

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

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1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

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4 BRIEFING BY DOE ON HIGH LEVEL WASTE PROGRAM

5 ***

6 PUBLIC MEETING

7 ***

8 Nuclear Regulatory Commission
9 Commissioners' Conference Room
10 One White Flint North
11 Rockville, Maryland
12

13 Tuesday, May 17, 1988
14

15 The Commission met in open session, pursuant to
16 notice, at 2:00 p.m., the Honorable LANDO W. ZECH, Chairman of
17 the Commission, presiding.

18 COMMISSIONERS PRESENT:

19 LANDO W. ZECH, Chairman of the Commission
20 THOMAS M. ROBERTS, Member of the Commission
21 FREDERICK M. BERNTHAL, Member of the Commission
22 KENNETH CARR, Member of the Commission
23 KENNETH C. ROGERS, Member of the Commission
24
25

1 STAFF AND PRESENTERS SEATED AT THE TABLE:

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W. PARLER

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S. CHILK

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H. THOMPSON

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8

Department of Energy:

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S. KALE

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E. KAY

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R. STEIN

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P. SAGET

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C. GERTZ

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P R O C E E D I N G S

[2:00 p.m.]

CHAIRMAN ZECH: Good afternoon, ladies the gentlemen. Commissioner Bernthal will be joining us later on. This afternoon the Commission will be briefed by Mr. Kay, Acting Director of the Office of Civilian Radioactive Waste Management of the Department of Energy. Welcome.

This briefing is a continuation of a series of periodic briefings by the Department of Energy, which are aimed at keeping the Commission informed of recent developments in the Department's High Level Nuclear Waste Repository Program. Since our last briefing by the Department of Energy, a number of significant events have occurred which impact on the development of a national high level waste repository.

The most significant event was the enactment of the amendment of the Nuclear Waste Policy Act in late 1987. This amendment selected the Yucca Mountain site as the location for the first repository. Since our last briefing, Mr. Kay has taken over the direction of DOE's High Level Waste Program and the Office of Civilian Radioactive Waste Management has very recently been reorganized.

The Commission is interested in hearing about this reorganization and how it might impact interactions with the NRC and the State of Nevada. The Commission was recently briefed by the NRC staff on Agency comments concerning DOE's

1 consultation draft site characterization plan for the Yucca
2 Mountain site, and we are very interested in hearing about
3 DOE's response to the Agency's objections and comments on the
4 draft plan. The Commission is also interested in hearing about
5 the development of the licensing support system.

6 Do any of my fellow Commissioners have any opening
7 comments that they would like to make?

8 [No response.]

9 CHAIRMAN ZECH: If not, Mr. Kay, welcome and you may
10 proceed.

11 MR. KAY: Mr. Chairman and members of the Commission,
12 because communications and interactions are an abiding element
13 of the DOE and the NRC relationship, I welcome the opportunity
14 to continue the practice of periodic presentations to the
15 Commission of OCRWM program activities and significant
16 accomplishments.

17 Today's presentation, my first, is especially
18 important because of the many events that have taken place
19 since the last briefing in June of last year. I have with me,
20 Pierre Saget, who is the Acting Director of our Office of
21 Quality Assurance; Ralph Stein, the Acting Associate Director
22 of the Office of Systems Integration and Regulation; and Steve
23 Kale on my right, the Acting Associate Director for Facility
24 Siting and Development.

25 Following the conclusion of the formal presentation,

1 we will be open for questions from the Commission as you
2 desire. In addition to reviewing some of the program
3 highlights with you, including changes resulting from the
4 passage of the Nuclear Waste Policy Act and Amendments Act in
5 December, I will focus on areas of joint and special NRC and
6 DOE interest with some general comments on the overall program
7 and DOE/NRC relationships.

8 Before addressing these subjects, I would like to let
9 you know that I appreciate the interest of the Commission in
10 the program and your efforts to provide guidance to the staff.

