 is trying to organize itself to deal with the tasks at hand in conjunction with the INEEL
33 staff and Grand Junction.

34 In addition, we want to continue to look at how to integrate Long-term
35 Stewardship decisions into the current clean up decisions. It's a tough nut to crack.
36 There's been some activity across the complex, the Rocky Flats groups have created a
37 very good document on a tool bias. We want to look at some of these things that are
38 being done across the complex, especially with stakeholder groups, and try to see what
39 recommendations we can make to the Department.

40 In addition, we're going to be looking at three areas where I say there's
41 more nitty-gritty work, and these areas are shown here: non-DOE sites, institutionalized
42 LTS through contracting, and the hand-off issue. And I'm going to go through each one
43 of these, but once again, this is a blending of Dave Geiser's concerns and the
44 Committee's concerns.

1 The first one is the non-DOE sites. I think, historically, we thought of
2 DOE facilities such as Weldon Springs or Rocky Flats when we talk about Long-term
3 Stewardship. But in actuality, there's a larger universe of sites that potentially could be
4 subject to Department of Energy involvement on Long-term Stewardship. Some of
5 these examples are listed here. The Nuclear Waste Policy Act Section 151(b) lists
6 possible assumption of Long-term Stewardship by DOE of some commercial fuel cycle
7 facilities where there remains some low level waste after both closure and license
8 termination by NRC. And that is something where it's not mandated that the
9 Department take over that responsibility, but it's certainly an opportunity or an option.

10 There's also UMTRA sites, there's FUSRAP sites, and some of these
11 DOE, like FUSRAP sites, it is mandated that they will be responsible for long-term
12 stewardship. Among some other ones, there's a decision to be made by the
13 Department. Dave Geiser came to us and said he needs some assistance in helping to
14 sort this out. The key questions here would be how should DOE-EM prepare for and
15 become involved in the non-DOE and sometimes not even federal sites that may be
16 transferred? Is the current EM long-term stewardship planning broad enough to
17 encompass these sites? What type of information might be needed and what type of
18 planning? And what agreements with the other agencies or organizations might be
19 needed?

20 This is a list of the subcommittee members that would make up that
21 Committee, and once again, these committees have just been formed in the last say,
22 two weeks, and there may be some shifting around based on member preference.

23 The second one is institutionalizing long-term stewardship with
24 contracts. This is a partnership with the Contracting and Management Committee.
25 Sites are driven by contracts. There's two types of contracts in general, M&O and
26 M&I. Currently there are closure incentives, but there's not long-term stewardship
27 incentives or long-term stewardship contract language, and there's also sometimes not
28 well known long-term stewardship scope. In fact, more often than not, that is the case.

29 So I think the brunt of this group will be to decide or try to look at what
30 is needed to manage long-term stewardship after clean up and how does that get
31 factored into contracts which, as we all know, drive so much of what is done at the field
32 level. What is lacking in current contracting? Guidance, which is reviewed annually.
33 The 02 guidance is already finalized. The 03 guidance will be finalized in early 02, and
34 the thought here is we might have an opportunity to impact that.

35 And the last question is how can contract guidance address long-term
36 stewardship, both knowns and unknowns, in a way that advances long-term
37 stewardship responsibilities in the Department?

38 In terms of Committee membership, we have six LTS Committee
39 members, and four members from Contracting and Management. In the vein of trying
40 to have the budget stretch to do more with less, we actually have ten Committee
41 representatives, but only eight bodies, and that is of course because we have two
42 Renaissance men: we have Jim Woolford and Dick Church who either have two heads,
43 or can wear two hats on a head, and so they're going to be representing both

1 committees. But as you can see, this is a partnership that blends the knowledge and
2 experience in the LTS area with some experts in contracting and management.

3 And the final one is interdepartment site transfer. You may not be
4 aware, but there was a Deputy Secretary memo in December, and it really sorted out
5 who was going to be responsible for LTS in the long term, if that's not redundant. If
6 there is no ongoing mission, then EM will retain the LTS responsibilities. However, if
7 there is an ongoing mission, and that's typically in scientific research or weapon
8 stockpiles, then the site landlord will be responsible for LTS decisions.

9 There are a number of things that have to be in place before that
10 transfer occurs. There has to be a technical planning document that would include the
11 LTS baseline, including future costs and scope. There has to be a budget authority and
12 transfer and there also has to be a formal agreement. With that sort of organizational
13 template, though, there's a lot of decisions that need to be made, and so this coming
14 year it's anticipated that two sites, one from the Defense Program side and one from the
15 Science side will be selected and will be transferred. And the thought here is this
16 subcommittee could assist the Department in determining how DOE-EM should
17 manage the challenges associated with site transfer.

18 Let's see, which way are you looking. Oh, yes. Once EM finishes a
19 clean up, it goes back to the landlord, if it's an ongoing site with an ongoing mission, so
20 that's a good clarification issue, but this is a transfer back to them. EM will only sort of
21 position for LTS.

22 Another question is how does DOE assure that there's a consistent
23 approach since some is going to be done by EM and some long-term stewardship will
24 be done by other programs? And I guess a basic question is, "Is a transfer to non-EM
25 programs the most reliable and cost effective approach?" I think that's another issue
26 the Committee would like to look at, even though there has been a Deputy Secretary
27 memo specifying how things will be proceeding. We'd like to give some independent
28 evaluation for that. And these are the subcommittee members for that particular
29 subcommittee.

30 I think as I said at the outset, that's the last of my slides, but I said at the
31 outset we don't have any resolutions, so those of you that were just trying to get ready
32 for a vote, I hate to disappoint you. But with that, I'd be pleased to answer any
33 questions that you may have about the report.

34
35 MR. BENNETT: Excellent report, Tom, and it looks like you've got
36 quite a nice series of meaty items on your agenda.

37
38 MR. WINSTON: Yes, well I guess the last thing I would say is that
39 we do not want to be distracted from the big picture look that we've also given. We
40 think that we've added some insights. And this Board by blessing our
41 recommendations, has added a real richness to the growth to the LTS program, and we
42 continue to want to look at a lot of those big picture issues. We also want to roll up our
43 sleeves and want to give some discreet guidance in a couple key, well, in three key
44 areas.

1 MR. BENNETT: Good, with that, let's move on to Tab 8. I
2 understand we have John Moran on the line listening.

3
4 **Ad hoc Committee on Safety and Health in Technology Development Briefing**

5
6 MR. MORAN: I'm here, thanks.

7
8 MR. BENNETT: Good. Good. I hope you're feeling better, John.

9
10 MR. MORAN: I'm getting there. Appreciate your willingness to have
11 me in this way. My apologies to the Board and appreciation to EMAB staff.

12
13 MR. BENNETT: Thank you. This briefing is a report on the activities
14 of the Ad Hoc Committee on Safety and Health Technology. Its members include John
15 Moran from the Worker Health and Safety Committee, and representative from the
16 TD&T Committee, that's Mike Mastracci, and he will give the report, and one from the
17 Contracting and Management Committee, and that's Sheldon Meyers, who's, I believe
18 Shelly's here. The report is a follow on to an Ad Hoc Committee effort which began
19 more than a year ago. The Ad Hoc Committee worked with EM-50 and EM-5
20 representatives, and this briefing is going to be unique in that it involves an EM office
21 director presenting the impact of an EMAB recommendation on the EM program. I
22 find that quite interesting.

23 Also I'd like to introduce, just to take a break for a second, Randy
24 Scott joined us, Director of the Office of Safety, Health and Security.

25 With that, I turn it over to Mike.

26
27 MR. MASTRACCI: Well, thank you. Essentially you've said pretty
28 much what I was going to say. I just wanted to point out the most important point was
29 that John Moran is on the phone to answer the hard questions. Essentially, what we
30 were trying to do. This was a interdisciplinary Committee, if you will. I'm a regular
31 member of Ed Berkey's Technology Development and Transfer Committee, and Shelly
32 Meyers is in C&M.

33 We came together to look at... if there are any special problems... if
34 there are special problems in safety and health in the development of new and
35 innovative technology development. It's not that we expected to find that safety and
36 health was being omitted or lacking or being missed, but development of new
37 technology, it'll walk into the future, into the unknown, and we expected that there
38 would be some special issues and special problems regarding safety and health, and
39 that's what we were about.

40 As indicated, we made eight recommendations to the Assistant
41 Secretary last April, and those recommendations were flushed out by Mac Lankford in
42 EM, by forming a working group between EM-53 and EM-5 to address those
43 recommendations. Since then, we have had an opportunity to further test those
44 recommendations. There was one accident, unfortunately that took place, and we now

1 have a chance to take a look at that accident and make a determination as to how good
2 our recommendations were and fine tune and improve on those recommendations for
3 the future.

4 Mac Lankford actually has the main part of the presentation. He will
5 speak to the issues and the progress that they have been making in the area of safety
6 and health. In the meantime, EMAB plans to stay engaged throughout the effort and
7 hopefully fine tunes those recommendations to a point where they are even more useful.
8 Mac. I give you Mac Lankford.

9
10 **Ad hoc Committee on Safety and Health in Technology Development**
11 **Briefing from EM-53 and EM-5**
12

13 MR. LANKFORD: I appreciate the opportunity to get up and say a
14 few words about this. We did receive the recommendations from EMAB, which were
15 very useful to us, and I felt like it would be acknowledging the value of those
16 recommendations to get up and say a few words about what we have been doing about
17 them, because it's been very important to us as well as to the workers.

18 We are on the path of assimilating these recommendations and
19 producing a culture change, but it is important to note that that is not at all something
20 that's automatic. It's... and if you look to the left bottom of this, we certainly were
21 considering and doing things in safety and health before the EMAB recommendations.
22 They were offered to us and we began working on a formal policy. Some time after
23 that, several months after we had started in full, there was an accident in Portsmouth
24 that was quite relevant to our work. It was on our developmental technology and there
25 was a serious injury to one of the developers at that site.

26 We issued the policy in January, having the benefit of that in some of
27 the lessons learned, but not fully having assimilated lessons learned, and then we had a
28 workshop at Oak Ridge that manages the Portsmouth site, to look more carefully into
29 that. And today we're just kind of at the cusp of making all this fully being implemented
30 by the focus areas, and that's not at all automatic.

31 The recommendations were right on target. They directly supported
32 EM-1's agenda for health and safety and another indicator that they were meaningful
33 recommendations is a lot of people have been interested in working on moving this
34 whole initiative forward. And, as I said earlier, your concerns were very relevant to the
35 Portsmouth accident.

36 There are many organizations that have been participating. The
37 working group, the column on the left, is an ongoing group of EMAB members,
38 including John Moran and Mike Mastracci and others have kept their ear tuned to our
39 progress. They listen in on our conference calls, which they're virtually every two
40 weeks, but they vary a bit. But we've been pushing to develop a strategy, to
41 understand what we need to do and to move this whole thing forward. And with EM-
42 5's cooperation and partnership, Bob Goldsmith who is Deputy to Randy Scott at the
43 back here, has been a full partner in this activity. We have been operating that working
44 group towards this culture change.

1 The Portsmouth accident workshop, you could see a lot of people
2 came to that. Gerald and I flew down for that, and a lot of people came to it and
3 participated, offered their understanding and perspectives. A pilot project was set up
4 to sort out contract language so you figure out what to do in our contracts for safety
5 and health to make it better, and just a point, there have been a lot of relevancy to
6 international initiatives, the CE marking in Europe has taken on a lot of interest to us
7 because they design for safety. They improve their design during the design so that it's
8 safe to operate and are held legally liable to do that and we're looking at those practices
9 and lessons learned from the international community.

10 As I said, your concerns were very relevant. The worker was badly
11 injured in a demonstration and the findings from the investigation Committee stated that
12 the DOE field office, the site contractor, and the developers shared responsibility, and I
13 would underline developers here, and actually I'll just point out that the handout that you
14 have, the title is 'The DOE Field Office, the Site Contractor and the Developers Shared
15 Responsibility.' This is a better title than you have because the original title kind of
16 implied that only the developers had these particular problems, but in fact, the findings
17 cited all three people. The DOE field office site contractor, and the developers as failing
18 to understand hazards, failure to implement hazards control, not establishing clear roles
19 and responsibilities, and not establishing or ensuring a safety culture around Integrated
20 Safety Management. This is very serious stuff, but we are the developers, so we're
21 working at it.

22 We are making progress. The recommendations that EMAB presented
23 to us, there were eight of them. Six of them were directly dealt with in a new policy
24 issued in January, as Carolyn noted earlier, and the implementation of that has begun.
25 There are a couple, the compliance cost and heat stress management, which we are
26 working on. There's active progress being made in those areas.

27 And one recommendation on contract language, we had a note from
28 EMAB staff to delay that one because the EMAB Committee wanted to work on it
29 further before we were charged to work on it. On the other hand, the issue of contract
30 language in safety and health is very relevant, and we are working on that right now so
31 that our technical task plans, our contracts or subcontracts are guided properly.

32 Features of the new policy. I'll just briefly run over them, but we did
33 set these out saying OST takes responsibility for safety in the development and use of
34 its technologies and that may be so obvious, but it had not been stated and it needed to
35 be stated, so we stated it. And it also needs to be said that this is for safety in the
36 development, but also safety in the use. So we are designing as we go through the
37 development with the operations, the processes, to improve the design so that use can
38 be safe.

39 Minimizing bureaucracy. I was laughed out of one room by saying that,
40 but that is true. We are trying to do that and so we're not (unintelligible). And we have
41 been questioned by people who ask where's the new oversight layer? Why aren't you
42 showing up to do an audit of us? This is not the way we're doing this. We are doing
43 this by practically helping the developer to understand the safety issues and make safer
44 designs. The sites already have integrated safety management processes, and we're

1 going to work with those. But we have the responsibility to make better technologies
2 safe, and we're going to give practical assistance to the developers.

3 The International Union of Operating Engineers is charged with writing
4 Technology Safety Data Sheets, and so we're going to help the focus areas actually
5 accomplish this, as opposed to setting out the guidance package saying you've to write
6 TSDSs and there's a training program on how to do that, and so now we've got 200
7 principal investigators trying to figure out what we're talking about. So we're going to
8 go out and help them write these things.

9 We are involved in work organizations from the beginning of design by
10 using the International Union of Operating Engineers on Technology Safety Data
11 Sheets, workers are involved in the design comments.

12 And continual improvement. We will keep doing this. I don't need to
13 expand on this. I'm not going to go through this whole slide on that action plan, but we
14 are working through an actual action plan to, over the next year, to further this and
15 actually effect the culture change I was talking about. There are upgrades to the
16 guidance that are being worked on.

17 By the way, the green on this chart are the things we've already done,
18 although the biggest green of all is not even there, and that is that we issued the policy in
19 the first place. But we're going to upgrade the policy. We're going to accelerate
20 Technology Safety Data Sheet production, and that is actually difficult to accelerate
21 that. We've got a staff up. There are just practical things that we're working on with
22 the International Union of Operating Engineers.

23 Heat stress management. Just a quick one on that to show you what
24 kind of thought process we've worked with. I asked 11 different unions at many of the
25 sites to get what they think the heat stress issues are, and we are preparing need
26 statements that could be sent to each of the sites on this issue. And if they believe they
27 have heat stress issues, they'll be primed to put those into the system that we can
28 respond to effectively. So we're trying to work with the system that we have that
29 guides our technology.

30 Accident impacts. We're working on going through what to do about
31 that.

32 Compliance costs. This was the belief that if people could really
33 understand how much cheaper it is to use a safer technology at the site by looking at a
34 life cycle cost, my goodness, wouldn't they select safer technologies and that would be
35 in the right direction. So we are working on that. But in terms of priority, that's a lower
36 priority than getting Technology Safety Data Sheets figured out for each of our
37 technologies.

38 So I won't dwell on this any further but we are planning and working
39 through a lot of different things. But this culture change is only beginning now. It's
40 not... you can't call it a safety and health a program. It's got to be woven into every
41 part of what we're doing. And I have to say, success in terms of everybody really
42 doing it well, will take a few years. But we're working at it.

43 The focus areas, the developers, field organizations are all going to have
44 to do their part, and we will be there, helping that process along. I again will not dwell

1 on the details for the focus areas, developers and sites, but they each have a real role to
2 play and they're becoming aware of that, and they're very supportive of it. I want to
3 make it clear that you can take time to get a culture change to work, even when
4 everybody wants to do it, and that's the condition we're in.

5 Your input on a continuing basis is actually essential to this, and I guess
6 that's really the reason I wanted to say something here. You hit the mark in the first
7 place and we're making good progress and we know where we want to go, but it will
8 take a long time to actually change the culture. And it's my belief that recommendations
9 and insights from this organization, keeping your pulse, your attention on this issue is
10 one of those things that really helps that culture change along.

11 And that's it. So thank you. Are there any questions?

12
13 MR. MASTRACCI: Thank you, Mac, and a final, I just wanted to
14 say... oh, I'm sorry.

15
16 MR. BENNETT: I think Ed had a question. Ed.

17
18 DR. BERKEY: Mac, could you explain? If you just implemented the
19 principles of Integrated Safety Management into the EM-50 process, would that not
20 accomplish everything that you're trying to do?

21
22 MR. LANKFORD: Oh, yes. This is, in our thought process how
23 we're going to carry out ISMS type responsibilities. They're the practical steps of,
24 okay, we've got to write down where the hazards are on this technology, and articulate
25 those to the users. But yes, this is ISM in our thought process. It's not something
26 different.

27
28 DR. BERKEY: Okay, and so what... my comment relates to making
29 sure that people, as they participate in this, don't see it as different because many of the
30 sites have already implemented Integrated Safety Management procedures, and it's just
31 the developers and EM-50 that's catching up.

32 MR. LANKFORD: That's correct. In fact, we confused the sites
33 when we issued the policy, and said go implement this, and they're looking at the policy
34 saying, we're doing this. It's really OST and our development part of the picture that
35 has to be implemented.

36
37 DR. BERKEY: Okay, therefore, then, what I would recommend is
38 that, I mean I would have liked this better if, if I would have heard, what we're trying to
39 do here is bring ISM into our system, because it did sound in the beginning like it was
40 different, and my reaction was the same as you just indicated the sites' reaction was and
41 you, to the extent that you just make sure that people understand that you're playing
42 catch up ball here on a system that's already in place in many places, and working, it
43 would just be clear to somebody like me.
44

1 MR. LANKFORD: Yes, I appreciate that. Thank you. That's worth
2 doing. Did you have a question, Dick?
3
4 MR. BEGLEY: Yes, it's a variation on Ed's question. There are a
5 number of established methodologies like process safety analysis that already exist in
6 the safety analysis and documentation world. Are you utilizing those methodologies so
7 that you're not...
8
9 MR. LANKFORD: We're certainly trying to do that. A lot of the
10 large developers will do hazard analysis and this kind of thing as just part of their
11 standard life. A lot of the mom and pop people may not even understand how to say
12 that. So we, the IUOE does have a set methodology and they're constantly improving
13 that. So we'll use what they have, either already in existence at the developer or we'll
14 be using standard tools, and our people are aware of those standard tools.
15
16
17 MR. BEGLEY: The thrust is to use what's already been developed
18 and adapted?
19
20 MR. LANKFORD: Yes, that's certainly the idea. We couldn't afford
21 to develop it over again. Somebody could waste a lot of time if we tried. Thank you.
22 Alright, thank you.
23
24 MR. MASTRACCI: Well, we've achieved good progress, but if you
25 recall the curve that Mac put up on the board in his first slide, he's still climbing that
26 curve, so we're not there yet, and I just wanted to point out that the EMAB Committee
27 under John Moran's leadership will continue to interact with EM-53 and EM-5, and will
28 be working on number 8, the recommendation on how we can change some contract
29 language so that this issue and problem with safety and health in technology
30 development can be developed better. Thank you. Any other questions?
31
32 MR. BENNETT: John Moran, do you have any comments?
33
34 MR. MORAN: Yes, I would try if everyone can hear me.
35
36 MR. BENNETT: We can hear you fine.
37
38 MR. MORAN: I have actually four comments. First of all, under the
39 charge of Dr. Huntoon and Gerald Boyd, Mac and the OST working group have, in my
40 view, made extraordinary progress in developing and in fact launching a policy
41 integrating safety and health in the OST program. And I think it's important for the
42 Board to realize that this policy goes far beyond any such efforts by any other federal
43 agency involved in remediation technology development. It is really out front, very
44 important, they've done a great job with it.

1 Second issue, on the ISM linkage. The fundamental starting point in
2 development of Technology Safety Data Sheets Mac talked about is the conduct of the
3 job hazard analysis. And it's the way hazard analyses are being applied across the
4 complex and worker participation with supervision is developing work packages based
5 on the job hazard analysis. So that is the key integrating link pin in this process, that
6 links it back to the ISM.

7 Third, the contracting issue. As a result of the investigation and the
8 workshop that Mac referred to at Oak Ridge based on the Portsmouth incident, they
9 have basically four, or three paths, forward they're examining, and one of those is
10 development of more clearly defined safety and health responsibility aspects to the
11 contracting process. It was our view in discussing this with Dave's Committee a couple
12 weeks ago there in Washington, that it would be best for the EMAB Ad Hoc group to
13 wait until that activity is completed to then see what we might learn from that process to
14 expand this to the overall OST development process in general, based on our
15 resolutions.

16 Thank you for a great job.

17
18 MR. BENNETT: Thank you, John. John.

19
20 DR. AHEARNE: Could you briefly describe the Portsmouth accident?

21
22
23 MR. MASTRACCI: I'm sorry?

24
25 DR. AHEARNE: Could you briefly describe the Portsmouth accident?

26
27 MR. MASTRACCI: I can't but Mac can.

28
29 MR. LANKFORD: Dick was just asking me the same question, as
30 you were asking it down there. I'm sorry I should have said something and I guess I'm
31 so used to it now, that I wasn't thinking.

32 What happened was we had some contaminated ground water at
33 Portsmouth and the idea was to inject down, I think it was around 30 feet deep,
34 although I'm not sure, some sodium permanganate into the aquifer. That sodium
35 permanganate, there was leftover material in the glance. When they took them out, the
36 worker had to deal with about three gallons of that material in a bucket, and instead of
37 neutralizing it according to the procedures, which were to pour it into a big vat of water
38 and then neutralize it, he just dumped the neutralizer directly into the bucket and it blew
39 up right in his face. And he was burned with third degree burns over 30 percent of his
40 body, which of course is a massive injury, and in fact probably would have died if he
41 hadn't had some synthetic material that did not burn when it blew up, but his coveralls
42 totally burned off and he was really severely injured.

43 He lived and will be permanently impacted, and of course the legal
44 issues will go on or start at some point. And I'm not involved in that directly, thank

1 God. But our people are. I mean it's not just a safety issue. The work has stopped. It
2 impacts other programs. I mean the personal hurt to that family. These are really bad
3 things, far more than the guy got hurt, as you all know, and I don't really need to say.
4 But that's basically the steps of it.

5
6 DR. AHEARNE: Thank you.

7
8 MR. BENNETT: Frank.

9
10 DR. PARKER: I understand that some of the contractors facing a
11 worker fatality, will lose all of their fees for the entire year and that some of the
12 companies have adopted zero tolerance, and even though they have a very good
13 reputations for safety, that this has made a distinct difference even for them. I haven't
14 heard anything about that, and I wonder if you could say something about that.

15 MR. LANKFORD: Actually, I don't know of any general policies. I
16 have heard that. These are like the lore that's out there, and I'm sorry I can't give you
17 specifics. But I have heard that at one facility if there's a second loss of time accident,
18 they would lose their incentive fee. I'm sorry it's not specific in my mind, but there is
19 lore out there, and I think the contractors are starting to be responsive to actual safety
20 in many different ways like that. Is that clear? Okay.

21
22 MR. BENNETT: Randy, any comments?

23
24 MR. SCOTT: No, I can't add to that.

25
26 MR. BENNETT: Thank you. David.

27
28 MR. SWINDLE: Joel, I just have one comment. Frank, your point.
29 One of the reasons this recommendation number 8 which was talked about was
30 deferred deals with contract language, is that when you go back in the accident, we call
31 it sort of pro forma what occurred afterwards. There was an immediate reaction by the
32 contractor, Bechtel Jacobs of Oak Ridge, because this was a contract not administered
33 by the M&I contractor at Oak Ridge, but through a development contract that all of a
34 sudden basically put his arms around the activities on the site and said any activity,
35 regardless of who performs it, must be directly managed and contracted through our
36 contract vehicle.

37 That set off a spurious set of activities that could impact other R&D,
38 other technology development. Part is directly stemmed to this fact that many of the
39 contracts did have this killer clause, pardon the pun, but that's exactly what it is, that
40 they could lose essentially all fee, put everything at risk in the event of a very serious
41 accident like a fatality.

42 So the Committee, as evidenced by working with John, we are
43 addressing that because there's implications beyond just TD, for EM-50 type activities.

1 It has some very broad implications, and so that's being looked at in the total context
2 with EM-5, Randy's group, as well as others across the complex.

3
4 MR. BENNETT: Okay, let me see, I think that may cover it and thank
5 you. Let's move on to Tab 9, and this is a Contracting and Management activities
6 progress report. David Swindle.

7 8 **Contracting and Management Committee Briefing** 9

10 MR. SWINDLE: Following some of the previous presenters, what I'm
11 going to do this afternoon is give you a status report of activities that have been in
12 progress since the last Board meeting. As a premise going forward, one of the reasons
13 for our contracting and management of contracting as a topic as a whole, you heard in
14 every presentation of the Board today, even in Dr. Huntoon's remarks, and also in
15 reference to even the communications that went to the governors as well as to the
16 regulators, of the importance of contract reform, contract management in the
17 Department's activities overall and in EM. In addition, overall, over 90 percent of all
18 dollars that the Department spends, and EM is no exception, are spent through
19 contracting mechanisms in order to perform its work.