11 The Amendments Act streamlines and focuses the waste
12 management program established by the Nuclear Waste Policy Act
13 of 1982. In terms of program implementation, the most
14 important and significant provisions of the Amendments Act
15 includes site characterization of the Yucca Mountain site in
16 Nevada as the only candidate site at this time for a permanent
17 geologic repository; the authorization, with conditions,
18 monitored retrievable storage or MRS facility as part of the
19 integrated waste management system; and the establishment of
20 several new entities such as the Nuclear Waste Technical Review
21 Board, the Monitored Retrievable Storage Review Commission and
22 the Office of the Negotiator.

23 I believe these entities should enhance the public's
24 confidence in the program, particularly the scientific and
25 technical quality of the program. Plans for implementing the

1 new focus of the OCRWM program are currently under development.

2 In response to the statutory changes and the
3 continuing evolution of the nuclear waste disposal program.
4 OCRWM has been reorganized along functional lines to facilitate
5 and enhance the integration of the waste management system.
6 The new organization places increased emphasis on quality
7 assurance, systems integration, licensing and regulations.

8 The office will function with full or associate
9 directors and a director of office of quality assurance. Like
10 the associate director, the director of the office of quality
11 assurance will report directly to the director of OCRWM. The
12 personnel paperwork has been submitted but not yet completely
13 acted upon for all of these positions. Therefore, the
14 incumbents to these positions are temporarily designated as
15 acting, but be assured that the organization is functioning
16 fully with leadership ready and willing to make decisions and
17 exercise the responsibilities of management.

18 To facilitate the technical management and
19 integration of the waste management program, OCRWM issued a
20 solicitation for a managing and operating contractor in October
21 of last year. This solicitation was revised due to the passage
22 of the Amendments Act and on April 25th of last month, the
23 solicitation for the M&O contractor closed. The proposals are
24 now being evaluated.

25 The major responsibilities of this contractor will be

1 to one, help ensure that the Yucca Mountain site is
2 characterized in accordance with the requirements of the
3 Nuclear Waste Policy Act as amended, and if found suitable, the
4 site is developed as a repository. Secondly, to assist the DOE
5 in the MRS siting activities. Thirdly, to assist in the design
6 and integration of the repository, the waste package, the MRS
7 facility and maintain oversight of transportation design
8 activities and its integration into the overall waste
9 management system.

10 Fourthly, to assist the Department in obtaining NRC
11 licenses and certificates for the repository, the MRS facility
12 and transportation casks. Fifth, to integrate the work of
13 various program participants such as the National Laboratories,
14 other Federal agencies and DOE prime contractors. Lastly, to
15 help ensure that all work meets safety, technical,
16 environmental, quality, schedule, and cost requirements, the
17 regulatory requirements of the NRC and EPA, and ensure that all
18 of our actions are consistent with applicable DOE orders.

19 On January 8 of this year, DOE issued the site
20 characterization plan consultation draft for the Yucca Mountain
21 site to serve as a vehicle for technical discussions with the
22 State of Nevada and the Commission. To start these discussions
23 a meeting was held in Reno in the latter part of January.
24 After the meeting in Reno, the NRC transmitted to the
25 Department on March 7 its draft point paper containing the

1 results of its technical review of the consultation draft.

2 In the NRC Draft Point Paper five principal
3 objections were identified. These five objections pertained to
4 difficult issues which have been discussed extensively in the
5 past. A workshop was held on March 21 through the 24 at NRC
6 Headquarters to clarify and discuss those objections, as well
7 as other NRC comments and questions.

8 The Department is pleased with the thoroughness of
9 the NRC review. Such a review is what we sought when the site
10 characterization plan was issued in a consultation draft form.
11 DOE plans to address and resolve the NRC objections as
12 appropriate during the consultation period, prior to the
13 release of the statutory plan. DOE will also address NRC
14 concerns to the extent possible, prior to the release of the
15 statutory SCP. We are planning to meet with the NRC staff
16 later this summer to discuss the proposed disposition of NRC
17 comments contained in the NRC Point Paper.

18 We are currently planning to issue the SCP formerly,
19 as required by the Nuclear Waste Policy Act, by the end of this
20 year. By having provided an opportunity for input from the NRC
21 and the State of Nevada, we believe that we will have fully
22 considered the views of the parties to ensure a high quality
23 statutory site characterization plan. Start up of the
24 exploratory shaft facility is now scheduled for June of 1989.

25 Recently, our staff attended an ARCS, soon to be

1 Advisory Committee for Nuclear Waste meeting, and offered to
2 review the logic and contents of the consultation draft. We
3 understand the NRC staff is now making arrangements for this
4 presentation to take place. In addition, we are planning upon
5 release of the statutory plan at the staff suggestion, to brief
6 the Advisory Committee on Nuclear Waste of any differences from
7 the consultation draft.

8 The Amendments Act and other Congressional actions
9 have created new opportunities for the Office of Civilian
10 Radioactive Waste Management to maximize the contributions of
11 an MRS facility to the overall waste management system. We
12 need to put in place not just a mined geologic repository, but
13 a complete operational system that will actively manage the
14 safe and efficient storage, the transportation and packaging of
15 waste over a 50 year period, in addition to providing the
16 ultimate permanent isolation of these waste in a geologic
17 repository, as I said.

18 The role of an MRS in the waste management system may
19 change as a result of several activities, including the
20 recommendations of the MRS Review Commission, the actions of
21 the negotiator, several ongoing system studies including the
22 use of dry storage technology studies at reactor sites and
23 other Congressional actions. To accommodate these
24 uncertainties, we are in the process of developing a near term
25 strategy that will allow optimization as a continuing process

1 and does not detract of our ultimate goal of permanent
2 isolation.

3 In accordance with the Amendments Act, OCRWM is
4 preparing a report on the use of dry casks storage at reactor
5 sites. The study will assess the utility industry's spent
6 nuclear fuel storage needs through the start of operation of
7 the geologic repository. An initial version of this report is
8 scheduled for release later this summer.

9 We view the development of transportation
10 capabilities as an essential element of the waste management
11 system. Fortunately, we are able to build on a long history of
12 safe shipping experience and a comprehensive system of Federal
13 regulation and international standards. Because the schedule
14 for the transportation program is linked to the schedule for
15 the development and operation of the waste disposal and storage
16 facilities we have both an opportunity and the time to refine
17 and improve shipping, equipment and procedures and to
18 coordinate transportation planning with other Federal
19 industries, states, Indian tribes and other interested parties.

20 As you know, the Department and the NRC have
21 established a procedural agreement on the certification of
22 transportation casks. Under this agreement, as well as under
23 the Amendments Act of December, all cask designs that will be
24 used under the NWPA shipping will be certified by the
25 Commission, including casks designed for defense and commercial

1 high level waste.

2 In addition, DOE will comply with the NRC shipment
3 pre-notification procedures when shipping waste to NWPA
4 disposal and storage facilities. I mention these constructive
5 actions which were taken prior to the recent Congressional
6 directives in December, to indicate our past the continuing
7 commitment to work with the NRC to address technical issues
8 affecting high level waste transportation.

9 I would now like to turn to action items relating to
10 key aspects of the NRC/DOE pre-licensing consultation program.
11 The Amendments Act reduction of the number of sites to be
12 characterized from three to one will allow more technical
13 interactions to take place on that one site between DOE and NRC
14 staff. That process is well underway, and I will now discuss
15 in terms of our completed and planned joint consultations and
16 some important subjects of those consultations.

17 In addition to the consultations on the consultation
18 draft of the site characterization plan, we have also had other
19 interaction such as the recent DOE/NRC site visit to observe
20 the USGS Southern Great Basin Seismic Monitoring Network. I
21 mention this joint site visit as an example, because of the
22 various participating organizations and the dual purpose it
23 served.