20 First of all what I'm going to speak to are the current activities we're
21 involved in. These involve the whole topic of project management. There's a specific
22 case reference, working with Walter Howe's office, the Office of Contract Reform and
23 Privatization, a DOE contractor base evaluation, and a topic of Workmens'
24 Compensation and speak to our plan work schedule that's ahead of us, looking at a
25 joint effort with the Worker Health and Safety Committee. Also I should mention
26 technology development and transfer, with Randy Scott's office, the Office of Safety,
27 Health and Security for EM; EM-53 which we just heard this discussion, which is the
28 Office of Technology Development and Demonstration. Also there's some additional
29 joint efforts involving MA-53, which is the Office of Contractor and Human Resource
30 Management as well, and there's some others... the Office of Engineering and
31 Construction Management through the EM-6 office, which we'll refer to in a moment.

32 There's a joint effort with the Long-term Stewardship Committee,
33 which was referred to, on managing Long-term Stewardship through contractual
34 agreements and arrangements, and then in that activity I'll speak specifically. There's
35 been over the past year and a half, a very in depth assessment, chartered, in fact, by
36 Congress through the National Research Council, looking at improving project
37 management in the Department of Energy.

38 As a point of reference, just to go back, our initiative that we've been
39 working on since the formation of Marvin Garcia's office, EM-6, in the Department of
40 Energy, is to provide input and recommendations and be a resource to Marvin in
41 carrying out the new responsibilities that were chartered about a year ago on the
42 operation of this new EM project management office.

43 As a background piece, recall again, partly in responding to the
44 National Research Council's findings and recommendations, also communications as

1 well as concerns and criticisms from the Hill, the Secretary of Energy has established a
2 new program office, of Program and Contract Management, as a focus area. General
3 Clair Gill came into the Department as part of an activity, and then subsequently in the
4 principal secretarial offices, which EM obviously is one, each program secretarial
5 officers were also instructed and directed to set up a similar office to focus on contract
6 and project management from within its own efforts. So in 2001, this is an area of
7 focus.

8 From the Committee standpoint, areas that we have been paying close
9 attention to and participating in which I'll get into some details. There is an effort of
10 getting more engagement of headquarters in the actual, at least management and
11 understanding and accountability of project execution in the field. And this is coming up
12 now at a headquarters level, it's called a capital assets list. These are basically what the
13 field reveals as the highest level priorities. These, typically, are projects that have over
14 \$100 million in value in terms of executable total estimated cost. And so what projects
15 get looked at in terms of attention and factor, understanding the basis of selection is an
16 important element for consistency across EM.

17 Another effort is project management training, and basically
18 development of project managers and environmental management. At our last Board
19 meeting, Dr. Huntoon spoke to the fact that a previous resolution that came out of
20 EMAB was to recommend the development of a career track or career path for
21 project managers in the Department. This subsequently was adopted, not only for EM,
22 but went up to the Department-wide initiative, and has now been adopted as a
23 Department-wide initiative which we'll speak to in a moment.

24 We're also interfacing again, in coordination with EM-6, the Office of
25 Engineering and Construction Management on a new DOE order 413.3 that's being
26 implemented and how that impacts EM. And again, as a prelude, one of the areas EM
27 has put in place a number of reporting tools to streamline, many of you heard of this as
28 the IPABS system. OECM has been developing a different reporting system. There's
29 some overlap in terms of does it duplicate, does it replace? And that is of significant
30 concern at least from the field standpoint again, of redundancy in information and does
31 it add value. And again, since OECM and EM-6 have interfaces to understand how
32 that is progressing, again, to provide feedback.

33 There are a number of key issues just to report on here that at least that
34 we're focusing upon. These are not all by any means. But the first issue came out of
35 the NRC report which was the real original, I guess, assessment, is that there need to
36 be more accountability at the headquarters level for the projects. Typically, this roles
37 and responsibilities between headquarters and the field has left something to be desired,
38 both in terms of consistency as well as in terms of who do you point the finger to go get
39 the answers in terms of real responsibilities, accountability, and authority? And so
40 NRC made the point that one of the issues is that there is this delegation to the
41 contractor, and the question is who is the true project manager on DOE projects?

42 A second issue that's there, again I'll refer to in a moment. Both the
43 NRC and EMAB in parallel, observed and made a recommendation that DOE should
44 establish a department-wide training program and that DOE needs a career

1 management program. One of the unique aspects is that most of the rules, and most of
2 the systems in place in DOE for 'managing projects' has really changed over the last
3 decade. Since the development of the EM program, or prior to the development of the
4 EM program, essentially all work was self-performed within a first tier contractor,
5 meaning the M&O, which was in essence almost indistinguishable from a Government
6 or Federal employee. With the EM program, where things get fixed out of some
7 different contracting mechanisms, the role of project management in defining work and
8 executing work has changed, and the skills and the capabilities of the federal as well as
9 even contractor staff in many cases have not kept up with those changes.

10 Some of the proposed solutions that are being worked on, both
11 Departmental-wide, as well as within EM, is the fed must be established clearly as the
12 owner of the project. They own the responsibility line for compliance, if it's eventually
13 an accountable activity that's negotiated with the regulators. Contractors are there
14 basically to carry out the responsibilities in a delegated fashion, or a contracted fashion,
15 as so defined by the "owner" of the federal entity.

16 Timely reviews and reporting is a key to success. Both the NRC and
17 independent EMAB assessments found that across the complex there have certainly
18 been to date no consistent reviews, both in terms of what information is accessed, what
19 information is obtained, as well as how is it fed back to the responsible entities, either at
20 the field office or at headquarters. And Marvin's office is clearly trying to work to get
21 that all focused where there's consistency so apples can be compared with apples.

22 And then learn from a focused set of projects. There are a number of
23 these capital assets or these key projects that are being identified. Some of the
24 concerns coming back from the field that have come about in a workshop that Marvin
25 had, is that there has been a lack of consistent guidance of what constitutes selecting a
26 project for review. What should be reviewed? And these are all issues that are being
27 addressed.

28 The training program for project managers. As a result, again, of the
29 initiatives taken forth both from this Committee, the C&M Committee, as well as
30 initiatives from EM or OECM, there has now been a career development program task
31 force been established. Report on some of the output of that very quickly, but for now
32 there's a firm commitment within the Department to not only establish a career-wide
33 development program for project managers, but have a development pathway for both
34 recruiting, retention, as well as reward and incentivizing. So that's a very positive step
35 forward.

36 And a key aspect of this came together not to long ago, and I'll speak
37 to that, of the EM project management workshop which Marvin's office conducted out
38 in Las Vegas, really started for the first time, pulling all the elements of the EM field
39 personnel, federal and contractors together so that everybody got on the same page
40 with what are the issues as well as challenges with implementing the new DOE order,
41 and the conclusion is clearly to proceed with that implementation.

42 Now one of the things that's in process, and Marvin if we've got this a
43 little out of sync, we'll ask for clarification. But right now, we're in the EM area. There
44 is a capital assets project list under development. There has been a preliminary set that

1 was put together about a year ago, now it's being refined as people are getting more
2 comfortable with the requirements. The sites are beginning to look at their priorities in
3 terms of where they need project management assistance, based upon importance.
4 And Headquarters involvement doesn't wait until the project has already broken
5 ground, there's cost concerns, whatever, starting at the beginning. CD-0 in the project
6 manager terminology. And part of this is really aimed at getting early Headquarters
7 involvement and awareness of if there is a problem out there in the baseline and the
8 scope of the schedule, that it's identified early so it can be addressed with the right
9 resources from across the complex.

10 And another initiative is looking at taking some of these capital asset
11 projects or key projects from the sites, and make them pilots to refine the processes
12 and the practices that will go forward.

13 There will be a number of project reviews as indicated. About a year
14 ago, a number of projects were already identified, and other projects are right now
15 being added, and one of the concerns that came out of the workshop was a concern
16 that all of these projects are going to be identified, and each side scientifically has quite
17 a number of projects in progress that the system could get overloaded; consequently
18 not an effective review could be conducted or less significant review.

19 Some other initiatives out of this workshop, I get a little repetitive there,
20 and this workshop turned out to be a very key mechanism to serve as an information
21 exchange form, to how to implement this, particularly with EM. And the outcome of
22 the project will show that there's feedback now as to get on a common basis for how
23 do you select projects for headquarters review, what can be kept at the field level for
24 streamlining. And again, to make reference to the IPABS, I call it the heart and soul of
25 the EM reporting and information management system, has some, I guess, many of the
26 same requirements that the DOE-wide reporting system requires, and right now the
27 Office of Engineering and Construction Management is looking at a project analysis
28 reporting system, a broader wide system, and at least to date there's some overlap and
29 duplicity that has to be addressed so again not to make reporting unnecessary for the
30 folks in the field. So that's a little bit of a status on that.

31 Finally, I wanted to speak to the project management career
32 development task force. This was a very significant undertaking in terms of trying to get
33 alignment with Human Resources within the Department and the primary or principal
34 secretarial office, but to recognize at the Departmental level that as the Department of
35 Energy handles more and more projects, it is important for the personnel who manage
36 those to have the right skills and to know the right decisions and actions to take in
37 managing projects.

38 Part of that starts with the career development program that will
39 enhance the knowledge, the skills, as well as the abilities of both current managers, but
40 also serve as a basis for future managers that could be brought in to the Department.
41 Right now, a lot of this information is drawing upon the experiences of the Army Corps
42 of Engineers, NASA, and others, so it's not created new.

43 The other part will set up a career development tracking program
44 system to monitor the progress of this, but also to be sure that personnel do get the right

1 opportunities to move ahead as they qualify, gain certain skills, to go forward. So that's
2 a significant part. This was aimed and leaning towards a Departmental-wide project
3 management certification program, again recognition of the skills and the investment
4 that's gone forward, and that's scheduled to be in place, Department-wide, at least in
5 draft by December 1, 2001.

6 Sort of a concluding slide on project management. Right now there are
7 some activities that are overall in progress within the EM as well as OECM area.
8 There's a benchmark study looking at the current capabilities of project managers
9 within the Department, but also a document being prepared again, following many of
10 the best practices principles in industry of what's the roles and responsibilities. Recall
11 that within the Department there is a unique consideration, there is the distinction
12 between the federal project manager and the contractor project manager, and that
13 varies throughout the complex.

14 Knowledge and skills program, a diagram to be developed. What this
15 basically will refer to is career pathway development; what are the various skills that
16 basically you can check the box off towards that certification process, and again, that's
17 again put in place so that the employees have a process as well as the Department, to
18 track the careers as people progress to more and more responsible positions.

19 After this, the benchmark study will provide lessons learned which can
20 be incorporated. This gap analysis will be done with current resources inside the
21 Department of existing project managers. The recertification or certification research
22 for this new policy is to be completed by May 1 and the retention program also by May
23 1.

24 Now, a point to conclude on this particular piece, this is not an EMAB
25 initiative now. This is at the Department level, and we are watching that closely
26 because it parallels very closely to what we had recommended a little over a year ago.

27 I want to speak to the second topic on the agenda, from a status
28 report. The C&M Committee has been working with the Office of Privatization and
29 Contract Reform, Walter Howe's office, PC-1, to look at essentially the roles of
30 contractors in the Department today. What attracts them? Why they don't get
31 sufficient competition? Is it contract provisions, contract clauses? What are the
32 incentives, et cetera?

33 In January 2000, PC-1's office completed, with some input from the
34 C&M Committee, an analysis of the DOE contractor base. There were some key
35 conclusions just to highlight, which the Department again is absorbing throughout its
36 operations. The first thing is that from an overall standpoint, DOE's contracting process
37 has significantly changed over the last decade. Part of this is the fact that we're going to
38 fixed price contracts, privatized contracts. Again, it's a mode away from the pure M&O
39 self-perform model. And so DOE needs to improve its
40 understanding that it's competing in the market place for contractor resources. And
41 part of this goes back, if the contractor, as we found in one element of the study, that
42 the telecommunications industry, where there's a higher return and higher yield, they end
43 up putting more of their resources, and particularly their best resources to go after that

1 higher return operation, as opposed to the more lower yield, higher competitive end on
2 the DOE market place. Again, a recognition of the market dynamics is important.

3 A second key is understanding risk management. There has been quite
4 a bit of 'talk', and Andy Paterson's here from PC-1, that as the Department has moved
5 towards the new contracting models, the shift the work or shift the risk to the
6 contractor. But it's been discovered and learned there has not been the associated shift
7 in the incentives that go with that in many of the cases. Consequently, the contractor's
8 been asked to take on more of the risk without more of the reward. And so that has
9 been a little bit of an imbalance. And so there's an initiative being undertaken, again,
10 within EM, that will be looking at how to upgrade management of risk and making
11 decisions on contracting processes and models.

12 A third key conclusion and observation is subcontractor performance
13 must be improved through procurement and project management practices. A very
14 simple idiom is that the mechanism which DOE controls the performance of its
15 contractors is through contract clauses, and if those are not in alignment for improving
16 contractor performance, you won't get that contractor improvement. And that's got to
17 flow down from the prime down to the subs and the line.

18 And then finally, which we heard a lot of, going back to EM-50's
19 discussion, or discussions from Ed Berkey's Committee and others, is that technology
20 use has to be expanded if it's to be effectively employed and engaged through this
21 "valley of the death" or across the "valley of death" as was referred to earlier, by
22 aligning the DOE contractor and subcontractor incentives and enhancing the
23 competition. What we've discovered basically in many of the cases is that when we've
24 been out in the field is that sites that do incentivize the contractors to deploy technology
25 and there's alignment with regulators as well as the DOE and others, that all of a sudden
26 you see good, better deployment and you meet the objectives that technology
27 developments are deployed. Where it's not the case, you don't get those initiatives.

28 Let me turn to the final topic, which is Workmens' Compensation.
29 First point, from a situation assessment and background. At our last Board meeting in
30 the fall, we reported that the Committee has been undertaking a series of assessments
31 to understand the option of improving worker health and safety through contract
32 mechanisms. Again, that came up in the previous presentation as well, because these
33 things tend to play of each quite effectively.

34 So we began an initiative to examine DOE site workers compensation
35 costs, and what's their linkage to worker health and safety. What we discovered, in
36 very simple terms, was a situation where the DOE contract model that was developed
37 over many, many years ago, in essence looked at Workmens' Compensation as just
38 another direct cost that would be totally reimbursable. In other words, there was no
39 direct linkage in trying to relate worker health and safety to the cost of Workmens'
40 Compensation, realizing there was, but nevertheless, there was not that linkage there.

41 From a Workmens' Compensation standpoint, it's sort of interesting.
42 There is a group at Headquarters, MA-53, that has the policy oversight and insures the
43 cost is there but there's no monitoring over what that cost is. The basis of cost in terms
44 of the field are not well understood, and the gaps clearly exist between management

1 responsibilities, between headquarters and the field in terms of what data is there. And
2 then finally, when we talk to folks in the field and at headquarters, and John Moran and
3 his Committee on worker health and safety likewise have been engaged with some
4 expertise, is that the linkage between the Workmens' Compensation cost as well as the
5 worker health and safety is not measured, even though in industry it very much is.

6 And so what we're working on right now is to provide and exploring if
7 are there opportunities to provide incentives to DOE contractors, through Workmens'
8 Compensation, say whether you call it reimbursement or some process of cost sharing
9 or saving sharing, to improve safety and health programs while reducing costs. Again,
10 in no way to imply that this is any retraction from the commitment to health and safety,
11 but just looking, can you still achieve the same result through less expensive means.

12 In June of 2000, my Committee, Contracting and Management, and
13 Worker Health and Safety, Randy Scott, the Director of EM Office of Safety and
14 Health and Security, EH, as well as EMAB staff started putting together quite a bit of
15 information to assess what's the relevancy of this. Is there, very simply, a pony in the
16 pile that can come from an opportunity? Our conclusion was there was.

17 We found, in the Department as well as externally, there's some key
18 examples. Two are just cited here. One within the Department that was not well
19 known, within Lockheed Martin and Sandia that show there are direct linkages from
20 incentivization and improving worker health and safety. In the private sector, Con Ed,
21 there's a total health and productivity best practices survey. Again, all the data pointed
22 out that there were direct benefits that could be achieved.

23 We met in the fall with MA-53, within the Department's management
24 administration side to determine the foundation and guidelines. It turns out, not to
25 speak to these specifically here, there are a number of policies in place, but they're not
26 linked. And I guess that's where we found there is an opportunity for both savings and
27 opportunities overall.

28 Two weeks ago we brought in specialists from the private sector who
29 briefed the Committee with Randy Scott, as well as MA-53, they're basically our
30 specialists in the areas of Workmens' Compensation, and concluded that on that basis
31 there is benefit both through cost savings, but more importantly on worker health and
32 safety that could be achieved. So we, right now, through, I think, EM-5, there will be
33 an assessment, hopefully going forward, that will actually pilot looking at what can be
34 explored within EM to see what are the true Workmens' Compensation costs at DOE
35 sites and really our objective now is to provide a clear basis of cost, identify the best
36 practices for managing worker health and safety, and health risk, and estimate the
37 potential savings.

38 One of the reasons this has come up, we've got quite a bit of, I call it
39 subjective data, for as we talk to people from the field and at headquarters, that the
40 cost of Workmens' Compensation in terms of a budget percentage is significant,
41 meaning less than 10 percent, but significantly greater than one percent as it varies
42 across the site. The problem is nobody truly knows what it costs in the relationships to
43 operating sites.

1 I conclude, on the last slide, from future work. We're going to continue
2 working the worker health and safety Committee and EM-5 on this Workmens'
3 Compensation topic. Hopefully, you've got a sense of the potential value, both to
4 safety and cost that it could provide. There's a project management initiative, again
5 staying close oversight or close review of the process and plans for DOE's project
6 management career development program.

7 There's a number of activities that Marvin's team is working on for
8 implementation of DOE Order 413.3. And then there's some developing elements,
9 efforts that are continuing. This OST eighth recommendation which referred to the
10 contract clause resulting from the technology accidents or development accident in
11 Portsmouth.

12 Long-term stewardship, the contract arrangements. We have an initial
13 agreement in principle to do some parallel work with the National Research Council so
14 that we don't duplicate efforts, but more importantly, reinforcing each others.

15 And a couple other final observations. Shared savings which Carolyn
16 mentioned this morning, that continues to be observed and watched through the
17 process, and shepherded. There's also questions of, which we'll look at, the new
18 IPABS interface and the new integration, the requirements for the project reporting
19 system of OECM.

20 So I'll stop at that point and ask if there's any questions.

21
22 MR. BENNETT: Tom.

23
24 MR. WINSTON: First, Dave, thanks for packing so much material
25 into a brief time. Amazing. And also thank you for being so willing to have your
26 Committee partner with Long-term Stewardship. We had a very good chairs
27 conference call earlier this year and both with the leadership of the Board chairs and
28 then I think Jim Melillo was always looking for sort of cross fertilization opportunities. I
29 think that really does sort of add a new dimension to the Committee's activities.

30 I wanted to ask you about the project management area. It's my
31 perception that the EM has focused on project management in the last number of years,
32 I think, starting with sort of, what I think the term we used was in projectizing the work
33 of the Department, enhancing the tracking through IPABS and other mechanisms, and
34 then sort of building a project management expertise within the Department. And as
35 you know, we mentioned earlier about the Secretary's letter to Administrator Whitman
36 and the governors, and one of the areas that was mentioned was project management,
37 in addition to some others, as you know.

38 If we are going to be starting that kind of a discussion or dialogue, my
39 question is, you presented a good background on project management initiatives and
40 the sense that this is now not an EM function, it's the Department that is going about
41 doing the thing that had been laid out. My question to you and the Committee is what
42 additional would you want the Department to do that they are not on a task to do now?
43 If we are going to relook at project management, what's your wish list, if you would
44 want others to try to raise?

1 MR. SWINDLE: Well, Tom, that's a loaded question, obviously.
2 Probably something we need to spend a little time on thinking. We haven't quite looked
3 that far ahead, I guess, in terms of some of the elements. I mean clearly one of the
4 concerns right now that has been voiced in our Committee, we've picked up in just side
5 discussions in the field, is the call for information. I mean the field is constantly, I guess,
6 concerned that as more and more information is being asked for, it takes more and
7 more time away from actually managing the projects. How much information is
8 enough? IPABS was one of the ways to go forward to try to streamline that. So one
9 of the concerns, again, for all of us is, is there duplicity of information, is there
10 redundancy, is it you know, not necessary, or what is the right level of information?

11 At least from our Committee's standpoint, we haven't asked that
12 question sufficiently enough yet to know. I mean that's going to be important. If people
13 are spending all their time answering the mail as opposed to doing the work, then that
14 doesn't help anything. But are they managing it more effectively? Well, that's a
15 question. I guess I'll... Marvin, you're here as well. You've got sort of a perspective
16 from inside. Are there areas, taking Tom's point, that probably, if you had your
17 druthers, would get better attention, or is that... what would your...

18
19 MR. GARCIA: Yes, we're only just getting started and making in
20 effect a total change.

21
22 MR. BENNETT: Marvin, could you use the microphone, please.

23
24 MR. GARCIA: You can't hear me?

25
26 MR. BENNETT: Yes, I can hear you.

27
28 MR. GARCIA: We're really just getting started in some of these areas,
29 but as I've described earlier, it's a cultural change that we're going through. They're
30 doing more contract management than project. They believe many folks believe that it
31 is project management, but they're looking backwards. We need to teach them to look
32 forward, and the way to do that is with schedules and learning how to read schedules
33 and to make the schedules work for you. The same thing with cost estimates and true
34 scope delineation, risk analyses, risks. Those are the areas of which, if we could get
35 them going faster in those areas, and really applying them as tools, then project
36 management would skyrocket within the Department.

37 But right now what we're working on is impacting, as just described to
38 you, the list, it's just a partial list and it's a list of capital asset projects: design and build,
39 design and construct type of projects. We've got several other kinds of projects that
40 we've got to get moving on.

41 The thing is, though, that we've got to teach them to do it as we walk
42 through this. In other words, we get a project and we're going to them, hold them to
43 that, doing reviews and such, that's what these original list of 23, I think I told you guys
44 about right after I got here, and now we're adding 97 to that and we're going to

1 continue to grow from there. But the idea is to get them in terms of review and what
2 their responsibilities are as managers and as project managers.

3 So we really need to build those skills. Hopefully the career
4 development will help, as was described also, but you know if we had that today you
5 wouldn't see the results of that for five years. So, we don't have it today.

6
7 MR. SWINDLE: And say, Tom, a couple of the other perspectives
8 out there, just thinking, this area of risk management, you know, industry has routinely,
9 particularly in the environmental area, you know, makes its decision. I think Ed had
10 that comparative chart. Business makes more problematic decisions on the basis of
11 careful reviews of risk, and the contrast of how DOE's looked at risk at the field has
12 been different, headquarters has been different than the regulators. So getting those on
13 line is going to be important, and that's an initiative that I mentioned PC-1 is doing.

14 And I think we're going to get some other insights because the phase II
15 report is out from the NRC on its project management assessments, and in the May-
16 June time frame phase III. I believe that's correct Marvin, I think phase III.

17
18 MR. GARCIA: Actually, it's an annual report that came out. The first
19 report and then an interim report and then the second report is coming out.

20
21 MR. SWINDLE: It's coming out in the May-June time frame. Okay.
22 So they are going... I think some of the next steps that we'll look at, the overall needs
23 Department-wide that'll answer part of your question, that'll help us all.

24 MR. BENNETT: Okay, yes.

25
26 MS. MILAM: I might be getting into too much detail here, and I guess
27 I'm speaking more with my former hat as a site employee as opposed to my current one
28 as a mayor, but I've got a couple of questions, more comments than questions.

29 We seem to go through cycles, and a recent cycle has been to drive
30 authority and responsibility down and it seems to be this is pushing it back up again,
31 which leads to my second comment of how is headquarters going to staff this
32 headquarters involvement in project management, to have that be very meaningful?
33 And the last comment, I guess, a fair number of people at a lot of sites have been
34 certified through the Project Management Institute. Would a Department-wide
35 program be in addition to, a replacement of, or whatever? Those are just comments, I
36 don't necessarily need answers today, I just hope they'll be addressed at some point.

37
38 MR. SWINDLE: Marvin, if... you're probably in a better position at
39 least...

40
41 MR. GARCIA: Yes, I'll be glad to try to answer them if I can
42 remember them. No, we're not really pushing. The authority and responsibility needs to
43 stay at the project level and that is at the sites. So we're really not trying to push the
44 work out, we're trying to hold the managers, the project managers, the leaders at the

1 site and at the headquarters, accountable for what they're managing, and that's what
2 we've not been doing so well. And it's that accountability that we're trying to drive
3 down. And then also, of course, we want to give them the tools to do that.

4 So the answer to that question is that I don't think we're talking about
5 additional staffing. In fact, I would be very surprised if we were talking about a single
6 additional body at the headquarters as a result of this. But we do want them to become
7 more aware of what's happening in their projects and be more forward-looking, as
8 opposed to history or looking back at what's happened to your project, look ahead
9 and try to solve the problems.