24 The prime purpose was to provide the Commission and
25 the State of Nevada with an opportunity to observe and learn

1 more about the equipment and procedures associated with
2 monitoring seismicity in the region surrounding the proposed
3 repository at Yucca Mountain. In addition, the site visit
4 provided information in preparation for audits of the network
5 which will be conducted following adoption of a formal quality
6 assurance program.

7 In addition to the meetings mentioned above, we have
8 completed a useful five day workshop on alternative conceptual
9 models, a quality assurance meeting, and NRC staff has attended
10 the TPO or Technical Project Office meetings of our contractors
11 in Nevada and they have observed DOE audits of our contractors.

12 Clearly, the value of consultation is accepted and
13 recognized by the Department. We see as a priority, near term
14 consultation on the topics of quality assurance, the
15 exploratory shaft location, design and construction,
16 clarification of some definitions in 10 CFR 60, determination
17 of methodology of calculating groundwater travel time, and
18 seismicity characterization methodology.

19 In the third quarterly progress report to the
20 Commissioner by the NRC staff, the staff identified repository
21 design parameters as an action item that covers a key aspect of
22 the NRC/DOE pre-licensing consultation program. The NRC and
23 DOE have agreed that in developing the site characterization
24 program, DOE will use performance allocation.

25 In the words of the NRC staff, "DOE will select

1 tentative values for the contributions that each of the natural
2 and engineered barriers can reasonably be expected to provide
3 to the overall waste isolation performance of the site. Such
4 allocation is the rationale for establishing specifically what
5 information site characterization will have to produce."

6 It should be emphasized that these tentative values
7 are simply guides for developing a testing program and designs.
8 As data is obtained and the site characterization program
9 matures, these values may change.

10 The NRC Position Point Paper and regular interactions
11 between the Commission and DOE staff are important vehicles for
12 assessing how well DOE is implementing performance allocation.
13 As the program matures, changes in our parameters will be
14 reported in our semi-annual progress reports. While there may
15 be some technical differences, I believe that the performance
16 allocation process for guiding the site characterization
17 program is currently proceeding well.

18 With respect to alternative conceptual models for the
19 Yucca Mountain site, the DOE concurs with the NRC staff
20 concerns and understands the basis for the objection. The DOE
21 and NRC agreed to an approach to adequately address the
22 concerns and to rescind the objection, and the DOE is currently
23 implementing that approach in its revision to the site
24 characterization plan consultation draft.

25 Key elements in implementing the approach include a

1 fuller discussion of the various alternative conceptual models
2 that can be supported by the existing site information,
3 alternative conceptual models that were considered but
4 discarded as not applicable, the significance of each
5 alternative conceptual model on each of the ologies, designs of
6 the repository and waste package and subsystem performance
7 objectives, testing to discriminate between the alternative
8 conceptual models during the site characterization process, a
9 scheduling of testing particularly to avoid both potential
10 interference between plant tests and preclusion of subsequent
11 tests that may be needed to support licensing.

12 Issue resolution is a key purpose of site
13 characterization in order to demonstrate compliance with the
14 applicable Federal regulations. We concur with NRC that a
15 major goal of the high level repository program is to ensure
16 that to the extent practicable, resolution of licensing issues
17 prior to licensing hearing should be achieved.

18 To achieve that goal, we are developing a process of
19 interactions with the NRC staff that should lead to the early
20 resolution of issues. This process includes the development of
21 position papers for review with the staff, followed by reports
22 that will consider the issue in greater depth, and possibly if
23 warranted, rulemaking. As I noted, we are developing this
24 proposed process now and will be discussing the approach with
25 the staff prior to recommending its adoption to the Commission.

1 As you know, the automated data system, the licensing
2 support system being developed by OCRWM to support the
3 requirements for all parties in the repository licensing
4 process will be based on a detailed set of system
5 specifications. These specifications will be derived from
6 statutory, programmatic and user requirements. Some of these
7 requirements are being defined through the efforts of the
8 Negotiated Rulemaking Advisory Committee that was convened by
9 the Commission.

10 Because of the importance and magnitude of the
11 Licensing Support System, the OMB has made the development of
12 the LSS a top priority within the Executive Branch.