10 With regard to the certification, I believe what we're trying to do there
11 is to make the project management the profession that it should be, and therefore we
12 want to... instead of having a project management as a label to a job, it's really
13 something that is a professional responsibility as it applies to the task at hand. And one
14 of the ways to do that, of course, is through the certification. Now the PMI certification
15 is certainly going to be encouraged, but the other side of it is there are levels of project
16 management and what we need to do is to bring the younger folks up into smaller and
17 through smaller projects and they'll learn the hows and the wherefores on project
18 management and/or program management. And to do that, that's what we're trying to
19 do with this program is to have the levels associated with that. So that's the reason for
20 that. Now we find the final level may very well be the PMI certification. Is there
21 another one that you had?

22
23 MS. MILAM: No, you answered all three.

24
25 MR. GARCIA: Okay.

26
27 MR. BENNETT: I'm going to cut it off at this point, just an
28 observation. First, I thought that was a very comprehensive explanation of where we
29 are. I was a little confused, Dave, as to what the Committee is doing in its input and
30 how that's actually integrated with all these activities, with all the other activities of the
31 Department. It seems like it almost just flows together, and I'm a little confused as to
32 what you guys are doing and what we're doing as a group, very specifically, and then
33 what is...

34
35 MR. SWINDLE: That's one of the challenges, I think. We're seeing
36 initiatives flow down from say outside of EM that impact EM, initiatives that begin
37 within EM, and that's where just now starting to tie all the pieces.

38
39 MR. BENNETT: So you're gathering information?

40
41 MR. SWINDLE: Correct.

42

1 MR. BENNETT: ... in this evolving area, particularly in project
2 management, this evolving area, and then putting that together and from that we'll be
3 evolving a specific EMAB...

4
5 MR. SWINDLE: Set of initiatives or action reviews and the like.

6
7 MR. BENNETT: Right, because one of the things, and I know you've
8 heard me before on this, I worry about is there's too much integration on a day by day
9 basis so that the EMAB becomes all of a sudden too linked with the day by day
10 activities.

11
12 MR. SWINDLE: Yes.

13
14 MR. BENNETT: ...and we have to be very careful that we keep
15 that.

16
17 MR. SWINDLE: We've got to stay at the 30,000 foot level for our...

18
19
20 MR. BENNETT: ... church and state separate.

21
22 MR. GARCIA: That's called complicity, and we love it.

23
24 MR. BENNETT: Well, I would definitely be very careful of that. But
25 it's very exciting, and I think something we have to watch carefully. It's very
26 encouraging, very exciting area you're operating in.

27 And Linda, a comment on the... just from my experience in the
28 engineering business and the evolving authority, responsibility from a centralized control
29 point to a decentralized area. That's the theory, get it out there and do it. But as soon
30 as something goes wrong, it comes right back up and what we're seeing here is this
31 wonderful process of putting better tools and a different level of quality management at
32 the local level, and therefore the chances of the authority and responsibility being equal
33 to be evolved and stay there are being increased, because everybody believes that's the
34 best way to operate. So, yes, there's an oscillation in it, but we just have to watch it.

35 With that, I'm going to cut discussion off and we'll move to Tab 10, and
36 Dave will continue his briefing. This is a report on the activities of the Ad Hoc
37 Committee on Performance Measures and Leading Indicators in Safety and Health. Its
38 membership includes members from the Contracting and Management Committee and
39 the Worker Health and Safety Committee. The Ad Hoc Committee will evaluate safety
40 and health performance measures as potential leading indicators of safety and health
41 problems.

42
43
44

1 **Ad hoc Committee on Performance Measures and Leading Indicators Briefing**

2
3 MR. SWINDLE: Thank you. I think John Moran is still on. He was
4 scheduled really to give this presentation, so I won't do near as good as he has. This is
5 a new initiative, special as a Ad Hoc Committee looking at this topic of performance
6 measures and leading indicators, for the Office of Safety, Health and Security, for
7 Randy Scott's EM-5. The product that... we're going to talk about the process very
8 quickly. Looking at a product later on this summer, which is a key issue is what are the
9 leading indicators, not lagging indicators.

10 There's a number of players both from members of the Board and its
11 committees, but also some experts from outside. John and myself as members of the
12 Committee. John brings an extensive background from OSHA, but from a labor and
13 safety management, bringing that from a contract in the private sector. Don Elisburg,
14 labor relations from a legal standpoint. We've got Bill Kojola from AFL-CIO. He
15 brings the union perspective. Agnes Dover, contract law. Dennis Ferrigno, from
16 construction and remediation project management from the large performer side. And
17 Terry Miller from the National Safety Council. So again, we're getting some broad-
18 based experience.

19 The task that this Ad Hoc Committee is just now beginning to formulate
20 is to consider the development of occupational safety and health performance
21 measures, specifically those that would be leading indicators that would be useful to EM
22 management so as to help look where there are trends that need to be reversed, or
23 more importantly, where success is occurring and lessons learned to be taken to other
24 sites.

25 The plan right now is to look at again some of these lessons learned,
26 but more importantly later on this spring is to meet with an external expert panel to look
27 at how the private sector uses leading indicators as ways to help more effectively
28 manage their business, both from a cost and safety perspective, and then eventually
29 recommend to EM a pilot for these performance measures to be undertaken at, there
30 would be at some to be determined DOE Environmental Management site, to ascertain
31 their effectiveness and value to site and to headquarters.

32 A background that John Moran and others here, I'm sure, are more
33 familiar with than I am, but when we look at the issues of how worker health and safety
34 typically is looked at, it's been the lagging indicators. Statistics generally tell you what
35 has occurred, and that's easier to understand. The real measure and value of
36 significance is what can be leading indicators and to help you understand what's coming
37 down the road.

38 In the past they've been documented with the performance of an
39 organization, how risk industries operate. You can pretty well tell pretty quickly what
40 they are, because when you have high incidence, high injury rates; it tells you it's a high
41 risk industry. They've also been used to evaluate how organizational safety and health
42 performance may have been in industry, for example, and as well as evaluate the
43 effectiveness of safety and health prevention programs. Obviously, if there's a reduction

1 in risk over time, when you look back in the past of say, worker injuries, then okay the
2 conclusion is you've got in a more effective safety and health program.

3 And then what may be some interventions that may be occurring or that
4 may be needed in the future. And what's been happening, literally, since around the
5 turn of the century, information's been gathered to where you see these lagging
6 indicators. Those statistics really remain statistics of the past. They don't tell you where
7 an industry or an operation is going. And organizations now are beginning to develop,
8 as part of a set of new initiatives, what are approaches to help identify future safety and
9 health hazards so you can prevent them, that is a preemptive strike, as opposed to a
10 reactive strike. And so that's a part of the efforts that we're looking at.

11 From a status report, the Committee co-chair, John Moran has
12 developed a white paper for the Committee based upon his extensive experience. It is
13 now in internal reviews. It starts, beginning to look at the issue, with what are the
14 opportunity for leading indicators and the potential value. And so in the next month,
15 we'll be looking at these potential measures that could be tracked, and likewise be
16 meeting in early May with an external expert panel to help validate whether some of the
17 conclusions we're reaching as a working group are, in fact, valid.

18 So that's sort of a status report on that, and I'll ask John Moran who's
19 still on the phone if he has any comments to add to that.

20
21 MR. MORAN: I'm still with you. The only comment I would offer is
22 the problem of leading indicators so that management can focus attention on issues that
23 are emerging is a difficult and challenging process. As an example, the changing
24 government has been attempting to do that over the last year and a half. It's really a
25 major and important and innovative step forward by EM-5 to focus on this area as a
26 way to reinforce and continue enhancement of (unintelligible) associated with ISM and
27 to really begin to work on getting there already (unintelligible) down further and to keep
28 them there. So this is an interesting and challenging effort which we look forward to
29 doing. Thank you.

30
31 MR. SWINDLE: Any questions?

32
33 MR. BENNETT: I don't see any questions.

34
35 DR. PAULSON: I have a comment.

36
37 MR. BENNETT: Okay, go ahead. Glen.

38
39 DR. PAULSON: I think the Board should recognize two things. First
40 that this idea has been in Randy Scott's mind as long as it's been in the Committee's
41 mind. It's another sign of the very close relationship that we have developed, working
42 with Randy. And secondly, just to endorse what John said, this task is both very
43 important and very, very hard.

44

Alternatives to Incineration Committee Briefing

1
2
3 MR. BENNETT: Amen. Alright, thank you. Thank you very much.
4 Excellent report. Let's move on. We're in the stretch and last, last but not least, and
5 we're not terribly far from our schedule but just a little bit. At this point, this is a briefing
6 on the formation of the Alternative Technologies to Incineration Committee, ATIC for
7 short. It's done as a result of litigation to block construction of a waste incinerator at
8 INEEL and a subsequent settlement agreement. The Secretary of Energy formed a
9 Blue Ribbon Panel to look at alternatives to incineration for TRU and mixed low-level
10 waste.

11 In its final report, the Blue Ribbon Panel identified promising
12 alternatives and recommended formation of a citizens working group to monitor
13 technology development. EM-1 asked EMAB to form this Committee. Dick Begley,
14 we introduced earlier, was appointed as Committee co-chair. Dick is a member of the
15 TD&T Committee, and a former director of the Savannah River Technology Center.

16 Also with us today is Richard Burrow. Richard? There you go.
17 Richard is the Secretary of Energy's Deputy Director of the Secretary of Energy's
18 Advisory Board and was closely involved in the recommendation that we move ahead
19 as we are doing today. So I think we've got the key players here and we're interested
20 in hearing where we're going, Dick.

21
22 MR. BEGLEY: Thank you. As Joel indicated, the plans to incinerate
23 mixed true and low level waste at INEEL met with opposition. As a result, a settlement
24 effort led to the formation of a Blue Ribbon Committee to look at alternatives to
25 incineration. The report was issued just a few months ago, and it did identify a range of
26 promising alternatives. They put them in categories as to those that represented a
27 relatively sure technology, as well as those that were longer term, but had some
28 significant potential for being effective substitutes for incineration.

29 In parallel, DOE had been putting together or a RD&D plan and the
30 Blue Ribbon Committee commented on that. A couple of the comments really related
31 to making sure these alternative processes were evaluated, not only with surrogates, but
32 with actual waste, which was a good thing to do, but obviously a rather expensive type
33 of development activity. And certainly, they also called for full, meaningful public
34 involvement and that's really why I'm here today.

35 Secretary Richardson, in the beginning of this year, announced the
36 formation of the citizens' working group, which will report to EMAB, and also called
37 for increased communications with existing Citizen Advisory Boards across the
38 complex. A national stakeholder forum to bring together experts and interested
39 members of the public is being planned, and that national plan is being put together to
40 respond to the Blue Ribbon Committee recommendations.

41 EM-1 is tasked with a number of items, one was to develop the overall
42 EM action plan, develop a plan for national stakeholders forum, and the planning for
43 that is going to be beginning next month, and the EMAB executive director, Jim Melillo,
44 formed the Secretary's public participation group.

1 The entire charge has been developed and submitted for approval to
2 EM-1, and letters soliciting “at large members” were sent to the field offices and we've
3 had significant response to those letters. And action plans were put together.

4 There'll be two co-chairs. I'm one, the second one is yet to be
5 selected. Two citizens from the organizations that were parties to the Settlement
6 Agreement will be on the Committee. A representative appointed by the governor of
7 Idaho and the governor of Wyoming will also be part of the Committee, and then ten
8 “at large” members, selected from across the nation.

9 We've got just about everyone identified except the co-chair and the
10 representatives appointed by the respective governors, and the next step is for an
11 organizational conference call or meeting, as soon as we have all the members in place,
12 and that should take place, hopefully, next month, and we'll be providing a status report
13 to EMAB at your next regularly scheduled meeting.

14
15 MR. BENNETT: Okay, thank you. Ed.

16
17 DR. BERKEY: Dick, what is your current understanding now of the
18 fact that this group would report to EMAB? Where are the implications on this Board
19 when you complete your work? Will you bring forward a report with conclusions and
20 recommendations and that sort of thing?

21
22 MR. BEGLEY: My belief is that, as with other committees, we would
23 bring forth report findings with recommendations for EMAB's review, and modification
24 then, and/or approval. Jim, is that correct?

25
26 MR. BENNETT: Through the normal process.

27
28 MR. BEGLEY: Normal process, yes.

29
30 MR. BENNETT: If it's a regular ongoing Committee or whatever.
31 Alright. Any other comment? Kathryn.

32
33 MS. CRANDALL: Could you talk a little bit about how your
34 Committee that's being formed, the citizen's committee, will work to plan the
35 stakeholders forum that's happening fairly soon. Well, I guess is it just a dialogue that's
36 happening?

37
38 MR. BEGLEY: It's the planning for the meeting, and we're really trying
39 to solicit, in addition to the information we already have from the Blue Ribbon Panel,
40 input from across the country, from those people in the technology business as well as
41 interested individuals. And the idea will be to provide input, comments, questions, to
42 the DOE who are conducting the R&D program to identify viable alternatives to
43 incineration. And so this will be an opportunity to look at the development program as
44 it proceeds, to look at all of the parameters that are being evaluated, determine if

1 indeed we have viable alternates that are more acceptable than incineration for this
2 particular application.

3 Now, while there is an interest in technology that could be broadly
4 applied, it's really focused on the issues that are the cause of the suit, that is the ones at
5 INEEL. So that's the primary focus of this group.

6
7 MS. CRANDALL: And after this stakeholders forum happens, will
8 there be some sort of iterative process? Will that information feed into your citizens
9 working group for a report that you put together? I just am not clear about how these
10 things work together.

11
12 MR. BEGLEY: Well, the...

13
14 MR. BENNETT: Maybe we can ask Martha Crosland, Director of
15 the Citizens Office of Intergovernmental and Public Accountability. Got to get my
16 names correct. Martha, you're right in the middle of this.

17
18 MS. CROSLAND: I just want to tell you I think that some of the
19 answers to this are really not developed as of yet. We're in very, very preliminary
20 stages of planning the stakeholder forum. We do want input broadly from the
21 stakeholders in terms of how we can plan this. We hope to have it by the end of 2001,
22 but even that is a question that we would ask questions on. How we interact with
23 ATIC is another question. I certainly know that we will be seeking the advice of ATIC
24 in terms of how to plan this forum, what the agenda should be, the participation, and I
25 certainly would think any recommendation, well, recommendation's the wrong word,
26 but any statements or other statements of concern from out of the stakeholder forum
27 would certainly feed into the ATIC process, and ultimately back into the EMAB
28 process.

29 One of the questions for the program, for this forum is how do we
30 continue to interact better with stakeholders throughout the R&D process and the
31 deployment. We would not see this as a substitute for what is ongoing, and what would
32 continue to be ongoing with technology development in terms of scheduled work. This
33 would just be an additional, hopefully a positive alternative avenue of communication.
34 Hopefully that helps.

35
36 DR. ADELMAN: What is the time frame?

37
38 MS. CROSLAND: The time frame we are thinking tentatively, and no
39 arrangements have been made, so this is very tentative, but late in 2001, which would
40 probably just given the holiday schedule, late November, early December. There is a
41 meeting next week at the Snowbird in Utah, and I think that was alluded to earlier in
42 some of your discussions. We hope to have, of the stakeholders that are here and are
43 interested, we hope to have an informal meeting to begin to discuss some of these
44 questions, to begin to really plan and have something that we could even share with

1 ATIC sometime after you have your initial meeting in terms of what the preliminary
2 ideas are.

3
4 MR. BENNETT: Thank you. Thank you, Martha. We have another
5 question. Glen.

6
7 DR. PAULSON: Well, one observation and one question. The
8 question first. One of your viewgraphs mentioned the nominating Committee. Who's
9 on the nominating Committee? That is, if any Board member had an idea of who they
10 might like to suggest to join your Committee, who would they communicate with? You
11 or this Committee or...?

12
13 MR. BEGLEY: Jim, I'll defer to you.

14
15 MR. MELILLO: At this point the nominating Committee was the two
16 co-chairs that are here, myself, the Assistant Secretary, and who else?

17
18 PARTICIPANT: Dick.

19
20 MR. MELILLO: Well, Dick, yes, wasn't selected at that point, but that
21 was the initial part, but all the reviews were done internally.

22
23 DR. PAULSON: The comment is being from Jackson Hole, I'm
24 somewhat familiar with the local dynamic that led to the dispute and eventual resolution.
25 The parties to the lawsuit, how could I put this tactfully, have sometimes been less than
26 forthcoming in offering suggestions of candidates to serve, for example, on the Blue
27 Ribbon Panel? Are they the same parties that you're counting on to recommend your
28 co-chair?

29
30 MR. MELILLO: Let me see if I understood what you just said. Are
31 you asking about the other co-chair yet to be selected?

32
33 DR. PAULSON: Yes.

34
35 MR. MELILLO: Are those people, the ones you mentioned, involved?

36
37 DR. PAULSON: Yes.

38
39 MR. MELILLO: No. The ones I mentioned here in terms of the co-
40 chairs is internally here, but no, whenever that happens, that will be mostly done here.

41
42
43 DR. PAULSON: Okay, but the viewgraph says that there will be a
44 co-chair from the parties to the settlement. Is that misleading?

1 MR. MELILLO: You misinterpreted it. It says two co-chairs and then
2 two citizens from...
3
4 DR. PAULSON: Okay. I appreciate that clarification. The other
5 point I guess I make is the...
6
7 DR. ROSS: They're here. Check the slides.
8
9 MR. MELILLO: Yes, look at that one. They're in conflict with each
10 other is what you're saying.
11
12 DR. PAULSON: Yes.
13
14 MR. MELILLO: Go back to the next slide.
15
16 DR. PAULSON: It's the one headed current status.
17
18 PARTICIPANT: Right here.
19
20 PARTICIPANT: No, one more.
21
22 MR. SWINDLE: Representative parties?
23
24 DR. PAULSON: Yes. I recommend that be corrected, to be in
25 accord...
26
27 MR. MELILLO: To correct the slide, that should be a full bullet and
28 not a sub bullet.
29
30 DR. PAULSON: Okay.
31
32 MR. MELILLO: Thank you for that.
33
34 DR. PAULSON: Yes, the other point I would make is the way that
35 this appears to be shaping up, there will be a lower percentage of EMAB members on
36 this Committee than is typical for the committees that we've created, and I think the
37 Board should just be aware of that. I don't know that that necessarily is a problem, but
38 it may place a higher burden on the EMAB member at the moment, just one, to make
39 sure that EMAB's role in history is well understood by this Committee. They'll have to
40 carry a significant burden in that regard.
41
42 MR. BENNETT: Okay, Jim.
43

1 MR. WOOLFORD: Somewhat a follow up to that is it's unclear to me
2 exactly what the charter of this group is. I think that would help settle some questions,
3 even looking at the presentation and listening to it, because if we're just focusing on the
4 waste stream related to Idaho, I think that, it seems to me, and Jim's shaking his head
5 no, but that, I mean that's part of I think some of the clarifications that are needed,
6 because that's fairly unique, having been involved in this from the EPA side, and there
7 were permitting issues as well, involved in this.

8 So if you're looking at the larger question of how we effectively engage
9 the public and the communities in these decisions, then I think that's something different.

10
11 MR. BEGLEY: We'll have a copy of the charter tomorrow and that'll
12 be helpful. Alright. Ken and then Ed.

13
14 MR. KORKIA: Just a quick follow up, when you were talking about,
15 that we understand expectations from that group, I think that group will have to
16 understand our expectations. I'm sure this was a FACA issue, I was involved in setting
17 it up this way, but a Committee always has a hard time with their work, and I'm sure it
18 will be very good work, but the ultimate responsibility under FACA is that this
19 organization will be providing the advice or recommendations and there could be
20 changes made in that, and that they know that's a possibility and that they don't resent
21 us for it, that it's where expectations are made up. So that's very important.

22
23
24 MR. BEGLEY: That's one thing that is in the charter to be clear to the
25 members how that's the basis on which this Committee will operate.

26
27 MR. BENNETT: Ed.

28
29 DR. BERKEY: These most recent points were exactly the reason why
30 I asked the question about what is the understanding about EMAB role, because I see
31 some potential problems down the road unless they're clarified now and particularly as
32 the process proceeds, we typically do have a lot of engagement during the process
33 because members are participating. In this case, we're likely only to get periodic status
34 reports, in which case we might be very surprised by what we hear as things evolve.
35 So we might consider, and I'm not suggesting we talk about it now, but I think we could
36 perhaps talk about it tomorrow morning, tomorrow when we return, whether this might,
37 this activity might call for some more real time monitoring by EMAB, maybe not as a
38 participant on the Committee, additional EMAB members, but perhaps monitoring of
39 progress when we get more real time feedback back. Just a suggestion. Perhaps we
40 can talk about it more tomorrow.

41
42 MR. BENNETT: Okay, Jim why don't you take that under advisement
43 and we'll get back on that subject tomorrow. John.

44

1 DR. AHEARNE: It's really just following up on Ed's point. In the
2 National Academy what we frequently do, we have committees set up under a Board,
3 we will have a Board member serve as a liaison to the Committee. It is not a member
4 of the Committee so it is not someone who has the sense of equivalent member of the
5 Committee, but the role of the liaison is to make sure that the Academy Board knows
6 what's happening and is alerted if there is a problem developing. It can also reflect to
7 the Committee any concerns the Board might have. So you might consider that.

8
9 MR. BENNETT: Tom.

10
11 MR. WINSTON: I apologize if due to the lateness of the hour I'm
12 denser than the average EMAB member, but I hope I'm not the only one that doesn't
13 understand this, but is the scope of this sub Committee to evaluate the stakeholder
14 positions and make recommendations on the stakeholder interaction? Or is it to make
15 that evaluation on the alternative assessment? Or both?

16
17 MR. BEGLEY: From my reading of the charter, it is to recommend to
18 the EMAB Board certain items that from a public perspective, are appropriate to be
19 considered by the DOE in the conduct of the RDD&D program. So it's really to look
20 at the development activities that are being conducted by DOE, to provide them with
21 perspectives, insights, and concerns that might not be fully addressed in the program.
22 And so that there will be appropriate public involvement in the course of the R&D
23 program, and not wait until the end. And obviously, as we've said, any input has to
24 come through the EMAB Board before it is formally transmitted to DOE.

25
26 MR. WINSTON: If I could just maybe follow up. Is that... it's sort of
27 looking more at the process that was undertaken by this initiative, than it is with the
28 findings of this initiative? I don't know if I'm making myself clear.

29
30 MR. BEGLEY: Correct me if I'm wrong, but it's basically make sure
31 all of the appropriate considerations are being incorporated in the ongoing R&D
32 program.

33
34 MR. MELILLO: Tom, their primary task, at least as the charter reads
35 now, it's a technical group, put together intentionally that way and it so states in the
36 charter, the majority of the individuals on here are of a technical nature, although there's
37 some other mix in there as well, in order to meet some of the FACA requirements. But
38 they're meant to be the host to receive information, if you will, in terms of being able to
39 assess, evaluate those promising technologies or those that end up, I don't know how
40 low, how far down they go. That is basically it and gives us advice and
41 recommendations based on that. So I mean this is... very definitely it's on the technical
42 side. So to clarify that.

43

1 MR. BENNETT: We'll have copies of the charter tomorrow to take a
2 good look at that, and word for word. Alright, okay?
3
4 DR. ROSS: He just answered the question.
5
6 MR. BENNETT: He answered it?
7
8 DR. ROSS: Yes, if we can get copies of the charter, I think we can
9 resolve all these questions.
10
11 MR. BENNETT: We'll see that tomorrow. Diana.
12
13 MS. YUPE: I just have a quick remark. I heard, when this whole
14 issue started that the Eastern Shoshone were invited to the meeting in Jackson. Do you
15 know that? If they showed up or anything on that?
16
17 MS. CROSLAND: I do not know the answer to that one.
18
19 MS. YUPE: Okay, and I think that if there is a tribal issue that needs
20 to be addressed, I think we can probably address it. My recommendation to you would
21 be to look at the two Shoshone groups and we can try to work something out, rather
22 than taking it to a higher level, getting more conflict into it, or looking at some kind of
23 resolution of how the two tribes would work together in any kind of issue that they're
24 bringing before the Committee.
25 I know that there was some issues of tribal interest because we share
26 land, the Northern Shoshone and the Eastern Shoshone. We share the same kinds of
27 issues for that whole area, and particularly with the Northern Shoshone, having direct
28 relationship with INEEL and the Eastern Shoshone having a lot of the interest with the
29 area that's being impacted. So there may be some issues that we need to discuss, not
30 at this technical level that we're talking about, more in terms of coordinating levels.
31
32 MS. CROSLAND: I appreciate that, and I would assume that we have
33 this (unintelligible).
34
35 MR. BENNETT: What is that? Martha, we can't hear you.
36
37 MS. CROSLAND: Oh, I'm sorry. Is this not on. I would think also
38 that in addition to working with you and making sure that our Idaho site does with both
39 of you, that it would be important to have representatives from both tribes at the
40 stakeholder forum to represent that tribal perspective.
41
42 MR. BENNETT: Okay, Diana? Okay. I think we covered it, and I
43 think we're just about at that point. Let's see, Richard Borrow, when you show up at

1 this one, the punishment sometimes is that you get asked a question. Would you have
2 any comments at this stage?

3
4 MR. BORROW: Very briefly, I just wanted to thank EMAB for
5 taking up this issue. I know I've worked very closely with Jim Melillo and Ken Smith
6 to try and work out some of the details going into the development of this
7 subcommittee. I term it a subcommittee, I know you don't, but in my lexicon it is a
8 subcommittee, and I appreciate your diligence in following up on the SEAB
9 recommendations and look forward to working closely with Jim to make certain that
10 we do have closure on many of these issues, and that I have addressed all of the
11 stakeholder issues that surfaced during the SEAB. Thank you.

12
13 MR. BENNETT: Thank you. Alright, I think we've covered our
14 questions on that, thank you. At this point, we ask for public comment, so I'll open the
15 meeting to public comment, if there is anyone who would like to make a comment, ask
16 a question, please go get a hold of a microphone and give us your name and affiliation if
17 you wish. I do not have any takers, so...

18
19 MR. KUCERA: I would like to make a public comment.

20
21 MR. BENNETT: Oh.

22
23 MR. KUCERA: Because it wasn't on the agenda, and I just happened
24 to just recently even ask about it, mentioned it to Tom. USA Today called me last
25 week and asked about a major report that had just been put out by Environmental
26 Safety and Health, another division here in DOE, regarding recycled uranium is the way
27 this was put. And I think this may have some implications for EM, or I would
28 appreciate it if sometime later perhaps we could get at least two minutes or some sort
29 of written briefing from EM, whether or not there are implications of the ES&H report.

30 It's a voluminous report about reprocessed materials going to various
31 sites around the country, and the implications are number one, that there are supposedly
32 new sites in places where the recycled materials went that are not on EM's current
33 radar screen. And the second thing was that, perhaps the most troubling, is the
34 question as to whether or not at certain sites around the country, including ones where
35 we're in current remediation and near completion, such as Weldon Springs, Ohio was
36 mentioned, the question is was there adequate diligence in the characterization of those
37 sites in preparation for clean up because the site managers may not have known that
38 fission products could have been at the site?

39 Anyway, this whole issue, those two questions are opened up because
40 of this report that has come out of ES&H, and I wonder was it coordinated with EM
41 and are there any implications in the view of EM managers, for what may happen at
42 EM. And I just wanted to put that out there and I don't know if there's an answer right
43 now, that's fine, but if you just get an answer at some point, I'd appreciate it.

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Public Comment Period and Adjournment

MR. BENNETT: Well, I'm going to throw that one back to Jim as to how we get a question like that back into the system and get you a proper answer, so we'll get back to you on that.

I think we've had a busy day, a lot of media and our heads should probably be swimming, and we're probably tired. Let's take a look at tomorrow's agenda for just a moment. We start at 8:30, like you said before, 8:30 sharp. Please be ready to go ahead. We'll get a very interesting briefing, I'm sure, from Gene Schmitt on the budget, and then the very, I'm looking forward to both that and the disposition mapping, which I consider a very important tool that we've developed, and the ramifications of that, I think, will be evident.

Then whatever public comment, and then we'll get back to the discussion of the path forward again that we started at the last session, trying to resolve what the EMAB thought it should be looking at, to recommend to EM-1, and I think we're making progress on that. There's some things crystallizing out there. Clearly, there's a little more work to be done. Ken's going to give us... Ken Smith's going to give us a summary, a quick overview summary of where we are on that and we'll talk about the next steps.

We'll approve the resolutions or whatever, and then set the date for the next meeting, which just in your minds should be thinking about now. Right now I'm thinking about something like October looking at all the schedules that we have, so you might be looking at your calendars tonight and we can comment on that tomorrow.

I appreciate all of the patience and the excellent presentations, the great work that Staff has done to get us here, and the involvement of those from the DOE who are interested in the work that we're doing, and I appreciate all that help today.

Any last comment before adjourn for the day?

PARTICIPANT: Can we leave these books here?

MR. BENNETT: I believe we can. I'm going to. So, thank you very, very much.

(Whereupon, at 5:46 p.m., the hearing in the above captioned matter was adjourned, to be reconvened tomorrow morning, Wednesday, April 18, 2001, at 8:30 a.m.)

Wednesday, April 18, 2001

8:30 a.m.

Opening Remarks

DR. BODDE: Let us come to order. As the great Caesar once said, "let the games begin." A couple of announcements I want to follow up on from yesterday's meeting. We mentioned this business about the Environmental Health and

1 Safety. Please find on your desks a couple of items that deal with that. First, a report
2 of that, or a summary report of the recycled uranium. Second, the fact sheet on the
3 same sort of thing, and their web site is listed on there some place. Ron, I think we're
4 missing something.

5
6 PARTICIPANT: One sheet. Yes, we didn't get the back page.

7
8 MR. BENNETT: We'll get some more copies.

9
10 DR. BODDE: Alright, we'll make sure you do get it then. And Ron, I
11 gather you have a meeting later on to discuss this.

12
13 MR. KUCERA: Thank you very much.

14
15 DR. BODDE: Alright, so we're closed on that. Second also, please
16 find, I hope the charter for the Alternatives to Incineration Committee at your places.
17 And finally, I wanted to revisit the suggestion that John Ahearne made about the liaison
18 from this Board to the Committee, and Dr. Spencer has agreed to do that, not serve as
19 a member of the committee, but serve as a liaison to that board in the NRC 2000.
20 Thank you for that suggestion, that's a very good way, I think, to do that. Our featured
21 speaker is Mr. Gene Schmitt.

22
23 DR. AHEARNE: Is right here. He's here.

24
25 DR. BODDE: Alright, then in that case, is there anything else anybody
26 needs to say or talk about before we go on to today's agenda? If not, then our first
27 speaker is Gene. Gene, welcome to the EMAB and we're looking forward to hearing
28 the details of the budget.

29
30
31
32 **FY 2002 Overview**

33
34 MR. SCHMITT: Good morning. I understand I'm going to be
35 accompanied by a section of some of my peers. I think Jim Owendoff is here, Mark
36 Frei and perhaps Dave Huizenga. They'll be here momentarily. First of all, for those
37 who have heard this already, and I see my friends. Jim said that he heard it before. Is
38 it twice, Ed?

39
40 DR. BERKEY: It gets better the third time you hear it.

41
42 MR. SCHMITT: I don't know about that. First of all, Carolyn
43 mentioned a number of things in her talk to you yesterday about budget, and I'll do my
44 best not to be redundant. There's a few things that I'll put up. There's a few items that

1 Carolyn talked about yesterday that I'll show on the chart, but I won't go on with it,
2 because that would just be redundant on what she had to say.
3
4 DR. PAULSON: Gene, I don't believe your microphone is on.
5
6 MR. SCHMITT: Is that better? Everybody hear me now?
7
8 PARTICIPANT: No.
9
10 MR. SCHMITT: Is that any better?
11
12 PARTICIPANT: Hey! Just don't swallow it.
13
14 MR. SCHMITT: So with that premise, let me begin. As Carolyn
15 mentioned yesterday, this budget is a priority-based budget and so rather than starting
16 from last year's budget, we actually did look at it from a priority basis, without going
17 through the entire list.
18 She mentioned worker health and safety. The high risk items, what we
19 address as high risk for this budget are the three that are mentioned there, the high level
20 waste, spent nuclear fuel, nuclear materials. I'll give you some hard examples as we go
21 through.
22 She also mentioned the priorities, lots about Rocky. Also Fernald and
23 Weldon Springs are two other sites that we fully protected in the budget. And then for
24 transuranic shipments, we maintain these schedules under the budget.
25 I guess I should also quickly go through this because she touched on it.
26 Our strategies to achieve it is assigned to project management, and I know Marvin's
27 here this morning if you have questions with Jim and company, and hopefully we can
28 address those for you. Jim is the author of many of our contracts, so we've got the best
29 person to talk to us about that in a few minutes, and then continuing to work with
30 regulators and nuclear materials and long-term stewardship. I'll get into some numbers
31 on those in a minute.
32 And I'll be selective. I'm going to skip through some of the charts in
33 your packets in the interest of time, to leave some time for questions.
34 The budget, and from a historical perspective, \$5.9 billion, a couple
35 observations to be made. First of all, it is about a 5.7% reduction from last year's \$6.3.
36 However if you look at it, it is identical to the 2000 budget, and it's within the range of
37 what we've been having for five years. It was mentioned yesterday by Tom Winston, I
38 believe, that there has been some scope changes this year, so it's not a total apples to
39 apples comparison. Again, there was numbers, but they're not large in their scope in
40 terms of \$5.9 billion.
41
42 DR. AHEARNE: These are all in current dollars?
43

1 MR. SCHMITT: I believe in current dollars, so there's an inflationary
2 impact as well. The thing that I might also mention, John, from that is that how did we
3 go from you know, a numerical high number compared to last year's to when you talk
4 about some sites, how we had significant reduction, and it's really two reasons why that
5 materialized.

6 One of them was the budget, particularly last year, had an
7 extraordinarily large amount of offsets. Last year we still had things like reformed
8 pension offset, we had a recision, and the TWRS contract. We had some other in
9 costs and balances. We lost most of those offsets in the 02 budget, so that partially
10 accounts for it. And the other reason that accounts for it is the priorities which we
11 mentioned earlier, when you protect chunks of the budget, it can have a material impact
12 on the balance of the budget.

13 I think you're aware that our budget has five appropriation accounts.
14 The way I'll present this to you is I'll present it to you by the appropriation structure in
15 which the budget is actually prepared. Often there's more interest at the site and state
16 levels, so what we do here is within each of the appropriation accounts. We identify
17 the state and/or site in which the funds are located, and then attached to the briefing in
18 the back is a summation of all the sites and state data across the accounts, and you can
19 view it whichever way you prefer.

20 The only material change in the account structure from last year to this
21 year isn't in terms of the five accounts, but there's a major shift from the privatization
22 account into the defense ERWM account, and that of course has to do with the tank
23 vitrification project in Hanford last year, and of course it was a privatization contract.
24 This year it's a standard appropriation in the ERWM. Other than that, there's very little
25 shifts between the accounts, on a percentage basis, that is.

26 First I'll talk about the closure account. This of course is for Rocky
27 Flats and Fernald, where the Ohio sites are located. This account from 01 to 02 had a
28 \$30 million reduction. At Rocky Flats, we're fully funding to the baseline to maintain
29 the 2006 schedule. Also of some note in 2002, is that we believe that we're going to
30 finish the plutonium stabilization activities at Rocky. That's really crucial to getting on
31 with that site. And also the plutonium is scheduled in March 2003 to be shipped off
32 site. So 2002 is a significant milestone year at Rocky. The balance of Rocky Flats
33 clean up is largely a large D&D project, not to make light of it because it's an enormous
34 scale D&D we haven't done before, but the nature of the work will be shifting after
35 2002.

36 Then, at Fernald we've also been making good progress. The
37 landscape at Fernald, particularly, is noteworthy. In 2005 and 2006, plant 5 and plant
38 6 are going to be completed. These are major uranium processing facilities, so the
39 skyline is going to be changing at that site. And Fernald is also being fully funded.
40 What that means is there'll be some delays, perhaps, at Miamisburg and smaller sites in
41 Ohio in the budget.

42 The defense environmental restoration and waste management account.
43 This account is down about \$400 million from 01 to 02. But this is where our major
44 work is done, where our major high risk activities are done. The largest of these is the

1 clean up plant at Hanford. Our budget includes \$500 million to begin construction of
2 the facilities at that site. We believe that with the \$500 million and the monies that are
3 there we will be able to maintain schedule for an 07 start. We recognize that that will
4 require challenges in 03 and in the out years, but in and of itself, it's adequate, we
5 believe to maintain the schedule.

6 We're also at Hanford going to be pumping four additional single shell
7 tanks. After 02, that will leave, I believe, five or six tanks to be done. We hope to
8 finish that in 03 or perhaps just a little bit in 04, to finish that important safety work.
9 We're also going to be at Hanford is moving additional amounts of spent nuclear fuel
10 from the K basins, through to (unintelligible). I think it's about 20 percent of the spent
11 fuel will be shipped. We've got storage, which is another significant high risk
12 accomplishment.

13 The PFP plant, we're going to finish. I think it's 4300 liters of plutonium
14 we're going to stabilize so that all the high risk areas at Hanford, we fully funded those,
15 and are moving aggressively forward.

16 Similarly, at Savannah River, we're going to continue operation in
17 DWPF. We're also going to be operating in both canyons. We're going to be
18 processing the Richland and Rocky plutonium alloys, NO₂ and as a result of that, we'll
19 be closing the Purex section of the plant, so we'll be making progress there.

20
21 DR. BERKEY: Gene?

22
23 MR. SCHMITT: Yes.

24
25 DR. BERKEY: The way that you express the situation at the waste
26 treatment plant at Hanford, well it's clearly the Department's view. Is that also the
27 contractor's view, that the budget will not impact the schedule?

28
29 MR. SCHMITT: I can't speak for the contractor, Jim, I don't know if
30 you can add anything?

31
32 MR. OWENDOFF: Those discussions are in progress. Rest assured,
33 though, that being they are individual discussions and we will not have a sole selection, I
34 know a lot about these contracts and I don't believe there's a problem. You will always
35 get it, depending on how you ask for it. Would the contractors like to have more
36 money? Yes. Will this amount of money allow them to proceed on the path that they
37 were proceeding on? Yes. Does this slow anything up? It should not. But we'll have
38 those discussions and will be working with that, but as far as I understand there's been
39 no skies falling.

40 Now the reason that we wanted, and put the 690 in the contract is we
41 wanted to get to some flat amount. What this will mean is that there has to be then
42 another step function in the 03 budget, so that's what we were intending to include, but
43 it's a big chunk next year if we have to stay on the schedule, so that will affect that.

44

1 MR. SCHMITT: I might mention a few things at Idaho, our third
2 largest site in this budget. We will be working on the transuranic waste program. We
3 will be sending additional amounts of transuranic waste shipments, so we will meet the
4 3100 cubic meter milestone in fiscal year 02 out of Idaho, which is required under the
5 settlement we had. We'll also continue our spent nuclear fuel high level waste work at
6 this site.

7 I propose not to go through all the sites here in the interest of time, but
8 if someone has any questions on any of the sites as to what we're going to do in 02, I
9 can answer them now or when we get through this.

10
11 MR. CHURCH: While we're there, if we could go back to the closure
12 account, for Mound of course that interests me more than any of the rest.

13
14 MR. SCHMITT: It's my favorite site as well.

15
16 MR. CHURCH: Okay. You're going to go places, I can tell you. In
17 1993 Congress passed the Government Performance and Results Act, and I just want
18 to read this paragraph. "Congress provides funding to the Department of Energy for
19 the accelerated clean up and closure of the Miamisburg Environmental Management
20 Project, formerly the Mound Plant mining strip of Ohio. Congress requires that the
21 Department request adequate funding to keep the project on schedule for closure by
22 2006 or earlier."

23 With this budget that is being submitted, that takes our closure back to
24 2010.

25
26 MR. SCHMITT: I don't think we yet know what impact that's going to
27 have.

28
29 MR. CHURCH: Well, that's what our local office is telling us.

30
31 MR. SCHMITT: I'm sure that's their view.

32
33 MR. CHURCH: That's \$400 million more for the American taxpayer
34 that's being pumped into that site, where if they followed the Act passed by the
35 Congress, they should be in and out and that \$400 million could be used some other
36 places.

37
38 MR. SCHMITT: I think what we're trying to do here is we have our
39 set of priorities, so the budget will meet them, and we met those priorities, and closure
40 is a priority, and we had to make some tradeoffs with all the balances under the
41 President's budget, and it was our view that the Rocky and Fernald sites, being larger
42 sites, having more visibility, were higher up in the pecking order.

1 MR. CHURCH: Okay. I just have one other comment, and all these
2 sites need cleaned up, don't get me wrong. The Mound is the only one that has an end
3 use. Fernald, Rocky if you're going to level them, it's going to be green space.
4 Mound, we are trying to promote jobs, not only for our city, but for the state of Ohio.
5 There is an end use.

6
7 MR. SCHMITT: I understand.

8
9 MR. OWENDOFF: I trust that what we will be able to continue to do
10 is to transfer those facilities that have the highest reuse capability. There will be some
11 that in the big scheme of life (unintelligible) problems will put those later on the list.
12 (Unintelligible) to keep up with the needs of the reuse committee when they have
13 people that are there, (unintelligible) levels, checking every day (unintelligible) have
14 available (unintelligible) commitment and there will be further discussions.

15
16
17 MR. SCHMITT: Okay, on that closing note, I'm going to try to move
18 on. The next account is our non-defense account. This account consists of many
19 comparatively smaller sites. There's two things that are noteworthy in 02, and the first
20 one is the Weldon Springs facility. We plan on finishing the Weldon Springs clean up
21 during FY02, another significant accomplishment, and we will be completing the
22 vitrification operation and shut down activities at West Valley.

23 This account had, I apologize, I don't remember the exact numbers, but
24 had a slight reduction from 01. This sure was put together well.

25
26 DR. AHEARNE: Gene, when you say complete the vitrification
27 project at West Valley, does that end EM's involvement in West Valley?

28
29 MR. SCHMITT: No, the fuel is still there. We still have discussions
30 going on with the state in terms of ultimate responsibility. There's still low level waste
31 there. There is potentially more work.

32 The uranium facilities and spent radiation, this is a new account that
33 Congress established last fiscal year. What Congress did, and we've expanded on it,
34 Congress combined the D&D fund account which has been around for a long time in
35 EM with some activities which previously were managed by Nuclear Energy,
36 specifically what was transferred in 01 was the treating uranium responsibility. What
37 we've done this year is we've expanded that to include the Portsmouth operations, now
38 that USEC has decided to shut down operations at Portsmouth. So in this account,
39 and I'll go into a little more detail in the next page, are all activities related to ESIC or
40 USEC operation, rather.

41 What we did here was that in evaluating ourselves, we recognized there
42 was a new scope to the program. And the new scope needed to begin this fiscal year,
43 fiscal year 01 and continue into fiscal year 02. What we've done in fiscal year 01, we
44 sent in the programming package to Congress that will allow us to, along with the

1 turnover activities from operations to the cold standby condition. I understand the
2 administration is going to have a review, ultimately, to see what the administration wants
3 to do from a national security standpoint. Initially, we're going to put it in a cold
4 standby mode, such that if the nation does need the enrichment capacity down the road,
5 it could be brought back up.

6 So that requires some activities. The turnover also requires us to put
7 some heat in those facilities. When gaseous emission plants are operated, they generate
8 huge amounts of heat. That heat is recycled and used for the heat source for all the
9 building's operations on this site. So we're beginning those activities in this fiscal year.
10 We'll continue those in the next fiscal year.

11 For both fiscal years, we're talking about \$100 to \$125 million of
12 additional scope. What was done in this 02 budget request is we will provide \$125
13 million to cover both years' additional scope expenses. So even though our total
14 appropriation is down from 01, it was really developed in two components. It was
15 developed for the new scope component, the \$125 million that allows us to carry on
16 the new work into 02, and to pay back the sources that we were using in 01 for the
17 work in 01, and then the balance of the project was on a classic comparison from last
18 year to this year, and I know that's complicated because of the fact that we're down
19 overall, but the fact is it was viewed as two increments in developing the budget.
20

21 MR. SWINDLE: Gene, one more question. Knowing that the D&D
22 fund is actually funded through a surcharge on nuclear fuel or nuclear generated
23 electricity, can you comment on how I guess the budget is established for that D&D
24 fund relative to the availability of funds that go in? It's my understanding that there's a
25 considerable surplus in the account for the D&D, relative to what's been taken in versus
26 what's expended, and at least there has been comments in the past that if D&D funds
27 were applied to their intended purpose in an accelerated fashion, that is, it could end up
28 saving that utility rate payers a considerable amount because that fund is there to
29 decommissioning those facilities.
30

31 MR. SCHMITT: Yes, I'll talk about that in a little bit. I am very
32 familiar with what you're talking about in utilities because it just so happens there is
33 continuing litigation going on between the utilities and the Department, and I happen to
34 be going to trial next week. My past is catching up with me.

35 The budget for the D&D accounts is complicated. It is, as you say,
36 there are contributions made by the utilities every year. In addition, the Government
37 makes contributions and we usually don't get into the technicalities of it, but we budget
38 money for it and then we take it out, and then we do a third element and that is what is
39 it we're going to spend out of that account for remediation and/or D&D every year.
40 And at this point in time, the expenditures out of the D&D fund have been for
41 remediation. Clearly we haven't begun to do D&D in Portsmouth plants yet. Some at
42 the Oak Ridge facility can be classified as D&D in my judgement, and we've been using
43 that source of monies.

1 But nonetheless, the majority of the monies that have been spent out of
2 D&D funds have been for remediation. And so when we want to spend money out of
3 the D&D fund, we treat it as if it were a straight appropriation and that's the way it's
4 viewed in the discussions with the committees. So the whole thing is complicated.
5 Maybe I've complicated it more than I need to here, but it is complicated because of
6 this \$420 million appropriation we get. The Government's paying it into the fund and
7 then we get an offset of \$420 million below the line.
8

9 MR. OWENDOFF: Here's part of the problem that we have is that
10 those monies go into the accounts of the treasury, just like our taxes. The utilities get
11 the credit for it on the books, but what has to happen, we have to get the money out
12 just as if it were a new appropriation. So it counts and gets scored in this whole stuff
13 that makes my head hurt on. You hear this word scoring, which accounts how you
14 count money. In essence, it's as if it's all new money.

15 Now, there's over a billion dollars in this fund. Some folks have
16 articulated, certainly I would not be one of those, but some have suggested two things.
17 One, let's at least try for the new contributions from the utilities not to have them go into
18 the treasury, but have them come directly to DOE so that we can spend them without it
19 having to go in and get pulled back out and be scored. That's very nice except that
20 OMB doesn't like that. That's another off-budget let's say transaction. Also that
21 reduces the amount of monies coming in that are being counted just like our taxes are
22 being counted going into the treasury. That is one thing.

23 The other thing they say, well, let's take the money that's in there and
24 pull it all out and make it all available. Well, that would be like saying, alright, there will
25 be a billion dollars, that the bill or monies that would be pulled out all at once. It would
26 have to be scored and that's not going to happen. Certainly the Congressional folks
27 know and OMB administration knows that this is an opportunity or an avenue that we
28 could use to accelerate the work.

29 We've articulated for a number of years prior to this last year, if you
30 look at when we tried to get more monies for the D&D fund, it was cut on the Hill for
31 three years running. So we couldn't even get the approval for the money that we had
32 put in, you know, over those three years. This last year, the Congress looked at it and
33 they had priorities too, so just like Gene talks about our priorities this year, prior years,
34 the Congress had priorities that this fund, the D&D work, it was felt that if you look at
35 the priorities that it was the last, you know, a lower risk.

36 This past year, Congress plussed it up, and felt that more work needed
37 to be done in that area. We'd very much like to get more work done, but we can only
38 do so much.
39

40 MR. SCHMITT: Moving to the privatization account, there were some
41 questions on this account yesterday. There are six projects that we're funding, in fiscal
42 year 02. Four of them are continuation fund requirements. Two at Idaho, two at Oak
43 Ridge, and two new ones. The two at Idaho where advanced mixed waste is of some
44 note because we will be finishing construction in 02 for operations in 03. At Oak

1 Ridge, there was a question on the storage facility, and we are going to be generating
2 waste, fill, if you will, to put in the “disposal landfill”, Frank, and there's monies in the
3 boneyard account an there's also going to be material generated in the BNFL contract.

4 It is also worth noting that we never had the problem before of having a
5 disposal cell without material being identified to fill it. That's never been a problem for
6 EM. Some even suggested some of us bureaucrats from headquarters could go down
7 and fill it in. We all rejected that one.

8 There's two new privatization accounts this year. Two disposal cells,
9 one in Portsmouth and one in Paducah, so we can begin to store waste on site as well
10 as continue to ship to Nevada.

11
12 MR. WINSTON: Hey, Gene?

13
14 MR. SCHMITT: Yes.

15
16 MR. WINSTON: Can I just ask a quick question? Normally on
17 privatization, and you're talking about a physical structure at Portsmouth, there hasn't
18 even been a feasibility study or anything. It's just there's not much stakeholder support.
19 In fact, there's stakeholder opposition and we don't have state buy-in. What would you
20 envision? How would a privatization account or work for something that's just sort of
21 getting on the drawing board? As opposed to Paducah, where there's been general
22 agreement amongst everyone, there's been feasibility, and now they're ready to get into
23 the next step.

24
25 MR. SCHMITT: Jim, maybe I'll ask you to answer that.

26
27 MR. OWENDOFF: My view is that one, the privatization is a fund
28 source mechanism, so it's not a (unintelligible) or it does privatization, all of a sudden,
29 accelerate the process for the cells, that's not the case. We believe that this model that
30 worked at Oak Ridge as far as how to acquire. Now, what we felt is there was going
31 to be a push at both Portsmouth and Paducah to get on with some of the D&D work,
32 as well as soil and water clean up. And we felt that to do that, we've seen it again at
33 other sites, is once you have a disposal cell, things can accelerate very quickly.

34 But what we didn't want to be in the position of is the drive to
35 accelerate the work and then have no place to put the waste. So we're going to go
36 through the processes, the normal processes at Portsmouth. That's why you see the
37 low dollar amount, not a high dollar amount this year, but we felt that we had to get on
38 with it, and we wanted to get it so that the Congress, gave us the approval for this
39 project.

40
41 MR. SCHMITT: So that concludes going through the appropriation
42 accounts, showing where the funds are. The one thing I didn't mention that was
43 observed yesterday. In the privatization account, the total \$141 million is a significant
44 percentage increase over 01. The percentage increase is a little bit misleading because

1 01 technically shows as a negative \$32 million, and because of offsets. In actuality,
2 there was \$90 million in funding in privatization contracts. So, a \$50 million increase in
3 the account is a significant increase percentage-wise. There's a few...