13 I am hopeful that we will be able to facilitate the
14 discovery process and the review of relevant licensing
15 information for licensing proceedings. Establishment of the
16 information base for the licensing proceedings before the
17 licensing applications are submitted will make it possible for
18 the Commission to meet the statutory three year application
19 review period.

20 I might note that I believe the licensing support
21 system is a tool that is new to the formal licensing process.
22 It provides real opportunities for enhancing the process. But,
23 on the other hand, the licensing support system also offer
24 opportunities just as real to hinder the licensing process.

25 I am pleased to note the considerable progress made

1 by the Negotiated Rulemaking Advisory Committee. The
2 participants have worked hard and cooperatively to reach a
3 consensus on some very important issues. I am hopeful that the
4 work of the Committee will result in a product that we all can
5 live and work with. We welcome and look forward to continuing
6 interactions with the Commission, the State of Nevada and other
7 appropriate groups.

8 Further, as we reach consensus on the LSS rule, we
9 should also consider the possibility of other changes to the
10 procedural rules that might enhance the licensing process also.

11 Policy guidance for the quality assurance program is
12 provided by the Director of OCRWM, a responsibility that I take
13 with the utmost of seriousness. To emphasize the importance of
14 managing for quality, OCRWM has, as I mentioned earlier,
15 established an office of quality assurance to be managed by a
16 director who reports directly to the director of the program.

17 Current goals for this new office are to establish a
18 qualified QA program by January 1 of 1989, to secure approval
19 of the OCRWM QA program by the NRC, and achieve a favorable
20 review of the QA program by the Nuclear Waste Technical Review
21 Board when it becomes operative.

22 To do this, QA program documents are being modified
23 as needed, required procedures are being identified and
24 prepared, and efforts are underway to resolve outstanding
25 issues at both Headquarters and our Nevada office and the NRC.

1 Other actions include establishing an audit surveillance
2 schedule, implementing verification activities and management
3 reviews of recommended improvements.

4 DOE has worked cooperatively with the State of Nevada
5 in many forums. For example, State Representatives have
6 attended the project office monthly technical project managers
7 or TPO meetings, arrangements were made for the contractors to
8 tour the Yucca Mountain site, a protocol has been established
9 for their access as appropriate to the Nevada Test Site, and
10 office space near the Yucca Mountain site has been offered to
11 the State scientists.

12 The DOE has also participated with the State's Local
13 Government Advisory Group, the Nevada Commission on Nuclear
14 Projects, and the Nevada Legislative Committee on High-Level
15 Radioactive Waste in many meetings and workshops and has
16 attended meetings with the Nye County Commission.

17 And of particular importance, the State attends all
18 NRC/DOE technical meetings. The DOE remains committed to
19 maintaining positive, cooperative interactions with the State
20 of Nevada and appropriate local governments. The Department
21 continues to hold open its door to the State of Nevada to begin
22 consultation and cooperation negotiations under the Nuclear
23 Waste Policy Act.

24 The DOE reaffirms the general policy goals and
25 attentions that were laid out in the original mission plan of

1 1985. The Amendments Act of December authorizes the Department
2 to enter into benefits agreements with the State of Nevada
3 concerning a repository. And on April 6 of this year,
4 Secretary Herrington informed Governor Bryan of Nevada, that
5 the Department is prepared to enter into these negotiations
6 with Nevada on the development of a benefits agreement.

7 The DOE intends to ensure that the State of Nevada
8 and effective units of local government are adequately funded
9 so that they may fully and effectively participate in the
10 program. The DOE will work closely with representatives of the
11 State of Nevada and local governments in establishing
12 appropriate mechanisms for the efficient processing of grant
13 applications.

14 On April 21, in response to a request from the Board
15 of County Commissioners of Clark County which is contiguous
16 with Nye County, Clark County requested affected unit of local
17 government status. This will facilitate -- the Department
18 granted the request from Clark County as an affected unit of
19 local government.

20 This will facilitate, I believe, Clark County's
21 active participation in the development of an acceptable
22 repository site. Last week the Department received from
23 Lincoln County, which is a contiguous county with Nye County, a
24 request that they be designated as an affected unit of local
25 government. I met with the Mayor and several other officials

1 of Lincoln County just prior to coming to this meeting.

2 In conclusion, I hope that my discussion of program
3 highlights and areas of joint and special concerns has
4 demonstrated that DOE will conduct a site characterization
5 program so as to assure sound management, efficient use of
6 resources, and above all the successful demonstration of
7 regulatory compliance. Our approach will be determined,
8 realistic, and credible.

9 In the past, there has been a tendency to view the
10 assurance of safety as a purely technical question. The NWPA
11 as amended, tells us that the affected public and its public
12 representatives no longer accept that view. We accept this
13 more enlightened view.

14 We fully expect that the NRC will be very demanding
15 of the DOE program in order to develop the confidence and
16 reasonable assurance that the public health and safety will be
17 protected. We believe that a technically competent and astute
18 regulator is in the program's best interest, and we have and
19 will foster a healthy relationship of mutual respect with the
20 Commission and its staff so that useful and constructive
21 technical and policy exchanges can take place.

22 That concludes the formal presentation, Mr. Chairman.
23 We will be happy to respond to any questions that you or the
24 Commissioners may have.

25 CHAIRMAN ZECH: Thank you very much, we appreciate

1 that. Questions of my fellow Commissioners? Commissioner
2 Roberts?

3 COMMISSIONER ROBERTS: What is the status of the
4 Monitored Retrievable Storage Commission?

5 MR. KAY: The Monitored Retrievable Storage
6 Commission, all of the members have not been appointed. If
7 what I am told is true, we should expect the reappointment of
8 the third Commissioner sometime this week.

9 COMMISSIONER ROBERTS: Who makes that appointment?

10 MR. KAY: The appointment comes from consensus by the
11 Speaker of the House and the President Pro Tem -- excuse me.
12 The Majority Leader in the Senate, so it comes from the
13 Legislative Branch.

14 COMMISSIONER ROBERTS: Once the Commission is
15 constituted, do they have a timetable for making their
16 recommendations?

17 MR. KAY: Yes, sir. They are required to submit a
18 report to Congress in June of next year. That anticipated that
19 the Commission would also have been appointed, I believe, about
20 30 or 60 days after the Amendments Act was passed.

21 COMMISSIONER ROBERTS: Who is the negotiator?

22 MR. KAY: The negotiator has not yet been named, sir.

23 COMMISSIONER ROBERTS: How is that named?

24 MR. KAY: That is named by the President. The
25 President will be the person who names the negotiator.

1 COMMISSIONER ROBERTS: And that has not occurred?

2 MR. KAY: No, sir; it has not.

3 COMMISSIONER ROBERTS: That's all I have.

4 CHAIRMAN ZECH: Commissioner Bernthal?

5 COMMISSIONER BERNTHAL: First, let me apologize, Mr.
6 Kay. I have found that our new location very often makes it
7 impossible to get everything done in two locations in the City.
8 I guess we are not in the City anymore.

9 I do have a couple of things that I wanted to ask
10 here today, and I hope that I am not asking you to repeat what
11 you have already said.

12 MR. KAY: I would be happy to.

13 COMMISSIONER BERNTHAL: One of the things that you
14 touched on, in fact shortly after I walked in, was the question
15 of quality assurance. As you know, the recent experience of
16 one of our largest utilities with respect to the NRC's quality
17 assurance requirements and in particular with respect to
18 documentation of that utility's having those requirements,
19 turned out to be a major stumbling block to say the least in
20 the Tennessee Valley's continuing operation of its power
21 plants.

22 You mentioned that you have retained a firm to assist
23 you with that element, but maybe you could speak a little bit
24 more to the progress you have made and how well you see
25 yourselves as being aware of and able to implement adequate

1 documentation procedures in particular, because that's one of
2 the things the NRC has to rely on.