4
5
6 DR. BERKEY: Gene.

7
8 MR. SCHMITT: Please.

9
10 DR. BERKEY: Gene, before you change, I noticed in the list of
11 program strategies that you have at the beginning noticeably missing in those strategies
12 is any commitment to comply with existing agreements that are present at many of the
13 sites. The closest that you come to it is the statement, "Continue to work closely with
14 regulators, stakeholders and tribal nations" How should we read that? I think there are
15 discussions at many of the sites now, about the impact of this budget on existing
16 agreements and what does it mean and so forth.

17
18 MR. SCHMITT: So you caught us. Our compliance is as always, and
19 remains a priority for the program. Having said that, given the priorities for this budget,
20 being what they are, clearly we've got compliance strategies at most of our sites. We
21 don't at all of them, but at most of our sites in this budget, we've got a challenge in front
22 of us. What we're doing is, is we've not told our regulators, yes, we need to sit down
23 at this junction. What we're doing is we're going to go through this top to bottom
24 review that Carolyn talked to you on yesterday about, and then we're going to go
25 through that. We're going to engage the regulators, the stakeholders in those
26 discussions, and then at a venue yet to be determined, and so we're going to see to
27 what extent we can define efficiencies, to the extent we can relook at our business and
28 see where we are.

29 So we're not denying that we do have significant compliance challenges
30 in many of our sites, but we're not yet given up on the prospect that by de facto we're
31 going to be out of compliance across the complex. That's going to remain to see if we
32 can be successful in this mission review that we're going to do.

33
34 MR. OWENDOFF: I think the Secretary has also, I don't know if
35 Carolyn mentioned it to you yesterday, the Secretary has also sent letters to Ms.
36 Whitman as well as the governors and asked that there be some engagement and
37 discussion, and a look at the clean up program. The Secretary wants to ensure that the
38 new administration has an understanding of the heavy dollar amount that's going to this
39 end, that the understanding of the sense of how the compliance agreements are driving
40 that. So I think as we've seen in other areas of the Government, that they want to be
41 able to understand it and to field those commitments and that's what this time's going to
42 be about for the next several months.

43

1 DR. HOOKS: Jim, thank you. However, I don't think that's
2 necessarily happening in the field. I know that we are already being engaged to
3 renegotiate agreements at this point in time, which is obviously causing much
4 consternation for folks in our regional offices. I'm not sure how this top down process
5 is going to allow, or when it's going to allow, but I do know that at least from the EPA's
6 point, at this point in time, I don't think we are interested in renegotiating any of the
7 agreements at this point until we see a little bit more about how this budget is going to
8 fall out.

9
10 MR. OWENDOFF: Well, come talk to me, or if you want to share
11 with us, which sites are saying they want to renegotiate. We have not sent any direction
12 out to the field offices that says go out and renegotiate the compliance agreements. So
13 I'd be very interested in knowing. I agree with you, it's premature to say let's
14 renegotiate. What we're trying to do is to assess what's the situation that we're in, do
15 we have from the budget standpoint, do we have the right drivers and where we'll put
16 the money and the business model that we're using to expend those dollars.

17 I think when I first came to the Department I had the good fortune of
18 going around to the site managers, engaging with the states as well as the EPA. The
19 first question that always comes up is don't be talking to us about moving dates until you
20 can demonstrate to us that you are being efficient in the Department. So that's one of
21 the other things we want to do is to look at what other kinds of requirements that we've
22 put on within DOE out to the field offices to require them to. Whether it's to perform
23 processes or procedures that if you look at places that are closing, and places where
24 there may not be a large future mission, that we're acting as if that place is going to have
25 to operate, as if we were in the production business. So that's some of the areas. But
26 please, let me know which specific sites and we'll work with those.

27
28 DR. BODDE: Gene, I wonder if you could wrap it up kind of quickly.
29 I'm a little concerned we're getting behind our schedule.

30
31 MR. SCHMITT: Yes, fine. Let me just show maybe one more chart.

32
33
34 DR. BODDE: Fine, thank you.

35
36 MR. SCHMITT: And that would be on science and technology. I
37 won't go through the details with you, but as you know we have had a reduction in this
38 account, I know there's some interest in the committees on this. \$196 million requested
39 in year 02 budget; that is a reduction from about \$250 million in 01. What we've been
40 doing is we've been obviously been needing to focus our activities. In general what
41 we're doing is science and tech will be continuing all the ongoing research and science
42 effort. We will be curtailing to a very limited amount, new initiatives as a result of this.
43 But we're not going to have to discontinue the focus area activities, so those will be
44 continuing.

1 Maybe I'll just end there and ask if there are any other question.
2
3 DR. BODDE: Okay, well thank you very much, Gene. We appreciate
4 all the time. Todd, did you have a question?
5
6 MR. MARTIN: Yes, just a real quick one, and Gene it's actually on
7 the two slides you skipped, the two major accomplishments. I mean I understand you
8 have to prioritize what gets on here, but this kind of straddles 2000 and 2001.
9 Essentially at the Hanford Waste Treatment Plant you had a contract, a contracting
10 mechanism, and a contractor basically fall apart right before your eyes on a very large
11 contract, and DOE's ability to pick up those pieces and keep some semblance of the
12 project on track, and issue a contract before the end of the fiscal year and keep moving
13 forward, in what I think the normal DOE world would have been a three to five year
14 "let's twiddle our thumbs to figure out what to do." I think you ought to be taking credit
15 for that.
16
17 MR. SCHMITT: Well, thank you.
18
19 MR. ROSS: I'm going to a slide you didn't show us on WIPP, and I
20 won't have you pull it up, it just says that we're going from 58 shipments approximately
21 last year, to 381, which I think is kind of a squishy number, to 683, yet you're cutting
22 the budget between 14 and some unknown percentage for transportation and
23 packaging. I'm just wondering how are you going to balance that? That's a key.
24
25 MR. SCHMITT: Well, I understand it's a key. You know, as Carolyn
26 mentioned yesterday and I didn't repeat it, but you know the Secretary has challenged
27 us to a five to ten percent efficiency across the board. It's a Carlsbad reduction.
28 Certainly the challenges will be greater than that. And so we're going to have to be
29 looking at the whole scope of activities in the Carlsbad office and then see what we can
30 do. We're committed to making those shipments. We recognize the budget is really
31 tight, particularly at Carlsbad.
32
33 MR. ROSS: Yes, it is and you know that's the thing that kind of
34 concerned us because that's the one operation that's really tooling up and trying to get
35 down the upwards side of the slope, and it's budget driven now, and the costs of new
36 troop action, the costs of transportation. You know, we've held those pretty stable on a
37 per unit basis, but it just didn't match.
38
39 MR. SCHMITT: Dave, you want to add anything?
40
41 MR. HUIZENGA: I don't think there's more to add right now. We're
42 working with Inez and his people out there, you know, and it's a tough challenge and
43 we're going to try to do our best to meet it. If there are things that come up in the
44

1 course of the next month or so reviewing these issues, things that we can't do, then we'll
2 have to try to face the music at that time. But right now we're working closely with her
3 to try to really understand exactly where we're spending all the money and to make
4 sure we've got the proper focus.

5
6 MR. ROSS: Okay, because those are fixed cost contracts with fixed
7 prices. That's why we were wondering.

8
9 DR. BODDE: Okay, let's take Kathryn and then Frank to close it out
10 and that will be it. Then we'll move on.

11
12 MS. CRANDALL: My question is about sort of general process with
13 this budget and public participation, stakeholder involvement. You noted the letter that
14 was sent to the EPA and to the governors, but as Diana noted yesterday, it doesn't
15 mean anything similar was sent to the tribes, and I don't know what you've been doing
16 to communicate with the Site-specific Advisory Boards and other citizens and certainly
17 from those of us who live inside the Beltway, the budget roll out was quite different this
18 year than in past years. I think that you're aware that you need to have sort of an
19 awareness and a buy-in of what's going on at the site-specific level. What are you
20 doing to get that?

21
22 MR. SCHMITT: Actually, we haven't deviated as much as it appears
23 from our past practices here. What has changed more than anything else is the
24 uniqueness of this year's budget, the way it was developed with the election that
25 transpired. So for the 02 budget, we did, of course, engage the stakeholders locally
26 and to some extent, nationally, you know, during that normal time which is January,
27 February through the spring months. That's been a year ago, okay, and the normal
28 cycle is once we submit our budget into the Secretary it then becomes an internal
29 discussions until the President rolls it out. Normally that's in January or the first week in
30 February. This year, it was two months later, so it certainly appears as if it were later,
31 but in fact the same process was followed.

32 In terms of the roll out here at headquarters, you know there was this
33 Secretary's preference to do it the way he chose to do it, and there's no decision that
34 well, we're not going to share this with stakeholders, it was just his mode of operating, if
35 you will. We have told the sites that because of the delay now in issuing the 2002, that
36 the 2003 discussions they've had with the state, with the locals, that they needed to
37 reengage the local communities and local stakeholders prior to their now delayed
38 submission that they're going to give us in May on their 03 requests.

39 So I know a number of the sites have already briefed their local
40 advisory boards, and have had other stakeholder meetings to explain the budget, and
41 others have plans to do so. So we're not trying to change our policy and approach to
42 it, it's just the calendar year is different this year. So, it gives the appearance of being
43 different, but we haven't consciously or otherwise tried to change that.

44

1 DR. BODDE: Frank, a last word.

2

3 DR. PARKER: Yesterday we heard how good the science programs
4 are and all the nice things that are happening as a result of the science program. Do
5 you know the future cost of again, improvement efficiencies and new technologies and
6 the with the budget being cut, it doesn't seem possible that we would be able to achieve
7 those kind of (unintelligible) efficiencies (unintelligible).

8

9 MR. SCHMITT: Well, again, as Carolyn said yesterday, we would
10 have liked to have more funds in the science and technology budget than we have, but
11 you know, the world doesn't come to an end here. As we do finish the activities and
12 the science and the research projects we're doing, we will be able to initiate new
13 projects, so it's not like we're never going to be able to initiate new and expand. But
14 clearly the pace of new projects is going to be deferred some.

15

16 MR. OWENDOFF: But I think also on that, that look in the money
17 that's in the focus areas and the money that's in the science, and what we tried to do
18 was look at some other areas, not in the focus areas of the science programs
19 (unintelligible).

20

21 DR. BODDE: Gene, thank you very much. We appreciate, as always,
22 your attendance and your words.

23

24 MR. SCHMITT: You're welcome and good luck.

25

26 DR. BODDE: Before we get to our next agenda item, I just want to
27 recognize the presence of two people who need no introduction, Jim Owendoff, of
28 course who has joined us, and Dave Huizenga, and we appreciate both of your being
29 here, and welcome to the EMAB.

30

31 MR. HUIZENGA: Thank you.

32

33 **Disposition Mapping Briefing**

34

35 DR. BODDE: The next presentation is Dr. Linda McCoy from
36 INEEL, and she's going to be briefing us on a management tool that I think you'll find
37 quite interesting. It's a technique for allowing essentially a complex-wide overview of
38 what is going on, of choke points, of needs technology, needs for regulatory approval
39 clearances, things like that. Our TD&T Committee has been briefed on this a number
40 of times and found it a very useful thing and thought that the entire Board should hear it,
41 so we now have the ability of doing that. So, Linda over to you.

42

43 DR. McCOY: Actually, I'm just going to make the introduction for
44 what's going to turn out to be a tag team presentation. One of the things I've learned

1 over the years is it's always smarter to let the people who are really doing the work to
2 do most of the talking. So with that said, as was said, my name is Linda McCoy. My
3 actual job is I'm the Assistant Manager for Research and Development in INEEL
4 Operations, which is the part of DOE that is responsible for running the Idaho National
5 Engineering and Environmental Laboratory. And really, I'm just going to take a couple
6 of minutes to introduce you to the concept of EM integration and disposition.

7 This is a process that really began almost five or six years ago, and
8 about five years ago we were in the process of EM sort of becoming responsible for
9 the INEEL. Previously, it had been a couple of other parts of DOE that did that. And
10 as part of beginning to sort of learn that more formal relationship, a discussion went on
11 with the then Assistant Secretary and staff at DOE-Idaho and the INEEL on some of
12 the things that we could do now that we were certain partners.

13 One of the first ideas that came up, was when Dr. Alm asked some
14 staff at INEEL to lead in a sort of a private type EM integration project. The idea of
15 the initial integration project was to look at life cycles for EM across the EM complex.
16 So what that really meant, and I think you're going to see how this rolls out in a couple
17 of minutes, is that we put some staff together, initially from a few of the sites, and began
18 to do things like take all the site treatment plans, all the site milestone schedules, all the
19 different things that everybody's doing across the complex that should be in here or
20 should be in there, sending stuff to WIPP, and stack them all up on top of each other,
21 to look at them all in one integrated fashion.

22 And basically, we looked for three kinds of things. Where are here are
23 efficiencies, where can you get efficiencies, and where are there overlaps? You know,
24 where are we doing something several times that maybe we only need to do once?
25 And then, where do we have gaps?

26 The interplay and those kinds of findings were developed into the tool
27 that you're going to see in a minute, and that's called disposition mapping, and it's really
28 sort of a graphical way of looking at those sorts of things, how the different sites interact
29 with each other, and where you have potential for overlaps or gaps.

30 This started out small, between three or four contractors over the last
31 five years, and has grown into a very major effort, encompassing folks from all of the
32 major EM sites, both contractors and federal staff. It's still led by the INEEL under the
33 overall leadership of Deputy Assistant Secretary Huizenga, sitting over here to my left,
34 and he is quite keen, both at headquarters and in the field and with contractor folks who
35 sort of work on this.

36 I think the reason we wanted to talk about this today is just to advise
37 you that a lot of work has been done. The working staff, when we were talking about
38 this presentation, said, "Gee, Linda, disposition maps are the way the complex is now
39 doing business." And I think that that's true, particularly in the waste management area.
40 I think we have almost all the waste streams in the Department pretty well mapped out
41 now, maybe with a couple exceptions. And we have some good ideas for the other
42 parts of EM for what we're doing, but the knowledge of what's been done, and the
43 level of analysis that's been done, hasn't always seem to go up to where it's visible to
44 folks, which is what we'd like to start working on today.

1 The other thing we'd just like to talk about a little bit is the sorts of
2 things you can do with this information once you have it, and in the role of Idaho and
3 INEEL as sort of EM's lead laboratory, one of the things we've been looking at is how
4 do you take this information and how do you make decisions, particularly relative to
5 your research and development program. And I think what you're going to see in a
6 minute when Paul starts to talk, is that you can sort of get around some of the criticisms
7 that the R&D program has had over the years by using the information in disposition
8 maps to make sure that your research and development program is very tightly linked to
9 EM needs.

10 And we're working on two in Idaho called the R&D master plan, that
11 basically allows you to pick any part of the research program that we're doing at
12 INEEL and roll it back to an identified need in EM. And you can do that not only with
13 what research you're doing, but what the priority is or some identification of when you
14 need it. You know, to meet a need for high level waste in 2007, or whatever.

15 So, I guess I really would just like to leave you with two ideas. I think
16 we anticipated that this is an interactive presentation, so if something doesn't make
17 sense, or if I say something dumb or bureaucratic, or Paul says something that's too
18 high falootin', you should stop us and say, "Wait a minute. What are you talking
19 about?" But I'd just really like to leave you with two ideas.

20 There has been a lot of analysis done by a lot of people, and that data
21 is all available to look at and use if that's what you're interested in. And that you really
22 can use this type of data to make really good decisions about how you're going to
23 prioritize your money, particularly for research and development in these times we were
24 just talking about, when the money's very tight.

25 And with that, I'd like to introduce someone who I think is familiar to
26 some of you as well. Dr. Paul Kearns is the Associate Laboratory Director for
27 Environmental Technology and Engineering at INEEL, and Paul's the person who's
28 actually in charge of all the scientists and engineers who are actually doing this in
29 INEEL. I'd like to pass it over to him and let him talk about it.

30
31 DR. KEARNS: Okay, thank you. Can everybody hear me? Sounds
32 like it's working, great. Well, good morning. I appreciate your time and attention. I
33 think Dr. McCoy provided an excellent overview and we can begin right away. I think
34 one of the things that we're excited about as part of the new management team at
35 INEEL is being designated the EM lead laboratory as a part of the family of EM
36 laboratories. We've studied and considered how we might provide additional value,
37 not just to the problems we're working at INEEL, but across the complex.

38 In walking through today's presentation, we're trying to emphasize that
39 we do have a number of tools that, through investments made by the Department, we
40 think have excellent utility across the complex. Another thing that we're trying to show
41 is that if we're going to take a tool or an idea to Savannah River and suggest they use it
42 as a way to save some money, or to save some time, that we really ought to have a
43 proven tool and we ought to be willing to do it to ourselves first.

1 And so today's presentation will show you how we've taken the tools
2 developed through the complex-wide integration activity, the disposition maps that have
3 been mentioned a couple of times through this meeting, and really study them, consider
4 how to gain value from them, and are looking for a faster, more efficient ways to do
5 things at INEEL.

6 So, please, as Linda suggested as well, stop and interrupt when
7 appropriate, when you've got a question or when we're not being clear in what we're
8 communicating. So feel free to do that. Yes?

9
10 DR. AHEARNE: Are you going to give us copies of what you are
11 presenting?

12
13 DR. KEARNS: We had copies back on the table. I'm afraid they're all
14 gone, so we'll have to get additional copies out.

15
16 MR. HERZOG: If you leave your business cards on the back table,
17 we'll take those business cards, or give INEEL a phone call with your name and
18 address.

19
20 DR. BODDE: The Board will handle it.

21
22 DR. KEARNS: The Board will handle getting additional copies out to
23 everyone. Great. Let me introduce Jim Herzog. He's here with me. He's our
24 Department Manager for what we call Integration of Science and Technology at the
25 INEEL. Jim's got quite a passion, if you will, for technology deployments and making
26 sure that we've got an active interface between our R&D community and the clean up
27 responsibilities we have on site. He'll be helping me throughout the presentation.
28 We've practiced this a few times, actually, done it live a couple of times, where we kind
29 of hand it off back and forth, and it works very well. So he provides a little bit more of
30 the technical detail, and I provide a little bit more of the management perspective. So,
31 Jim, glad to have you here.

32
33 MR. HERZOG: He brought me to page up and page down.

34
35 DR. KEARNS: Let's take the first slide here, please. One of the
36 things that we wanted to do also in preparing this presentation was to respond to some
37 of the concerns raised through the Incinerating Cash report. I think Dr. Berkey
38 mentioned this yesterday as well. We've got three quotes from the report here that
39 really kind of set the tone for something that wasn't very well received at the INEEL.
40 We think we've got some good stories to tell and would like to do that here this
41 morning.

42 We are responsible for carrying out our environmental clean up
43 operations at the INEEL. We're going to show another slide here too that indicates the
44 scope of those. We also take the responsibility very seriously to reduce the cost of

1 what we're about and doing business at the INEEL. We're very serious about applying
2 science and technology to the problems that we have, and our management
3 responsibilities there. And we're certainly about applying new clean up technologies as
4 we're going to show you this morning.

5 The INEEL, just a quick refresher here, is located in southeastern
6 Idaho. It's 890 square miles, not quite the size of the state of Rhode Island. It's got a
7 long history, began in 1940 as a naval gunnery range and I think many of you are aware
8 of the fact that in 1950 it became the National Reactor Testing Station, and in 1974, the
9 National Engineering Laboratory. We've had 52 reactors on site, the majority of those,
10 large majority of those have been decommissioned and removed. In 1997, we were
11 designated as the National Engineering and Environmental Laboratory. There were
12 two follow-on designations followed that announcement.

13 As the National Environmental and Engineering and Environmental
14 Laboratory, one is we were designated as the Lead Laboratory for Nuclear Energy by
15 the Office of Nuclear Energy in 1999. Great history with it there again, through the
16 development of direct technology in the United States, and also in year 2000 we were
17 designated the Environmental Management Lead Laboratory, which we'll talk about a
18 little bit here.

19 As DOE's EM laboratory, we're one of the four laboratories that DOE
20 has responsibility for. We have been designated, in addition to that, as I said, the Lead
21 Laboratory for EM. The photo insert here shows Carolyn Huntoon there in the middle,
22 signing the charter for the EM Lead Laboratory, along with Beverly Cook who's the
23 manager of the Idaho Operations Office, and Dr. Bill Ship who's the Laboratory
24 Director at INEEL. It was signed last June of 2000 at our on-site review after much
25 discussion as to what the value might be in designating a Lead Laboratory across the
26 EM.

27 Already our obligations, our responsibilities are for both complex-wide
28 collaborations, lead science and technology and development for long term
29 environmental stewardship as mentioned here as well. Championing complex-wide
30 integration of planning and managing a number of assigned national programs. A
31 couple of focus areas, for example. The National Spent Fuel Program is also managed
32 through the Idaho activity.

33 The challenges at INEEL in terms of our clean up mission are
34 significant. They are, as Gene mentioned, I think we're the third largest site in terms of
35 obligation, also in terms of size that EM has responsibility for. We've got 1.2 million
36 gallons of liquid radioactive waste about 400 feet above the Snake River aquifer.
37 We're concerned about that. We need to find a path forward at the high level. An EIS
38 is being prepared for the high level waste options there. We hope to see that finalized
39 and issued here in the next few months.

40 We also have a large percentage of DOE's spent nuclear fuel on site.
41 We've got SQEs. Many of you know DOE's got a great variety of different types of
42 spent fuel, the majority of those reside at the INEEL. We have an obligation, really, to
43 safely manage those and also to prepare them for eventual transport to the repository.

44 We also have a large percentage in storage of buried transuranic waste

1 across the complex present at the radioactive waste management complex. We call it
2 the SDA or the subsurface disposal area. There's an
3 88 acre burial ground there and we're looking for a path forward on it, to try to
4 understand sufficiently from a scientific standpoint to really recommend what is a proper
5 path forward. There's a set of RFAs being prepared to be issued next March in terms
6 of options there for what we call Lag 7, steering group 7, the subsurface disposal area.

7 Like many of the other DOE sites, we've had an AG infrastructure that
8 really does require quite a bit of investment to keep safe and also to allow us to
9 operate.

10 Compliance, and accomplishing compliance with level funding This
11 slide was prepared before the budget was rolled out, obviously. And insuring critical
12 science and technology support speaks to our enduring mission there.

13 We look at the EM clean up stewardship mission, really in four
14 separate segments at the INEEL. This is part of the work we've done in a complex-
15 wide integration activity. One is to establish a baseline and understand a problem well
16 enough so that we could chart a baseline, and that includes a path forward in terms of
17 how we're going to process or treat that waste and also a disposal path.

18 As far as that, we identified barriers and needs. Where we have a
19 question mark in terms of our understanding of the problem or our understanding the
20 scope of the problem, or perhaps we don't have the technology to treat a particular
21 type of waste. So this is a particularly important aspect of what we're up to.

22 And we also need to develop and analyze solutions to select the path
23 forward, assuming we've got some options in terms of how we address those barrier
24 needs that we've identified.

25 And the final step, then, is to insert those solutions into that executable
26 baseline. And the puzzle piece here represents, if you will, a critical activity that's part
27 of the baseline that we don't have enough certainty in terms of our understanding that
28 would enable us to move forward. It might be a characterization technology, it might be
29 a treatment technology, it might be a real problem that we don't understand. Perhaps,
30 waste aging or how they decay or change over time. So that might be an example.

31 This graphic is also particularly important for the discussion on
32 disposition maps which we're going to get right into in terms of establishing the baseline,
33 identifying needs, the barriers and the needs, in the utility of the disposition maps that
34 have been prepared. Move into that, Jim.

35 Here's an example of a disposition map, actually from Portsmouth.
36 Mixed, low-level waste is the topic here. Disposition maps have been prepared for
37 each site, for several different waste streams, things like high level waste, spent fuel,
38 TRU transuranic waste. There are actually over 500 different disposition maps that
39 have been prepared over the last three years, as Linda has suggested. The information
40 included on the map identifies the material, the waste stream, if you will on what would
41 be your left, also includes how the material is going to be processed, what the treatment
42 steps are and eventually how that material is disposed and the disposal site.

43 On this part of the map, I don't know how much detail you guys can
44 actually read. For those of you who have a copy of the presentation, it's also a

1 challenge. But we also have listed on the map, the inventory for each waste stream, so
2 the numbers here on the chart show the inventory. It's important to note that we have
3 inventory updates every year, and so we started with what we knew in terms of the
4 original information, and then as the map, as IPABS actually is updated, the corporate
5 data base here is updated, the inventory is also updated as we begin to understand the
6 problem a little bit more.

7 The maps have a tracking system, if you will. The colors green, yellow,
8 and red, indicate our confidence and our certainty in being able to move forward.
9 Green means everything's good, the system's go, and we understand the problem.
10 We've got the technology in hand to process the material and we've got a defined
11 disposal pathway. Yellow indicates that we're not so certain. There may be some
12 areas that we think we understand. We're not quite there in terms of our knowledge
13 base. Red indicates that it's a real barrier for us. We don't have a defined problem set
14 yet, or we don't have technology to enable us to process or treat that waste.

15 We've got examples here of all of this on this disposition map from
16 Portsmouth. It's important to note in this case, where we talk about the types of solids
17 and liquids, and several liquids, and incinerable liquids from Portsmouth. Yellow here
18 indicates we've got a question on the scope of the problem. The red here indicates that
19 we've got a technology barrier for mixed wastes and mixed wastes of solid residuals, so
20 there's quite a bit of information represented here.

21 It's important to not only have the map, but to really understand what's
22 behind it. It's a great way to visualize and graphically represent what it is that you've
23 got in the way of a disposition pathway for each of the waste streams. It's also
24 important to note, this is a tool. It really is a nice communication tool to start with, with
25 regulators for example. That's how they've been programmed for use at INEEL to
26 bring it along with some other technology, in identifying some of the technology barriers
27 which we'll get to as an example.

28
29 MR. HERZOG: If I might, Paul? It's important to note that there are
30 really three kinds of barriers. Paul mentioned you can have a green, which means
31 everything's ok, all systems are go, everybody understands the waste disposition path
32 and it looks fully able to be accomplished. But you can have a technically-based issue
33 or barrier; you can have a non-technical issue, so you could have, as Paul alluded to,
34 scope or a regulatory issue or barrier, and that can be a yellow or red. Yellow, we're
35 not quite sure, red we know we've got a problem there; you can also have a site
36 interdependency barrier, where one site is trying to shift waste to another site as shown
37 here.

38 Portsmouth is planning to shift waste to TSCA. In some cases a site
39 might be planning to shift waste to another location, and the other location may not be
40 fully able to take that waste. There are situations where there are waste streams, for
41 example, that were targeted to come to Idaho and be processed in the WERF
42 incinerator. I apologize for the acronyms, stands for Waste Experimental Reduction
43 Facility, but it was a very small incinerator that we had in Idaho and that incinerator has
44 ceased functioning, so there's some sites that thought they were going to send some

1 waste there for disposal, that is an example of a site interdependency difficulty issue or
2 barrier. So there's three kinds technical, regulatory, or work scope and so forth, and
3 then site interdependencies.
4

5 DR. KEARNS: Thanks, Jim. And actually, I wanted to point out the
6 WERF incinerator Jim had mentioned is shown here as one of the disposition pathways
7 for mixed waste from Portsmouth, so it's important to note that these maps do need to
8 be updated periodically. There's an annual process that allows us to do that.

9 Another example of a map. This is actually Argonne East, and you can
10 see in this graphic, the different color codes represent the different sites, different DOE
11 offices, if you will. Purple here represents responsibility of the Chicago operations
12 office. The Argonne National Laboratory comes under the Chicago umbrella in terms of
13 management authority and this is again the mixed low level waste disposition map. The
14 highlight here is to show that again, the site interconnection here between the waste at
15 Argonne and eventual disposal at the Hanford disposal cell.

16 And we've got a variety of colors here, indicating again that we've got
17 some challenges in some areas, and also some information needs that also need to be
18 taken care of.

19 Red light barrier analysis is underway for FY 2000. It's important to
20 note that we're working with a basically dated, it's a few months old now, that the
21 IPABS, the corporate data set that's used to generate this information, these disposition
22 maps is in the process of being updated right now for 2001, so the red light analysis or
23 barrier analysis I'll be talking about briefly here, really represents data that was entered
24 in this system last year. So there have been some changes, as we pointed out.

25 Two types of barriers are identified on the map, as Jim has highlighted.
26 Technological, and those really go back into the operator. The Office of Science and
27 Technology looks at in terms of identification of the site technology coordinating group
28 needs, for example, and addressed through the focus areas or through EMSP or
29 through ASTD, many of the programs that Gerald Boyd and his team looked at
30 yesterday afternoon.

31 There are also non-technology issues that are identified, and those
32 really fall to Dave Huizenga's responsibility in the Office of Integration and Disposition.
33 These are things that require site and national level resolution. It really is the utility here.
34 The complex-wide integration activity.

35 Analysis in 2000 indicates that we've got 116 streams that have been
36 identified with red technology lights, problems where we don't understand enough, we
37 don't have the correct technology to really say the disposition pathway is going to allow
38 us to get us where we need to be.

39 We've got 204 with red non-technology barriers, which again are the
40 kinds of things that we would hope that the Integration and Disposition Office at
41 Headquarters would wrestle to the ground and resolve. And we've got 66 barriers
42 there, red lights that show overlap, either or both, actually, they are technology
43 challenges as well as integration issues across the complex.

1 A complex-wide integration disposition activity, as Linda said, has been
2 underway for about five years. It is a very active program across the complex, with
3 great participation by the contractors in this group; it wouldn't work otherwise. Great
4 ownership by headquarters on the activity. The vision in that group, really, in
5 addressing those cross-complex questions or challenges is to achieve a forward-
6 looking, system-wide understanding of the disposition needs to assure appropriate
7 infrastructure facilities, technologies and capabilities to really allow us to achieve those
8 disposition paths that have been identified.

9 We have to talk a little bit about some of the achievements of the
10 program, collaborations, really, to remove the barriers that had been identified and
11 mentioned there, about 204 red lights that fall under this category in the FY2000 maps.

12 Three accomplishments to speak to. First one is identify disposition
13 paths for orphan nuclear materials from Mound, Fernald, and Rocky Flats. This is
14 great news and we've taken a look at non-actinide isotopes in some of the sealed
15 sources and have been able, actually to find a path forward for their movement from
16 those sites so they can stay on track in terms of their closure activities, their closure
17 goals.

18 Second item is consolidation of transuranic waste from small sites to
19 larger sites to allow site closure. Again, the challenge here is to understand the problem
20 initially. We identified four sites: Columbus, Mound, University of Missouri, and I
21 forget the fourth one right now. We've identified those four and it turns out that by
22 moving that waste from those four closure sites to other sites, you can save about \$44
23 million by not having to create the infrastructure to certify and prepare that material to
24 shipment to WIPP at the smaller sites, so that's a real cost savings by achieving some
25 integration that you can realize. We thought that was particularly noteworthy.

26 The last activity I wanted to talk about was the first national schedule
27 for shipping high level waste and spent fuel to the repository. This is a further out
28 activity, of course, but if you look at the problem right now in terms of moving the fuel
29 and the high level waste that DOE is responsible for to a repository, you've got a real
30 problem in terms of the number of transportation containers that you'd need and the
31 time available to move that material. The time in which EM wants to meet all the
32 compliance requirements is pretty short, and so what the program did was actually look
33 at the problem across the complex, and came up with an integrated schedule that really
34 minimizes the number of containers you need, and also the amount of material on the
35 highway at any given time.

36
37 DR. AHEARNE: Two questions. First, what are you closing at the
38 University of Missouri?

39
40 DR. KEARNS: I believe that's a research reactor.

41
42 DR. AHEARNE: You're closing?
43

1 MR. HUIZENGA: No, no. They're not closing it. There are seven
2 drums of transuranic waste there that were generated from a previous DOE supported
3 activity, and we're trying to get it out of there.
4

5 DR. AHEARNE: There are a number of people who really would get
6 excited if the words were you were closing the University of Missouri research reactor.
7

8
9 MR. HUIZENGA: No, we're not. We didn't mean to scare you on
10 that.
11

12 DR. AHEARNE: And the second, you have the first national schedule
13 for shipping to a repository. When does this schedule start?
14

15 MR. HUIZENGA: It's going to be integrated no matter when it starts.
16
17

18 DR. AHEARNE: But you already have a schedule. You have a date.
19 When does it start?
20

21 DR. KEARNS: No, we don't have a calendar date.
22

23 MR. ROSS: You have a repository.
24

25 MR. HUIZENGA: No, I think actually it's a good question when it
26 starts, but independently of when it starts, the thing that was interesting with the analysis
27 was that people were assuming shipping rates to the repository, whenever it starts, that
28 were inconsistent with what the repository was planning on being able to handle. So it
29 really has implications ultimately for how much lag storage the Hanford people need to
30 build in, and/or the Savannah River people, relative to how much is going to be on site
31 wherever the repository is. So I think it was just another example of making sure the
32 right and the left hand know what's going on, and they didn't.
33
34

35 DR. BODDE: Let me suggest this. Let's get through the briefing and
36 then open it up, and once we're through this technical briefing, I want to ask Dave
37 Huizenga to comment on this from a management perspective, and then we'll get into
38 the general discussion.
39

40 DR. KEARNS: Okay. Now we're going to take another look at this
41 chart. Again I've said that before we take something out and suggest it be used across
42 the complex, or at other sites, we want to apply it first at home, at INEEL to make sure
43 that it's got great utility. We're going to look at this again, this process establishing the
44 baseline and identifying the barriers and needs and developing, analyzing solutions,

1 selecting that path forward and then inserting solutions in that executable baseline from
2 an INEEL perspective.

3 Establish a baseline. One of the new activities that INEEL in the last
4 year and a half, since we've had the new management contract there, has been the
5 really concentrated effort to look at the baseline at Idaho and develop what we call a
6 detailed work plan. It really summarizes the work scope to be completed in the next
7 year, and in the process of taking the long term look in terms of that detail planning
8 that's been underway.

9 We've only done this once but it's a real success. Again, I think in
10 terms of communication and being able to communicate our understanding of a path
11 forward.

12 Identifying needs and barriers. Technology road maps have become a
13 regular way of doing business at the INEEL, since we've been there, again, about a
14 year and a half, we developed science and technology road maps for a number of the
15 very difficult challenging problems we have on site. For example, the high level waste
16 issue, we developed this science and technology road map to show the path forward on
17 both the calcine waste and also the sodium/barium waste, which is the liquid waste that
18 remains to be treated in INEEL.

19 We also developed a road map for what we call the voluntary consent
20 order. I think Jim's got an example of that. The voluntary consent order is our way of
21 dealing with a number of miscellaneous tanks that we have at the site, about 600 now.
22 Rather than continue to debate the issue with the state, we entered into a voluntary
23 consent order in terms of how we characterize and eventually treat that material in those
24 tanks. So this really allows us to define the scientific and technical path forward for the
25 600-some odd miscellaneous tanks we have entered into the voluntary consent order
26 on.

27 They have become a regular way of doing business at the INEEL; a
28 very useful tool. One of our challenges, I think in the science and technology
29 community, is to truly accelerate our work so that it's got value in a timely way to the
30 EM program and we found that the science and technology road map is a key way to
31 do that, by engaging the problem holder, the people responsible for the clean up
32 activity, along with the scientists in developing that road map. So that's really key to
33 that integration step.

34
35 MR. HUIZENGA: Paul, if I might add, with the voluntary compliance
36 that working group in Idaho started, their detail work plan, they knew they had a
37 problem. They did not know how to inspect and characterize what we call small
38 volume tanks. We have about 800 to 850 tanks on our site that are less than 5000
39 gallons, some were characterized, some were not. And as soon as they started the
40 work plan process, they engaged the research and development community to help
41 them identify techniques for inspecting and characterizing small volume tanks and the
42 piping systems that come to and from those tanks. So you've got situations where
43 you've got one and two and three inch piping systems coming to a tank, for example,
44 that's 500 gallons. How do you tell what's in that tank? How do you tell what was in

1 the piping system going to and from those tanks? And so to try to get those guys some
2 support, we did the road map to identify a variety of different technology options for
3 doing tank inspections, and that was then used to finish up their detailed work plan.
4 And that's the report that's coming around to you right now.

5
6 DR. KEARNS: As part of development of the detailed work plan,
7 short and long term problems are identified and documented in the detailed work plan
8 process. This is another change that we feel very good about. Before, the science and
9 technology needs were kind of an afterthought. Once you had done your planning,
10 once you had developed your baseline, then you'd begin to understand where the
11 questions are once you've issued that baseline.

12 What we've done is actually required, through a change in the policy
13 and procedure at the INEEL, consideration of science and technology needs as part of
14 the development of that baseline activity, and it's all documented in this one document
15 called the detailed work plan, which is a real break through for us, because again, it's
16 got the problem holder engaged in that conversation, and actually preparing that
17 material for the detailed work plan.

18 We have identified over 200 needs at the INEEL which have to be
19 addressed through science and technology improvements. It's also important to note
20 that once a detailed work plan is completed, and information is entered into the IPABS
21 system, the appropriate data system here that EM uses to manage its activities and the
22 disposition maps are actually generated through the information into the IPABS data, so
23 it's an integrated system, trying to communicate here.

24 Were going to walk through here now an example of how we use the
25 TRU disposition maps at the INEEL to address a need to address one of those red
26 lights that shows up. That's a little bigger version of the disposition map. I'm sorry, you
27 probably can't really see it, but this is transuranic waste disposition at the INEEL, the
28 top part of the chart is contact handle transuranic waste, the bottom part is remote
29 handle transuranic waste. The top part, the eventual outcome is really a contact handle.
30 It's really getting a lot of focus right now in terms of the 3100 cubic meters project
31 where by June of 2002, we're going to ship 3100 cubic meters of transuranic waste to
32 WIPP. We're going to beat that. We've got some issues, certainly, associated with
33 that.

34 This morning I wanted to focus an example on remote handling
35 components.

36
37 MR. HUIZENGA: Paul, can you indulge me for a minute? I got
38 paged, Dr. Huntoon wants something. I'm going to have to leave in a second, but I
39 wanted to say some good things about you, so if you give me a chance here, maybe I
40 could interject.

41 This effort really has been extremely valuable to us. As you can
42 imagine, the trick, really, in a six billion dollar a year effort is to try to really keep track
43 of things, and this is a tool that has helped us get focused, so I want to thank the people
44 at Idaho for working on Al's vision and initiative. I think that Gerald and I were joking

1 a little bit about this. This is something that even Clyde had started out with some years
2 ago, and of course Greg Frandsen did a super job of really heading it up for a long
3 time. So I want to thank key people for what they've done.

4 It's matured in the waste management area for a lot of the waste
5 streams and so we're able to really use the tool to understand the problem areas,
6 understand partnerships with Gerald Boyd's activities in the Science Office, and we
7 tried to get the maps up to a similar level of maturity in the nuclear materials area. We
8 started a couple years later and we're working aggressively now to bring those maps up
9 to the same level of completeness that we had in the waste area.

10 So I really do think that from a headquarters perspective, this is a tool
11 that is worth continuing to develop and maintain, and we intend to work closely with
12 Idaho and with the other field sites to make that happen. That being said, there are
13 obviously going to be some challenges to figure out how to fund everything that needs
14 to be funded around the complex, and we'll be working with you, Linda, to try to sort
15 some of those issues out over the next several months, I'm sure.

16 But at any rate, there definitely is the support. Jim Owendoff's got a set
17 of these, you might think this is good or bad, I don't know, depending on your
18 perspective, on his bookshelf. You know, he whips that thing out there once in a while
19 and says, now, da, da, da, da. So it definitely has high level management support,
20 attention and value.

21

22 DR. BODDE: Let me ask if there are any questions for David before
23 he has to leave. Yes.

24

25 MS. CRANDALL: I'm very impressed with this, but I'm wondering
26 how much is this integrated with other program areas?

27

28 MR. HUIZENGA: I suppose it is, but to be honest with you, I don't
29 know to what level. The contractors that we work with, of course, at a site have
30 responsibilities, I suppose, sometimes that cross over into NE and DP and other areas.
31 So I would be surprised if those things weren't somehow being incorporated into it, but
32 I haven't had a specific example come to my attention recently.

33

34

35 MS. CRANDALL: What about, for instance, the materials disposition
36 program?

37

38 MR. HUIZENGA: Well, I guess that yes, maybe some of these things
39 are too obvious to me, I'm not even thinking about permanent MD or MM-16 materials
40 disposition standpoint. Obviously the things in the nuclear materials area are all
41 tracked, following from Rocky to Savannah River, and ultimately some other place.
42
43

1 MS. CRANDALL: So you don't have any problem at NNSA with
2 material disposition responsibility (unintelligible) doesn't have different maps that have
3 the same (unintelligible) maps that work together (unintelligible).
4

5 MR. HUIZENGA: No, we haven't had that difficulty. Of course we're
6 still growing to understand the ultimate relationship with NNSA, but so far those type of
7 areas haven't really come into place. I guess Tom has probably other crossovers with
8 NE and relative to stuff that's coming from Hanford up into Ohio, the billets and the T-
9 hoppers (ph) and other stuff, so maybe as I just evolve my thinking here, to argue that
10 we probably are more integrated than I've even been focused on.
11

12 MS. CRANDALL: And also it's important because of the new policy
13 about long-term stewardship being handed back to sites with continuing non-EM
14 mission. So, I mean it seems like the corporate lead, DOE, needs to have a handle on
15 disposition maps that's not just (unintelligible).
16

17 MR. HUIZENGA: Yes, that's a good point, and I'll make sure that we
18 really are doing that, if we're not already, but I guess I think we probably are more than
19 I initially thought.
20

21 DR. BODDE: John.
22

23 DR. AHEARNE: Actually it's a similar question. Dave, when you
24 mentioned that you were putting together this national schedule for getting spent fuel, et
25 cetera, to the repository and the problems you identified, is that a schedule that is also
26 including DOE's responsibility for the civilian spent fuel?
27

28 MR. HUIZENGA: It's a schedule that we're working with the
29 repository folks that takes into account what they expect the rate of receipt to be from
30 the civilian side, so how we fit in the queue is unknown?
31

32 DR. AHEARNE: Well, no, I understand the DOE piece, but DOE has
33 responsibility under the law, taking the commercial spent fuel and you have therefore
34 many more sites from which they will be shipped, and so I wondered in this national
35 schedule that you mentioned.
36

37 MR. HUIZENGA: You mean the power reactor fuel?
38

39 DR. AHEARNE: Yes.
40

41 MR. HUIZENGA: Right. I guess what I'm saying is that we're
42 working closely with the RW folks. They know now. I mean I don't know, if you're
43 asking me do the RW folks have a queue figured out for the commercial, I don't know.
44

1 DR. AHEARNE: What I'm really trying to get at, if this is the system
2 that integrates the (unintelligible) for a national schedule. And I was understanding from
3 what was said that you were looking at the shipping points in the DOE complex...

4
5
6 MR. HUIZENGA: Right.

7
8 DR. AHEARNE: ...to the repository.

9
10 MR. HUIZENGA: We are.

11
12 DR. AHEARNE: Are you also looking at the shipping points from all
13 of the commercial?

14
15 MR. HUIZENGA: If they are, they haven't told me what it looks like,
16 but I know that the rate at which they're going to be receiving from the commercial
17 affects the rate at which we can ship from the DOE sites. So to the extent that it
18 accommodates their rate, that I know. I don't know whether they've got a similar map
19 of the US and they've got from 100 reactors a bunch of lines going to someplace.

20
21 MR. BECHTEL: They actually do, and that is actually defined by
22 contract. So I think that's a good question.

23
24 MR. HUIZENGA: Right.

25
26 DR. BODDE: Okay, let me take Ron Ross' comment. Dave, do you
27 have time for just one more?

28
29 MR. HUIZENGA: From Ron?

30
31 MR. ROSS: Hi, Dave. Dave and I have had conversation over this
32 too as well as my concerns, and I'm really going to state a concern here for you Dave,
33 and I would like to open a continuing dialogue on this, and I know that we've had that
34 conversation too, and that this is a powerful tool. I feel it's a good tool. But I'd like to
35 lay out that right now I think headquarters needs to do some things here too and get
36 more involved as far as how this lays out against the budget, as we heard earlier today,
37 and how that then works back into a strategy of really how you're going to integrate the
38 systems, if you may, between the intersite relation or multi-site relationships here.

39 It's more of a comment at this point to you that I'd like to open that
40 dialogue as chairman of that integration and transportation group, to discuss these
41 issues, particularly headquarters' role in this and how you might think of these various
42 intersite activities, and I brought up earlier the WIPP issue and that was only a lead in.
43 It was a specific issue, but you also have the incineration issue, you have some storage
44 and treatment facility issues, low level and TRU. And you know, I just see that we

1 need to have some thought processes on this and if we can assist in that, I'd really like
2 to put forth that activity.

3

4 MR. HUIZENGA: Okay, good. I mean at this point we've got a big
5 investment, both in people's time and money and we want to make sure that we're
6 getting the maximum use out of it. So, to the extent that we can.

7

8 MR. ROSS: Yes, because headquarters really has a role here and it's
9 not clear how that is integrated into the budgeting process and the strategy plans that
10 you have and I think that's a very big concept that needs to be laid out, particularly for
11 the states that are hosting sites that are dependent on other sites.

12

13 MR. HUIZENGA: I know that my headquarters staff is very familiar
14 with what is being worked in the disposition maps. Or on the maps, because Helen's
15 working the incinerator issues and Will understands incinerator strategies.

16

17 MR. ROSS: Right.

18

19 MR. HUIZENGA: But let's follow up and talk.

20

21 MR. ROSS: Yes, I'd like to have that conversation further in the
22 future.

23

24 MR. HUIZENGA: Alright.

25

26 DR. BODDE: Dave, thank you very much for taking the time, we
27 appreciate it.

28

29 MR. HUIZENGA: Thanks.

30

31 DR. BODDE: And with that, let's continue the punctuated briefing.

32

33

34 DR. KEARNS: Okay, Jim and I can compare notes on how to
35 shorten the presentation a little bit too, so we'll try to do that.

36

37 DR. BODDE: A thousand blessings.

38

39 DR. KEARNS: As I was saying the bottom part of the chart is really
40 what I wanted to focus on here, the disposition map on remote handle transuranic
41 waste. One of the needs that is identified here by a red light is for undestructive
42 evaluation and assay technology associated with remote handle transuranic waste, and
43 this actually is a photograph of material that comes out of the IPABS, that corporate
44 data base that I mentioned, and it really allows us to understand what the problems are

1 in an integrative way across the complex, and we use to draw the disposition maps
2 from. So this is actual data out of the IPABS system, based upon the baseline for
3 remote handle transuranic disposition at INEEL. We're going to walk you through
4 this... is that where we want to go?

5 MR. HERZOG: Yep.

6
7 DR. KEARNS: Okay. I'm going to walk you through this, how we're
8 trying to address that in an integrative way through. Integrated through development of
9 a solution. So I developed the five solutions, is the next phase here. Science and
10 technology resources brought to bear on all these issues. INEEL really involved the use
11 of the laboratory complex. We call it a system of laboratories. These are very difficult
12 problems, very challenging problems. No one site, in my opinion, is smart enough to
13 solve all the problems they're facing individually, so we're much stronger by working
14 together. It's new management. We've tried to bring to the INEEL as part of the fabric
15 of how we do business with the other laboratories, we try to be a lot more co-
16 laboratory in our approach, and really EM needs all the intellect that we have in this
17 country and across the world to solve these challenging problems. So that's what this is
18 all about.

19 One of the things that we really developed at the INEEL was a master
20 schedule to really focus our research and development on solving operational needs.
21 Jim's got with him a copy of the master schedule.

22
23 MR. HERZOG: John, I could roll this thing out, but to save time, I
24 won't.

25
26 DR. KEARNS: It's actually boring too.

27
28 MR. HERZOG: That's why I wanted to roll it out. It's not, but it is
29 about eight feet long. This chart documents all of our science and technology needs,
30 and then cross walks it to our research programs that are going on in Idaho. We
31 included all of our research programs, the ones that are funded by external
32 organizations, the ones that are funded directly by EM-50, and the different DOE
33 offices. I also charged the research programs to not only our operational needs, but
34 our laboratory initiatives. Idaho is a multi-function national laboratory, so there's more
35 there than just leadership.

36 So this is how we keep track of what the research is, and how it's going
37 to deliver a product to our end users.

38
39 DR. McCOY: Why don't we just go ahead and let Paul finish and
40 then, when we finish, Jim you can roll it out so that John can see it with his own eyes.
41 I've found that that works the best.

42
43 DR. KEARNS: Actually, this is a snapshot from the integrated master
44 schedule in terms of how we actually track by technical task plan, the TPT title. I'm

1 sorry, TTP as we call it, all kinds of technology. We identify the investigator, the funding
2 levels, expected funding level for the coming year. Here we identify the science and
3 technology need, specifically. We talk about the need itself and the scope of the activity
4 and we talk about the expected benefit.

5 Really a nice tool for me as a manager, because I think it's the first time
6 that I really understand how all the research that we have underway at the INEEL,
7 specifically relates back to a need that has been identified, either at the INEEL or
8 across the complex or another site, so it's a great tool in that regard.

9 Let's go back actually to that master schedule, I'm sorry. This first
10 block here again, trying to follow through the use of the disposition map, this first block
11 really addresses the need that was identified, that area that was identified for NDA,
12 NDE technology or application for remote handle TRU, so that's part of the connection
13 here. Let's move ahead, and back to the map.

14 And what I wanted to show here was the integration step, again, kind
15 of bringing things back together as the tail end of the process, the detail work planning
16 that occurs, where they generate information for the IPABS system here at
17 headquarters. We also, as we said, developed a technology road map, if we've got a
18 great deal of uncertainty or a very challenging problem as part of that process. That
19 road map, then, gets entered into the decision making in terms of the definition of the
20 baseline and path forward. Those operational needs also feed up into the IPABS
21 system, as we said. The IPABS data is used to draw the disposition maps which are
22 shown here.

23 And then we also, of course, have integrated tracking through the
24 master schedule, which Jim is going to roll out at the break here, so that's kind of how it
25 all ties together. It's a very quick perspective, but that's how it ties together in terms of
26 the ongoing activity at the operational level and the research level.

27
28 MR. HERZOG: If I can make just one emphasizing point. Paul just
29 earlier in the presentation had in the initial stages of needs identification, it was done in
30 more of a canvassing approach. More planning was done by the operational programs
31 and through a canvassing activity afterwards, and we would identify the science and
32 technology needs. The step that we've taken here in Idaho is incorporating the needs
33 identification process into the actual detailed planning. In other words, we've got a
34 belly button, we've got a name associated with each need.

35 One of the operational managers owns that need. We know where to
36 go to make sure we understand the requirements for them to finish their job. We can
37 inspect the research program much more closely to the operational program needs.
38 And that's a significant feature I wanted to note to you.

39
40 DR. KEARNS: And then the last step here that I want to show you is
41 the actual planned insertion of that new technology into the baseline or into the
42 executable baseline at the INEEL. And again, we've got the waste management
43 clean up project schedule for the (unintelligible) canyon at the top of the chart, and in
44 here we've got the integrated RME (ph) project schedule. We've got two technologies,

1 actually, that are to be looked at to address that need. Again, inspected with
2 acceptable knowledge levels, and a multi-detector and analysis system. R&D is
3 underway on both those systems, if you will.

4 And then we actually go through a couple demo steps and then we
5 actually insert the appropriate technology back into the baseline at the appropriate time,
6 so we understand through this process what that need is, and so we've been able to
7 back up from that understanding, based upon our information and resources, the
8 technical resources we have, when we need to begin development of the new
9 technology or when to begin to study a problem so we'll have an answer in a timely
10 way, so we can insert it back into the baseline.

11 I think this is my exit slide, right? Yes, this is what we agreed would
12 run into Jim's presentation here, but basically execute the baseline, implement solutions,
13 follow on charts which describe the number of deployment activities at the INEEL this
14 past year, and also our look ahead, if you will, to the next 12 to 18 months, which is the
15 particular time frame of interest to the site team that's responsible for the INEEL, so
16 you can refer to that in your packet.

17 The operations folks are responsible, they've taken that responsibility
18 seriously for deployment of new technologies to solve problems that they have, looking
19 at issues like safety, saving some schedule time and being more cost effective in their
20 activities.

21 One of the challenges that we find at INEEL is that new technology is
22 frequently used, often the use of it is not documented in a way that allows the Office of
23 science and technology to take credit for it, so we're trying to work on improving
24 documentation of use of new technology, new science, and also the lessons learned
25 from the use of that technology.

26 We also need to do a much better job, we feel, at INEEL and across
27 the complex, in communicating successful deployments. Not every technology or
28 scientific project that's invested in is going to yield a great benefit, but we feel that by
29 advertising those that are successful, we can really help encourage additional
30 investments in science and technology across the program.

31 And then we've also worked hard. Jim I think had his CD earlier, but I
32 think I may have lost it in the shuffle here.

33
34 MR. HERZOG: You did, but there's several back, I think, back on the
35 back table. It talks about a feature that we have in Idaho, where we can keep tracking
36 and help document our technology activities, we call it our technology catalog. That's
37 the web site, it is available on the INEEL home page. There's about 120 different
38 technologies that are in that web site, and also in the back of the room is a briefing
39 book on the activities that have occurred in Idaho over the last year. Also there is a
40 summary of the technology utilization activity over the last year. The web site is there if
41 you guys care to take a look at it.

42
43 DR. KEARNS: One last point I wanted to make which would have
44 been made in a later slide, but I want to comment that contract incentives work,

1 certainly, in this area because that's one of the very important aspects of what has been
2 accomplished at Idaho in terms of the use of new technology. This past year we saw a
3 tremendous improvement in the number of technologies deployed: 44. Which is a pretty
4 high number for INEEL compared to past performance. It's also important to note that
5 of those 44, 25 were actually investments that the Office of Science and Technology,
6 Gerald Boyd, had made in developing those activities, so it's a good lesson on use of
7 contract incentives.

8
9 DR. BODDE: Great. Thank you very much. Let's go into some brief
10 questions, and then we are into break and then our remaining Board business. Tom.

11
12
13 MR. WINSTON: Thank you for a very comprehensive presentation.
14 DOE, Dave, took the lead on a lot of this, has worked with the states and also with
15 states' tribes on the development of this system, and I think we've given high marks for
16 the communication tool that it is and there's been a lot of feedback from states and
17 tribes over how to make this, the information, more usable. I think states need to take
18 a realistic look at the Department's waste and materials management activities, and this
19 gives that opportunity.

20 You mentioned, literally hundreds of these. And I think historically local
21 communities, states and tribes have been concerned that DOE was trying to force a
22 waste management or materials management decision, independent of an overall
23 complex-wide look. And this is really a valuable tool. I want to follow up on one point
24 that Ron made though, that this is a little tool but opportunities are there for integration.
25 And I think to some degree it takes into account some hurdles. Some of those may be
26 political or regulatory, but some of those also are budget, and I'm not clear at this point
27 how well the linkage with the budget is, either on the actual infrastructure that might
28 support an integration or waste disposition or the overall budget.

29 Being from Ohio, in order to clean up the five DOE sites there, we are
30 going to be dependent on a significant amount of assistance from other sites, and so
31 we've looked very closely at the intersite, interstate equity equation, and that's a very
32 complex situation. When I say these are opportunities, what that means is that these
33 are challenges, but then you get down to the whole issue of interstate or intersite equity.

34 Most states and most sites, the stakeholder communities, have a fairly
35 simple formula. They want to make sure they're treated fairly, and that means that they
36 don't have a disproportionate burden of waste management that is thrust on them, and
37 that more often than not, the big thing is their compliance, is the kind of following up on
38 commitments that the Department has made for the existing materials and waste at the
39 site.

40 And so one of the points that Ron was making, there's really budget
41 implications. At the NGA meeting last week there was a clear message to the Assistant
42 Secretary that a lot of these cost savings, some of the ones you mentioned up here, are
43 not going to be realized if there's not a credible budget, because of the situation where
44 either the governor, the local stakeholders, tribal leaders or whatever, are not willing to

1 take on additional burden because there is, for one, maybe not even the infrastructure
2 there to support it at the site if the materials would come there, or due to significant
3 disappointments in the forward movement on compliance at the site.

4 My question is, is what is your feel as to how well budget issues, and
5 how quickly budget situations are taken into account in the waste disposition mapping,
6 and are there some opportunities to sort of better enhance that so that you really kind of
7 front load your visual portrayal of this with that key dynamic in intersite and interstate
8 equity?
9

10 DR. KEARNS: I think certainly we can do better. The information
11 that's portrayed in disposition maps, as I said, is updated currently on an annual basis,
12 and so it's not particularly good at real time analysis. It could be used in that way, but
13 certainly it's again, based upon an annual update of information provided through this
14 IPABS corporate data base that EM manages. It could be used in that way, though.
15 I'm not going to say that that's the way it's being used.

16 To my knowledge, it wasn't used, for example, in developing the
17 budget request. Could it have been used? Yes. It would take an investment of
18 additional resources to enable some real time analysis versus the annual update that's
19 currently done.
20

21 MR. WINSTON: I'll just conclude by saying that I think that one of
22 the ways in which the budget needs to be evaluated are in the implications in the waste
23 integration area, because I think there is a key tie in. Some of it is subjective. Some of
24 it is political. But I think it's difficult to have a meaningful discussion on the budget
25 without understanding some of those missed opportunities that will be lost because of
26 these issues I just mentioned.
27

28 DR. KEARNS: Good point.

29
30 DR. BODDE: Ron, do you have a comment on this particular point?
31
32

33 MR. ROSS: Tom, I'd like to respond a little bit more clearly as to
34 what I was trying to say earlier, and that is that what you're saying is exactly what I'm
35 thinking, that the headquarters people need to be doing. They have no strategic plan on
36 how to integrate these things that we're talking of. This is a good tool. It's a good
37 project management tool and that. But one of the criticisms that we've been giving to
38 DOE is that there is no tie in on a strategic plan and therefore a management process on
39 a complex-wide basis, and you've just pointed out many of the highlights of that
40 discussion, and how it reflects in the budget, which is why I went right to that with
41 Dave, is it's really unclear at this point, if it does at all. I don't know.

42 But you know, there are a lot of things that are going to be done at your
43 sites that are going to be strictly for compliance within Ohio, which means that money
44 or funds are not going to be available for other things that may need to fit into the

1 intersite types of things. And likewise at every other site. This is a good tool to
2 evaluate those implications, but I think headquarters needs to start looking a little further
3 as to how they might strategically start programming these into their decisions.
4

5 DR. BODDE: Okay, let's go around the room with other questions
6 and comments, and Diana, can I start with you, please?
7

8 MS. YUPE: With INEEL being the lead laboratory for EM, I'd like to
9 know how is this whole process that you're discussing today fit in with EM mission in
10 terms of the actual implementation at the site, and does this process go through the
11 environmental check sheet to assure that all of the resources are going to be protected
12 as well, or even assessed within this whole process through the implementation?
13

14 DR. KEARNS: There's a strong connection, particularly the decision
15 is that you take the disposition pathway as suggested by the analysis, it would go
16 through the appropriate review process (unintelligible) sites are linked. So it's strongly
17 connected. Linda, I don't know if you want to add something from the DOE
18 perspective on that?
19

20 DR. McCOY: I want to make a comment and then if I miss answering
21 your question, draw me back again. I've been sitting here sort of fidgeting for the last
22 couple of minutes because I wanted to say something. The discussion we've been
23 having, in my mind, has to do with the distinction between tools and policy. The
24 INEEL's job as the lead laboratory, and my job as the federal manager for R&D in
25 INEEL. And I view this as sort of an analytical R&D project. You know, how do you
26 really take data and look at it and analyze it to get the best information from data, if you
27 will.

28 Our job is to provide the tools. It's to highlight the inconsistencies and
29 potential and the tasks and the places for efficiencies, and the places where maybe
30 we've forgotten to do something for the DOE management. And then the management,
31 the DASs and Carolyn and Jim and those folks have to decide the policy.

32 And where I hear the discussion going, and I guess what I wanted to
33 say is you know that the INEEL folks try to provide data and recommendations based
34 on the data in terms of technical competence, but it's not the laboratories job,
35 necessarily, to make policy. We provide the information, and then headquarters makes
36 the policy decisions.

37 Now my perspective is that we're getting to the point where it's mature
38 enough where that probably is possible, but that in reality right now, particularly with
39 the way we've sort of changed administrations in setting the course, that Tom's point is
40 well taken. This process is not particularly integrated into the budget process at this
41 point. And certainly, from the perspective of people trying to provide tools to make
42 better decisions, what we'd like to see is that in fact, that would happen over the next
43 couple of years, but it's not there right now.

1 Right now and partly because of the budget cycle, you guys all know
2 that you're two and a half years ahead in your planning cycle compare to the
3 implementation here. I don't know that this information, except for a few of the key
4 accomplishments that Paul and Dave talked about like you know, the mythical
5 shipments, John, to whatever repository eventually shows up, which starts at some year
6 zero and goes forward. There's no date on there right now. That has been integrated
7 into the budget necessarily. But that's a place to go if the folks like the tool, which, I
8 guess, is what we're trying to find out.
9

10 DR. BODDE: Okay, let's take some succinct comments and then we'll
11 close this out and get on to a brief break and Board business. The concise Dr.
12 Paulson.
13

14 DR. PAULSON: I detect the fine hand of Jim Owendoff in the
15 red/yellow/green color coding. My question is how do you do the intellectual quality
16 control on the maps? And operationally there would be opportunities to change a red
17 to a yellow, or a yellow to a red, or a green to a yellow, et cetera. What's your internal
18 process for the intellectual review of these?
19

20 DR. KEARNS: I can speak to the INEEL example, because I'm not
21 sure about some of the other sites, but INEEL, for example, there is communication
22 that occurs between those folks representing the more operational day to day aspects
23 of the job and those folks that work for me on problems that basically represent the
24 technical challenge, if you will, that baseline. And those are updated annually. A
25 variety of discussions are held in terms of the maturity and the technology and the
26 soundness of the path forward. In the process, if I end up being co-owner of that
27 disposition map, along with Sue Stiger, who's responsible for EM clean up activities at
28 the INEEL. It's a clear and honest discussion and debate at the INEEL and I give her
29 comments of what occurs at some of the other sites.
30

31 DR. McCOY: I will say that in all of the complex-wide stuff, no matter
32 who develops it, all of the results are validated back with whoever the operational
33 manager is at the site, and that has to be clear before it's published. So there is a fairly
34 rigorous validation process where we take the data, we come up with results, and all is
35 passed back for validation and sign off before we can consider those to be publishable.
36

37
38 DR. BODDE: John.
39

40 DR. KEARNS: We actually use a check sheet. Did we think about
41 that? There is a check sheet and it does address issues, barriers, and technologies.
42

1 DR. AHEARNE: My question is, since you point out that you wanted
2 to make sure this works in INEEL, could you describe a little bit about what this system
3 shows for Pit-9.
4

5 DR. KEARNS: Well, Pit-9 is under, as I said, we evaluated it as part
6 of RFAs for Y-7, and so the baseline as currently portrayed in the disposition map for
7 Pit-9 would be the baseline agreed to by the state regulators.
8

9 DR. AHEARNE: But do you show red? yellow?
10

11 DR. KEARNS: There would be red and yellow.
12

13 DR. AHEARNE: And what is the technology?
14

15 DR. KEARNS: As well as green ones.
16

17 DR. AHEARNE: And you have a lot of technology? Or no
18 technology needs?
19

20 DR. KEARNS: Oh, we have several technology needs. We were
21 going to show you one of those as an example of something that has been developed.
22 The advanced tensiometer, which really allows us a great deal more insight into how
23 ground water moves.
24

25 DR. AHEARNE: But if I were to look at your chart for Pit-9, would I
26 come away with you now have a clear path forward, and know what has to be done
27 and what technologies have to be developed? Or would I conclude this process has
28 not yet captured what needs to be done for Pit-9?
29

30 DR. KEARNS: I think you would walk away from it saying this is a
31 tremendous job.
32 (Laughter)
33

34 DR. McCOY: John, you have to pick almost anything but Pit-9.
35 Seriously, the Pit-9 answer is constrained because of a law suit, and there are certain
36 things that can't be discussed publicly because it's in litigation. But pick any other tough
37 problem, you know, some of the spent fuel disposition or what we're going to do with
38 the workmen waste, and I have confidence that the guys who work on that area can
39 walk you all the way down to the individual technology barriers.
40

41 DR. BODDE: Jeanne.
42

43 DR. LOGSDON: I have a question about what integration really
44 means, and this is a very naive question. I was fascinated to see the Department of

1 Energy strategic plan yesterday, and was reading it carefully last night. For example,
2 under one of the environmental quality objectives there's something like "complete clean
3 up of an additional 22 geographic sites by the end of FY 2000, increasing the total
4 completed to 91 out of 113."

5 Now, is your data supportive of that particular objective? I mean if we
6 went to your roadmaps, would we be able to find out, okay, what are the additional
7 22? What are the 91? What are the 113? I mean is it integrated in that fashion or are
8 we just at the beginning of the process in which ultimately that's what we want to have
9 happen?

10
11 DR. McCOY: I'll invite Paul and Jim both to comment here, but I
12 would say we're at the beginning of the process. If you remember, at the beginning what
13 Paul said, and what Dave Huizenga echoed was that these were very mature maps for
14 waste management questions, and that has a lot to do with where boxes of waste are
15 going and how they're being stored and how they're being disposed of.

16 The question you're asking is more in the environmental remediation
17 arena, and we have just started developing maps for environmental remediation. That's
18 not nearly as mature yet. So I would have to say probably right now, the maps
19 wouldn't support the question you're asking. That's one of the next areas we'd like to
20 get to if we get to continue this work over the next few years.

21
22 DR. BODDE: Frank, would you like to have the last word?

23
24 DR. PARKER: I really want to compliment Paul and Greg,
25 particularly, for all the good work that they've done to make this material accessible to
26 us. I think on the benefit side, R&D master schedule, it's somewhat vague, and I think
27 to fully capture what has been accomplished, it would be very helpful if maybe
28 (unintelligible).

29
30 DR. KEARNS: Okay.

31
32 DR. BODDE: One more item before our break, and that is to inquire if
33 there are any public comments on this? Well, hearing none, then, thank you very much
34 Linda and gentlemen for the excellent presentation. We appreciate it very much. Let
35 us take a break until 10:45 and come back and get on to the various items of Board
36 business.

37 (Whereupon, a 15 minute recess off the record was taken.)
38

39 **Board Business**

40
41 DR. BODDE: Okay, we are now into the session of Board business
42 and we'll lead off with the review of some of the efforts of the committee, to begin to
43 look at our mission into the development, and to take all of this together and summarize

1 that, and so Ken, we want to thank you for your efforts thank you for your
2 (unintelligible) summary of the committees activities.

3 4 **Board and Committee Work Plan Briefing**

5
6 MR. SMITH: Thank you very much. As with all introductions, this
7 one was brief, but I always worry that they're obituaries and wish they'd wait until after
8 the presentation, but we'll go into this. Can everybody hear me? It's with this new
9 technology, we can clean up everything, but sometimes the mikes are not working. Can
10 I be heard in the back? Stan? Great, okay, we'll go ahead and start.

11 I've gone over a couple slides, but let me go with this technology here.
12 The Board asked us, the Committee Chairs, to put together a work plan that would
13 integrate and coordinate the efforts of the various committees. We went out to the
14 Committee Chairs after the last meeting, and we developed a format where we would
15 gather together the information and try and put it in a parallel format so that the Board
16 chairs and the committee chairs could subsequently work with this.

17 And this is the format that we came up with. A statement of the
18 mission, various comments regarding the integration of the effort with other committees,
19 the relationship of the Committee's efforts to the overall EM mission, product
20 expectations based on the work that the committees were doing, and of course, all
21 important in any planning effort, a completion date.

22 We always, in discussing our work, want to bear in mind a little ritual
23 statement that was developed a couple years ago by one of our committee members,
24 and that is, the "rules for Committees". And the Board Chairs believe, and I personally
25 endorse that these are guidelines that all our committee efforts should be directed
26 toward. We have to do things that are practical. We have to do things that contribute
27 to the EM mission. And the reports that we do develop should be in a format that they
28 can be used easily and effectively, and efficiently by EM-1 and the line program offices.

29 The first committee that I'll cover briefly is the Science Committee, and
30 some of what I say will be redundant in part to what you heard yesterday. Depicted on
31 this slide is the mission of the Science Committee, somewhat abbreviated, but I think it
32 hits the essence of their efforts. The Committee is dedicated in its efforts, as you heard
33 from Frank yesterday, and over the next year towards looking at the EMSP program.
34 They are, however, involved in joint efforts with other committees, particularly the long-
35 term stewardship committee and the TD&T Committee as Frank described.

36 There will be a continuing review of the EM science program. As
37 Frank indicated, they looked at only 16 completed projects to date. There are a lot
38 more of them out there, and they will continue to evaluate and work with Gerald's office
39 and at Gerald's request to evaluate the quality of science and provide feedback through
40 the Board to EM-50 on how future calls should be structured, and what improvements
41 can be made in the process of the program. This is an open-ended program and will
42 continue for at least another year.

43 The next committee up is the Technology Development and Transfer
44 Committee. Their mission statement is on the slide. As Dr. Berkey mentioned

1 yesterday, they had their ongoing status review of the OST program, the briefing that
2 you received yesterday, the second briefing.

3 The next task of this Committee is to focus on better defining
4 performance measures for EM. The Committee had previously done some work on
5 performance measures for the Office of Science and Technology. In addition, this
6 Committee will track and will continue to work with the Worker Health and Safety
7 Committee and their performance measures on leading indicators.

8 Their project schedule is as shown here, and then they'll report on their
9 performance measures by October 2001 or next meeting in 2001, and a final report
10 next year.

11 The Contracting and Management Committee, Dave Swindle's
12 Committee, mission is as indicated on this slide. As Dave indicated yesterday, the
13 Committee is working on two continuing tasks, one on Workmen's Compensation, and
14 savings that might be accrued through a review and a restructuring of that particular
15 plan, and the project management initiative that he described in his briefing yesterday.

16 In addition, members of his Committee are working with the Worker
17 Health and Safety Committee on performance measures as indicated in the briefing, and
18 with the Long-term Stewardship on incentivizing stewardship planning. The Workers
19 Compensation task is specifically stated here. Dave expects, with a lot of effort from
20 his Committee, to have a report in the fall at our next meeting.

21 And the project management initiative is ongoing. He continues to
22 work as he described, with Marvin Garcia's office and with General Gill's office to
23 monitor what these offices are doing and provide feedback to the Board on possible
24 projects that we should look at.

25 The mission of the Worker Health and Safety Committee as indicated
26 on this slide. The Committee is focused on sustaining the momentum of ISM. The
27 expected product, recommendations on ISM and the new CFR implementation,
28 probably in the fall of this year, with a possible continuation and completion in the spring
29 of 2002.

30 The Long-term Stewardship Committee, as Tom Winston briefed
31 yesterday, the mission is on this slide. And as Tom indicated, based on the result of an
32 extended dialogue with the Office of Long-term Stewardship, that the committee has
33 reconfigured into three subteams. The three teams are indicated on this slide.

34 The subcommittee on non-DOE sites, the mission is indicated in the first
35 bullet. They're going to try to develop recommendations on steps to insure that transfer
36 responsibilities go smoothly with the completion in the spring of 2002, and a possible
37 interim report in the fall of 2001.

38 The Committee on Institutionalizing LTS, the subcommittee, the
39 mission. As you recall from the briefing yesterday, this is a joint effort with the
40 contracting and management committee. The product are recommended initiatives to
41 incentivize LTS activities. And that subcommittee hopes to have recommendations for
42 the Board to consider in the spring of 2002.

43 And the third subcommittee on interdepartment site transfers, again the
44 mission and the expected product. And again, this is a one year from this date

1 completion schedule. An interim report at our fall meeting, and final recommendations
2 in the spring of 2002.

3 The mission of the Integration and Transportation Committee, and their
4 current activities. The committee continues to monitor transportation protocol
5 development and is working with the Office of EM-20 on developing products. And
6 that right now is the future work plan.

7 The Alternative Technologies to Incineration Committee, Dick Begley
8 briefed you on this yesterday. This is of course a brand new committee for this Board.
9 In response to your request we passed the charter out this morning. The task results
10 from the Secretary's blue ribbon panel and then Secretary Richardson's announcement
11 on January eighth, indicating that he would form a committee subordinate to the EMAB
12 to consider alternative technologies.

13 This committee has the potential to overlap in issues of transportation,
14 waste packaging and D&D on down the road. It is a 16 person committee. They may
15 use working groups to get around and visit the sites. The committee intends to provide
16 recommendations to again answer the question of yesterday on specific technologies
17 that are alternatives to incineration for TRU and mixed level waste.

18 The expected completion date of this one seems a little bit far out, and
19 in fact it is, but this is a long range task and the Department, EM specifically, has to
20 evaluate alternative technologies, ways to further develop them, and go through a
21 selection process. Our estimate is that it will be 2005 before there are
22 recommendations. That may be optimistic. The Committee will be reporting to the
23 Board on a schedule established by the Committee Chairs in conjunction with the
24 Board Co-Chairs.

25 The Ad Hoc Committee on Safety and Health in Technology
26 Development, again, you received an excellent briefing on that yesterday. Certainly an
27 example of how the committees cross-cut and work together to develop a product, and
28 in this case, a product that became a policy that Carolyn signed and put into effect in
29 early January of this year.

30 Current status of that Committee is as indicated on this slide. The
31 Committee will continue to work, evaluating the outcome of the actions taken in
32 response to the accident investigation and of course will report its findings back to the
33 Board.

34 The Committee will also work on the eighth recommendation of that
35 April 1999 recommendation. You were briefed on that yesterday. It involves using
36 contract incentives to help develop further and promote safety and health.

37 A new Ad Hoc Committee that just has been formed, again, John
38 Moran briefed on this one yesterday via the phone, as well as Dave in person here. It
39 is a cross-cutting committee. It is a temporary life committee that will sunset after it
40 does its missions. It's looking to identify the leading indicators and I think we discussed
41 that at some length yesterday. It works closely, of course, with Randy Scott's Office of
42 Safety, Health and Security. Expected completion, fall 2001 or spring 2002, and again,
43 that committee will sunset after its task.

1 David, in short order I think I've summarized the work plan that the
2 Committee Chairs have submitted, and I'll turn it back to you for your discussion.

3
4 DR. BODDE: I think this is a very important piece of work. This is, as
5 Joel noted yesterday, EM-1's Board and we work at that policy level (unintelligible) it
6 has to be responsible to EM-1 and we (unintelligible) observe things.

7
8
9 DR. BODDE: Okay, my microphone was off, that was the problem.
10 Well, let me start over again for your benefit. This is EM-1's Board. It's got to function
11 at the EM-1 policy level, got to be responsive to what EM-1 is looking for, what EM-1
12 wants. But at the same time, in doing our work, we observe things that ought to be
13 brought to the attention of EM-1 as, from our perspective, things that might be
14 overlooked. And so you have this duality of initiatives, duality of insight.

15 I think as we get into this transition in leadership at EM-1, that's a
16 particularly important function from the Board's perspective, and I would hope that the
17 Committee Chairs would be available for further working discussions as we move
18 through this transition period with the idea of looking to our own process, and looking
19 to the value added toward EM-1. And Jim Melillo will keep in touch with us with
20 regard to such working discussions.

21 Any conclusions, of course, would be brought to the full Board for
22 vetting and full discussion before anything actually happens.

23
24 DR. BODDE: Let me then toss it open for discussion for your
25 thoughts on where this has gone and the road forward.

26
27 MR. MARTIN: Actually, David, this is a good follow up to
28 what you just said. Given the uncertainty with a transitioning EM-1, I mean there's
29 going to be some uncertainty about what this top to bottom review is, but that certainly
30 has risen to the top for me, and I would hope that we express through you and other
31 committee chairs, that we have an interest in playing whatever role EM-1 deems
32 appropriate and you know, defining exactly what this thing is and what questions it asks
33 and how it goes about answering them.

34
35 DR. BODDE: Thank you, yes, that's a good point and you know, just
36 to note further that the way this Board does its work is really through the committees. I
37 mean we meet as a Board and as a group twice a year, but it's really in the committees
38 where the real action happens. And so that level of initiative and thinking is very
39 important. Any other questions or comments? Ed.

40
41 DR. BERKEY: I just wanted to react a little bit to Ken's presentation
42 and put that in the light of what we're discussing at the moment. I think it would be very
43 useful to try and map what you just presented, Ken, and what the plans of the various
44 committees are against the set of budget priorities that we were presented with this

1 morning to give us a picture as to whether we're really addressing all the budget
2 priorities or whether there are some major gaps in what EM is planning to do this next
3 year and what the Board is planning to do, to see if we perhaps need to create an Ad
4 Hoc committee or reorganize some of our plans a little bit in light of what we've been
5 presented with. I think that mapping would be useful.

6 We discussed prior to the meeting, one of the concerns that I have had
7 that we have spent a great deal of time and effort on the whole science and technology
8 issue, and perhaps other elements of the EM program have received less attention from
9 the Board. And we see how good Gerald's doing because of all the help we've given
10 him, and we think that the rest of EM deserves the same opportunity.

11
12
13 DR. BODDE: Ed, I think that's a very good point, and I think this
14 integration briefing that we've just heard illustrates one of those possible areas. Ron,
15 did you want to comment? Oh, John.

16
17 DR. AHEARNE: Given what we've heard about the depressing state
18 of the budget, and David your comment that the Board does its work through
19 committees, what is the budget situation with respect to operations of all the committees
20 this coming year?

21
22 DR. BODDE: Well, that's a very good question. I think the answer is
23 it's tight, but let me turn it over to Jim as the expert on that.

24
25 MR. MELILLO: I don't know whether Jim is the expert on that or not
26 but I don't have any either positive or negative instructions one way or the other at this
27 point. No one has said cease and desist on this, or stop this, and so I don't really have
28 anything I can add to it, to the best of my knowledge, and certainly will be taking it up
29 with the new incoming assistant secretary when she arrives. Whatever I need to know
30 at that point. I don't anticipate anything at the moment.

31
32
33 DR. AHEARNE: You don't anticipate any reduction or any money?

34
35
36 PARTICIPANT: Both.

37
38 MR. MELILLO: I don't anticipate any reduction at the moment, but
39 obviously, as with everything else in life, always subject to change.

40
41 DR. BODDE: Ron.

42
43 MR. ROSS: Thank you. I want to address a couple of issues, given
44 the integration and transportation committee, if you notice, it's pretty much the shortest

1 of the reports. It's an ongoing dialogue with EM right now and particularly EM-1 and
2 also the Office of integration and disposition. And the issues there are related to the
3 comments I made earlier to Dave and to respond to Mr. Winston's comments here
4 regarding how this all effectively works.

5 Some of the question that I'm posing back to them right now, basically,
6 that it fits in the line of the budget, fits in the lines of integration and how the site
7 interdependencies are being addressed here. And so I wanted to indicate that this
8 group is going to continue to ask those questions. I think the questions are right there
9 and that there needs to be a strategic planning process put into place, and what does
10 that really mean as far as the complex and the Department.

11 And then second, how this then translates into the priority setting
12 process, and then the management tools that are necessary to continue to monitor
13 where the organization is going in meeting its objectives. It also fits well into the top
14 down review that's proposed.

15 So let me iterate here that this is a committee that is still in the formative
16 stages, but I think it's now asking the right question and hopefully we're going to start
17 getting the right answers. So that's essentially the report on that, and that is not
18 reflected here, and that's only because there is some recent occurring kinds of things,
19 such as the new EM coming in, that kind of thing.

20
21 DR. BODDE: Thanks, Ron. Other comments or questions to this
22 point.

23
24 MR. ROSS: I might put a word out to Dr. Berkey. Anybody that's
25 supported by the outside stakeholders tends to find a new job within EM, based upon
26 EM's reorganization, so be careful on how much you support somebody. We find at
27 the states, that that seems to be the case that we really like somebody and they
28 disappear.

29
30 DR. BERKEY: Do you have any candidates that you want to get rid
31 of?

32
33 MR. ROSS: Yes.

34
35 DR. BODDE: Kathryn, you had a comment?

36
37 MS. CRANDALL: Kind of a comment, I'm not sure exactly how the
38 committees work and of the public participation element in the committees. And I think
39 that particularly with the new ATIC committee or Alternatives to Incineration, that that
40 will be particularly important. And I also think that if the Integration and Transportation
41 Committee starts working some of those problems to further sort of make sure that
42 there's an open door policy to these committees and maybe even try to do some more
43 outreach to stakeholders and public citizens would be good in our committee work, not
44 just at our meetings here.

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DR. BODDE: Very good. Let me ask Ken to fill us in on the requirements there.

MR. SMITH: A committee meeting is a working group meeting. It does not require a Federal Register notice. It does not require a verbatim transcript. Jim's policy for our Board is that all the committee meetings are open to the public, even though technically they don't have to be, but that's Jim's policy. We don't do closed meetings or even closed working group meetings, so they're open to the public, and the public is invited to attend. We produce minutes of them and we post the minutes on our web site so that they are open. We announce the committee meetings in the biweekly that Jim signs out twice a month, but technically it's a working group. But we've done everything, under Jim's direction, to open them up and make them as accessible as possible.

DR. BODDE: Thank you. Ed.

DR. BERKEY: I just wanted to make a brief comment about the issue that we haven't really discussed, and that is besides a new EM-1 coming, there is going to be a new Under Secretary coming, and we know a little bit about Bob Card and what he's interested in. We know how much Dr. Moniz impacted some of the things that we did the past several years from his position as the Under Secretary. And it's already going to be pretty clear, because Bob Card does come out of the Rocky Flats closure contract, that he's going to have a really keen interest in project management issues, and related issues to efficiency within the context of worker health and safety, and hopefully within the context of applying new technologies. But if people haven't become aware of his particular background and interests, I think it would be useful perhaps to circulate his resume among the Board members. I think it will have some impact on things that are going to be of interest to this Board.

Approval of Resolutions

DR. BODDE: Okay, thank you. Anything else on this general subject of our work process and so forth? Alright, if not, let's move then on to the resolutions, the next item of Board business. We have three resolutions, and if satisfactory from your point of view, dear colleagues, I would suggest we proceed in this way.

First I'll ask for a motion to approve each resolution and a second. That puts it on the table. With the resolution on the table, then we'll have discussion, proposals for modification, if any, and so forth. Then I will ask for any public comments on the resolution. Then we will have our vote.

1 So if that is satisfactory to everyone, then let's turn to Tab 4 and that is
2 the first resolution of the Ad Hoc Committee on Science and Innovation, otherwise
3 known as the Ahearne Committee.
4

5 PARTICIPANT: I will introduce it.
6

7 PARTICIPANTS: Second.
8

9 DR. BODDE: It is moved and seconded. Are there questions,
10 comments, discussion from the Board? Hearing none from the Board, let's open it for
11 public comments. Are there any public comments on this resolution?

12 Hearing none, then we are ready to vote. All in favor, indicate by
13 saying aye.
14

15 PARTICIPANTS: Aye.
16

17 DR. BODDE: All opposed?
18 (No response.)
19

20 DR. BODDE: The motion passes unanimously. And thank you again,
21 John, and all the members of this committee for a very fine piece of work and a lot of
22 hard work went into that.
23

24 DR. AHEARNE: As I said, a lot of thanks goes to Mike.
25

26 DR. BODDE: Yes, and Mike also. We acknowledge that for the
27 record.

28 Okay, the second resolution appears at Tab 5, and that is from the
29 TD&T committee. That was not in your read-aheads. Let me give you a moment to
30 find it and glance at it again. And if I could have a motion to approve.
31

32 PARTICIPANT: I move that we accept it.
33

34 PARTICIPANT: Second.
35

36 DR. BODDE: It is on the table. Are there any questions, comments,
37 proposed changes?
38

39 MR. ROSS: I might just comment on the second page of it, a
40 paragraph says "DOE/EM should make greater use of complex-wide integration and
41 disposition tools to identify technology needs and waste integration opportunities and
42 assist in allocation". I just want to call attention that that's probably going to cross over,
43 you know, the integration area too. And I want to just point that out so that when we

1 do come up to that we will call upon that and I might add, we'd like to sit in on more of
2 your activities too on that.

3
4 DR. BODDE: Yes, I think that point's well taken. Integration really
5 cuts across the whole of our activities, or it's not integration at all. Other observations?
6 Let me ask for public comments on this resolution?

7 Hearing no public comments, if we are ready to vote. All in favor,
8 indicate by saying aye.

9
10 PARTICIPANTS: Aye.

11
12 DR. BODDE: All opposed?
13 (No response.)

14
15 DR. BODDE: The resolution is passed unanimously.
16 The third one is found at Tab 6, and this resolution is from the Science
17 Committee on the quality of science in EMSP. Again, that was not in the read-ahead,
18 so let me give you a moment to look at that. Review that.

19
20 DR. AHEARNE: Move that it be accepted.

21
22 DR. PAULSON: Second.

23
24 DR. BODDE: The resolution is on the table. Are there comments or
25 discussion? Hearing none from the Board, are there comments or discussion from the
26 public?

27 Hearing none from the public, we are then ready to vote. All in favor,
28 please indicate by saying aye.

29
30 PARTICIPANTS: Aye.

31
32 DR. BODDE: All opposed?
33 (No response.)

34
35 DR. BODDE: The resolution passes unanimously.
36 Well, that completes our formal business as I have it on the calendar
37 and on the agenda. Let me ask if there is any new business to come before the Board
38 at this time. Yes, Glenn.

39
40 **New Business**

41
42 DR. PAULSON: I have one item of old business that really didn't fit
43 into the earlier discussions, so I'll raise it now, and one item of new business. I'd like
44 the minutes to reflect that our briefing book contained a letter from Randy Scott dated

1 March 15, 2001. It was the response to the Board's letter to Carolyn Huntoon right
2 after the last meeting, just so it's clearly noted that we've gotten a response.

3 The new business item is triggered by the point that Todd made
4 yesterday, which a couple of us discussed during the break. I'd like to suggest that at
5 this juncture in the Board's history, in honor of the new administration and all, that we
6 ask the staff to review the entire history of recommendations that the Board has made
7 since its inception 12 or 13 years ago, and do a little analysis of them, the categories of
8 the recommendations, not necessarily whether they've had any impact or not, but so
9 that we see what the Board has dealt with within the EM program over the years. That
10 will help us inform the new administration what issues have been covered over what
11 period of time, and for the Board purpose, it will help identify any gaps in the EM
12 program that the Board has not looked into ever.

13
14
15 DR. BODDE: Well, Jim, you'd like to comment on that?

16
17 MR. MELILLO: Glenn, that is an excellent suggestion and we started
18 that, and we've been doing it. Ken started it and we've gone back to the beginning and
19 started laying them all out in terms of exactly what were the recommendations, what
20 were the impacts, what were the reactions to them, and we haven't gotten to them all.
21 We haven't finished it yet, so we just wanted to let you know that that is an excellent
22 suggestion, and yes, we should do that, and we will complete it. It would be of great
23 value to the incoming, and a great value to the Board as well at this point, based on a
24 lot of things that were said over the last two days.

25
26
27 DR. BODDE: But, I think being able to see the areas that we have
28 focused on is important to make sure that we're not just working the same rut over and
29 over again, but that there are many new ruts.

30
31 MR. MARTIN: David, that's a groove, not a rut.

32
33 DR. BODDE: Thank you for the correction. Diana.

34
35 MS. YUPE: I just want to present an issue that is being expressed
36 throughout some of the historical societies in relation to the work that has been done
37 through the EM program at the sites. And part of it, and this is just for consideration of
38 the Board and some of the committees, and Tom and I have been working a little bit
39 about it as well, but it's in regard to the preservation of the properties that are of historic
40 nature at these site areas, whether it be on a D&D, or integration, or long-term
41 stewardship, or whatever issue, that there needs to be some focus made on how these
42 properties and the DOE culture is going to be preserved for the future.

43 One of the recommendations from the INEEL as well as a couple of
44 other sites, that we need to have more interaction with the federal preservation office

1 here in headquarters. I know that there has been a split here within Forrester on these
2 preservation issues, but we need to look a little bit more on how these properties are
3 going to be preserved or protected and how there's going to be some compliance with
4 the Preservation Act, as well as the American Indian Policy. Thank you.

5
6 DR. BODDE: Thank you. Other comments or thoughts on that point?
7 Tom.

8
9 MR. WINSTON: Thanks, Diane. If there is a place for that, appears
10 to have a niche, it would be in the long-term stewardship area. I think we need to keep
11 in mind that this is an EM committee. There clearly is an EM focus. The reality is that
12 an awful lot of sites that are getting to the final closure stage are considering how they
13 can also enhance long-term stewardship by telling a story, having a history, and so I do
14 think there is a time there, and Diane had offered to try to explore those tie-ins for the
15 committee, where that leads us, I'm not sure, but I do think that there is a long-term
16 stewardship tie in because, while we can have institutional controls, and we can have
17 covenants, and we can have all sorts of apparatus, the reality is, if we're going to
18 succeed at these sites, we need to be able to have a living legacy. And I think historic
19 preservation has a tie in there.

20
21 MS. YUPE: If I may, just a follow up on that. And that is true that
22 there is a lot of implications within long-term stewardship for the historic properties.
23 We've also discovered there's a lot within D&D, and there's also some within the
24 Defense programs as well that whether it be here or in DOE, or at the Interior level.
25 And the historic societies are really concerned of how all of the projects are going to
26 be, I'm trying to think of the word, but basically that, how the work that EM is doing is,
27 and especially at the INEEL, it's exactly because it is an EM lab, that how these
28 properties are going to be taken into considerations during all of the different kinds of
29 projects throughout the whole complex. But it is true that long-term stewardship is one
30 of the primary focuses for preservation, but the law does not discriminate between one
31 committee against another. It is not only the law, but also the policies that are
32 incorporated here in DOE. They don't discriminate. They have to go across the board.
33 Thank you.

34
35 DR. BODDE: Alright. Lorene.

36
37 DR. SIGAL: Just a comment with regard to your review of EM
38 activities and recommendations. That of course, is very helpful to the Under Secretary,
39 but I think it needs also to be provided to new members of the Board. It would help a
40 great deal if as you were appointed you had some idea of what the Board has done,
41 what it's about. I would have found that very helpful.

42
43 DR. BODDE: Yes, I think that's right. We probably don't do a good
44 enough job of introducing new members to the culture here, the culture of this Board,

1 the culture of the DOE and so forth. So I think that point is very well taken, and that
2 some of the others here will attest to that.

3
4 MR. WINSTON: I'm just going to add that those of us that have been
5 here since the beginning probably have forgotten.
6 (Laughter)

7
8 DR. BODDE: We'll take Paul and then Kathryn.

9
10 DR. RAMBAUT: I appreciate (unintelligible) and also (unintelligible)
11 information about EM from the EMAB staff on the e-mail. Recently you got from,
12 what I call some particularly interesting notes of the reorganization of the MINATOM
13 in Russia, and I think materials like that puts the whole bullet into an international
14 specter, and I really thought that was very useful.

15
16
17 DR. BODDE: Good, well, I hope we can do more of that. Kathryn.

18
19
20 MS. CRANDALL: This is sort of related to the question that Ron
21 asked yesterday about the EH report on recycled release materials, and at the last
22 meeting, my memory on this is very cloudy, but there was some work by an Ad Hoc
23 committee on a facility for recycling materials or somehow related, and I just was
24 wondering what happened to that committee? Was it a recommendation that was
25 made and that committee has disbanded? And is there going to be any follow up, any
26 continuing work on this sort of general issue of release and reuse of radioactive
27 materials?

28
29 MR. MELILLO: I can't answer for the Department. I don't know,
30 Betty, can you answer that? Do you have any idea on that?

31
32 MR. ROSS: Jim, since we did pass a resolution on recycling and I
33 believe that's in the history of EMAB. We do have a history with a policy attached to
34 it. If I remember right, that committee sunset at the end of its work, and I don't
35 remember the name of it.

36
37 MR. MELILLO: Yes, you're right, Ron. But I think you're asking me
38 something about last year's recycling committee?

39
40 MR. ROSS: Oh, I'm sorry last meeting, okay.

41
42 MR. MELILLO: Quite honestly, I can't say but in terms of us, there is
43 at the moment, no further role for us. Whether or not there's anything further planned
44 on the part of the Department I really wouldn't know, so I can't comment on that. I

1 know what you're talking about, though. There were various holds put on various
2 things that were going on under former Secretary Richardson, but I do not know where
3 it's going at this point.

4
5 MS. CRANDALL: My understanding was that there was a review of
6 the overall policy which (unintelligible) environmental assessment on, but (unintelligible).

7
8
9 DR. BODDE: Frank, on this point?

10
11 DR. PARKER: There is an ongoing review in the Department right
12 now. Some of the people in EM are working furiously on it, so it's a very active
13 problem as to what to do.

14
15 DR. BODDE: Anything else on this particular point?

16
17 MR. KUCERA: Related to that report, Tom Winston and I just spoke
18 briefly this morning that there may be some follow up under the long-term stewardship
19 that we need to do in that the report from ES&H may point toward non DOE sites
20 where there's a DOE responsibility into the future as far as long-term stewardship is
21 concerned. So the non DOE subcommittee of the LTS committee may end up looking
22 at this, but we'll just have to dig into the report to focus on how much is really there,
23 whether or not it's something that we're going to have to deal with in a major way.
24 And since I just got the CD-ROM this morning for it, and there are nine volumes, I
25 believe, we're just at the beginning of that, but there is the suggestion of additional non
26 DOE sites that we may have to take a look at in terms of long-term stewardship. But
27 that's the only area that we would be looking at. So if the Board wants to do something
28 else related to that, then I guess they would have to direct some other committee to do
29 that.

30
31 DR. BODDE: Yes, Dave.

32
33 MR. SWINDLE: Just very quickly to get back on your point, as a
34 point of clarification. EMAB did establish an Ad Hoc committee, and I was part of,
35 co-chair last year, looking at the specific assignment coming out of EM-1 to review a
36 study that was being led out of the Secretary's office cross-cutting with EM on metals
37 recycling. That report was never completed at the EM or out of the group that was
38 working on it, consequently our one request was to review something that never got
39 out. Consequently, that committee as I understand, was disbanded because we never
40 were able to fulfill that specific requirement.

41
42 MR. SMITH: The committee never met.

43
44 MR. SWINDLE: The committee never met, right.

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DR. BODDE: Ed.

DR. BERKEY: I have a new topic to raise to see if there's any interest among the Board, or whether it's even appropriate for us to consider some kind of involvement, but it stems from the presentation that we heard this morning about the budget, and the clear implications that we all sense that there are going to be some rather extensive negotiations started. Craig alluded to the fact that it's already underway at EPA, and it's going to be underway with many states and it's likely to lead to many compromises.

And we know that the budget realities, unless they change dramatically, are going to lead to these kinds of things. You know, the Board hasn't typically involved itself in budget issues, and I'm not suggesting that we do so now, but we do and we have involved ourselves in prioritization issues and the stakeholder issues.

There is an opportunity here is what I'm saying. There's a top to bottom review under way. We can sit idly by until it's done and see whether how we react to it, or my comment is, is there a more pro-active role that the Board can play in the interim, while this review is underway, while these discussions are starting all over the country with many of the sites?

We also know that many of the sites are going to be undergoing decreases in their workforce. There's a lot of implications to what we heard this morning. And we meet again, in roughly six months. That's a long time. And I don't know that we have any organized activity to track this.

DR. BODDE: Well, that's why I'm suggesting these informal discussions among the chairs might be a good thing to do as we go forward. This is a very fluid situation, it might be a good way to track that. Tom.

MR. WINSTON: I just have a response. I think you raise a really good point, Ed. And I would suggest that the Board monitor those discussions. We don't know at this point where those discussions are headed, and we're not sure at this point what this top to bottom review is. At the same time, there's a significant opportunity here.

For example, in my questioning of Dave yesterday and his presentation, I couldn't imagine an evaluation of project management without some involvement with his committee over the project management initiative. Certainly some group coming in to look at that issue would want to take stock of a high level external advisory board's recommendations on that issue, so there may be some actual discreet task that committees could do, just providing information and expertise, that is not necessarily even being part of the discussions per se. But I think that needs to be monitored because I think that there is some overlap with some key areas that this Board has made recommendations on.

DR. BODDE: Todd.

1 MR. MARTIN: I don't know what the appropriate approach is, but in
2 support of what Ed said, one of my frustrations is some of the compliance issues that
3 are going to come up as a result of this budget don't currently seem to fit into any of the
4 committee slots. So if I have energy on that, I don't know where to place it. I don't
5 know what committee chair to contact, that sort of thing.

6
7 DR. BODDE: Well, these committees are not set in stone of course,
8 and you know, if we have to convene an Ad Hoc committee on a particular issue, we
9 can easily do that, so don't let the boundaries seem to be hard boundaries. They're not
10 at all.

11
12 DR. BERKEY: And that's exactly what I think. I think that this is one
13 of those topics that is sort of in, maybe it draws, or maybe it's the source of an Ad Hoc
14 committee, and you're suggesting the process to get there is for the committee members
15 or the committee chairs to talk about this?

16
17 DR. BODDE: Well, what I'm suggesting that is, as we go forward that
18 Jim will help us organize discussions among the chairs.

19
20 DR. BERKEY: Okay, I think, maybe if Todd, or people like Todd on
21 the Board who, how would you suggest? Should they at the moment contact Jim, or
22 Ken or you?

23
24 DR. BODDE: As they would like. I think just contacting Jim would be
25 fine.

26
27 MR. MELILLO: Given, as you've all said, the very early stages that
28 we're in of this right now, and I don't know any more than anyone else does in the room
29 that's already been stated what's the review's going to be or anything else. What you
30 can assume, more than assume, I will tell you what I will be doing, because I know I
31 will, is trying to pay attention to what the review is about, and while I haven't thought it
32 out yet, the next thing would have been to find a way to share that at that point so that
33 the Board is informed. That's basically what you're asking, I believe. And so that was
34 my intention. I'm just not there. It's evolving and we're all equal on this right now. I
35 don't know any more about it than any of you do. The idea of trying to get information
36 flowing, and that's what you're talking about, I will attend to that.

37
38 **Board Calendar**

39
40 DR. BODDE: Okay, ladies and gentlemen, have we exhausted the
41 topic if not ourselves? Okay, hearing no further comments, let me just call your
42 attention to one other item, and that's calendars for the next meeting. They are in your
43 book. Please mark the calendar dates you cannot attend, and if you would look
44 favorably at some of the dates that appear to be workable for everybody, particularly in

1 October: either Tuesday, Wednesday, or the Wednesday through Thursday. From a
2 personal point of view, my own preference would be Wednesday through Thursday.
3 I've got a Monday class.
4

5 MR. ROSS: It helps that those of us who travel from the west get that
6 extra travel day to come.
7

8 DR. BODDE: Yes, yes, okay. That's a good point also for the
9 commuters from out west.
10

11 MR. CHURCH: I would just like to inform the chair that the Energy
12 Communities Alliance is going to be meeting in Oak Ridge October 17th, 18th, and
13 19th. That takes several members of this committee, and it also takes a lot of DOE
14 staff, so I would draw that to your attention.
15

16 DR. BODDE: Thank you very much, I didn't know that. 17th, 18th,
17 and 19th.
18

19 MR. CHURCH: Of October.
20

21 DR. BODDE: Okay, thank you. Well, then that may not work for us
22 then.
23

24 DR. AHEARNE: To whom do we give them?
25

26 DR. BODDE: Give them to any of the staff. Let me just say in closing,
27 I think we all notice that these meetings appear to flow quite well, but it's like the ducks
28 on the surface, are paddling like hell underneath, and we really owe a vote of thanks to
29 all the staff who made this happen, and Regina for setting up the room for us to
30 accommodate this crowd, and also for organizing the very nice coffee and sodas that
31 we had this time. I think that is a significant step forward. Those of you who haven't
32 soldiered through the old coffee-less days may not appreciate it fully.
33
34

35 MR. BENNETT: The budget may require a change.
36

37 DR. BODDE: There's probably a line item in the budget somewhere. I
38 want to thank Kim Stewart for coordinating the briefings that we got. I want to thank
39 Mike Pfister, both for his work on the Ahearne committee, but also together with
40 Peggie Burke, Kim Stewart, and Michelle Lynar, for having arranged the reading
41 books that we had. So let's all offer a round of thanks for them.
42

43 (Applause.)
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Public Comment Period and Adjournment

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DR. BODDE: Well done. Okay, Mr. Co-Chairman, and Mr. Executive Director, any final remarks before we adjourn?

MR. BENNETT: Thank everybody for a very productive meeting. I hope you all got as much as I did out of this. Thank you.

DR. BODDE: Okay, no other comments? Oh, public comment. Any public comment?

Hearing no public comment, we stand adjourned.

(Whereupon, at 12:00 p.m., the hearing in the above captioned matter was adjourned.)