3 MR. KAY: Let me first say, Commissioner Bernthal,
4 that the activities of the High-Level Waste Program are
5 extremely intense, important and costly. I think that it is
6 incumbent upon the program to develop a QA program that has met
7 the approval of the NRC before we get into more site specific
8 or new work with regard to the site characterization activities
9 in Nevada.

10 We have had very explicit communication with Mr.
11 Thompson and his staff in this regard. I believe we have made
12 some very real progress, both at Headquarters and with the
13 Project Office in Nevada in the development of QA plans and
14 programs. We hope to very shortly be able to submit the plan
15 for the Nevada Project Office to the Commission for their
16 review. This, of course, will be followed up by plans and
17 implementing procedures for the technical project offices in
18 Los Alamos, Livermore, the USGS, the contractors for the
19 program.

20 I feel very strongly that we must have these in place
21 before we go forward with the exploratory shaft particularly.

22 COMMISSIONER BERNTHAL: I agree and couldn't agree
23 more. I am pleased to hear that. I would just urge -- I know
24 that you are going to do this, Ed, but I would urge that you
25 pay special attention to that occasionally neglected, at least

1 in the history of this Agency, element of our regulatory
2 requirements.

3 It's not going to be good enough in this business to
4 do the job right. You are going to have to be able to show
5 that you did it right. And then, of course, it is very
6 important that the public sees you as having done it right when
7 it is all finished. And quality assurance, I think in many
8 respects, is the key to that.

9 MR. KAY: If I could address one more issue that the
10 Chairman raised in his opening statement, and that's about the
11 reorganization. I know there's been some concern that everyone
12 in our organization is on an acting status right now. I don't
13 expect my acting status to change. I am the Deputy Director of
14 the program, and I have been told to expect to remain in the
15 position as Acting Director as well as Deputy Director for the
16 remainder of the Administration.

17 With regard to the associate directors, the paperwork
18 is in and we are not an excepted service agency. We have to go
19 through some other steps. We hope to very soon have these
20 approved formally by the Executive Personnel Board. On the
21 Director of the Office of Quality Assurance, this is a new
22 senior executive service position to the Department. I have
23 been told by the Director of Administration it has the number
24 one priority in the Department to try to get this approval
25 through all the hoops it has to go through, not only in the

1 Department but outside the Department.

2 So, there is some commitment within the Department to
3 be able to get the acting titles off of things, particularly on
4 the quality assurance. I feel very fortunate to have Pierre
5 Saget acting in that position right now. I feel very
6 unfortunate that he will not commit to me on a full-time basis
7 for this. So, I will have to advertise for that position once
8 it is approved by the Department and OPM for a new SES
9 employee.

10 COMMISSIONER BERNTHAL: I sympathize with your
11 circumstances. I guess acting isn't exactly like being lame
12 duck, but it probably has certain similarities. I can relate
13 to that.

14 MR. KAY: I am held responsible, no matter what.

15 COMMISSIONER BERNTHAL: Right. One other question I
16 had was with respect to your relationship with the new Advisory
17 Committee on Nuclear Waste in this Agency. As you know, the
18 Commission has recently established a separate Advisory
19 Committee in the tradition of the ACRS, which we call the
20 Advisory Committee on Nuclear Waste. We have two or maybe the
21 Chairman will correct me, I guess we aren't at three yet. I
22 guess we have two outstanding individuals that are already
23 committed to serve on that small committee.

24 Have you set up a plan or mechanism, and more
25 importantly a person, that will establish a communications link

1 between DOE's efforts and this independent Advisory Group that
2 will also report to the Commission?

3 MR. KAY: We have established a person that will be
4 the primary interface with the NRC staff and other mechanisms.
5 That will come out of Mr. Stein's office, the Office of Systems
6 Integration and Regulation.

7 We do have a schedule. We are, right now, in the
8 process of developing with the staff a time that we can come in
9 and brief the ACNW more on the consultation draft. We plan to,
10 when we put the statutory SCP out, to come in and brief him on
11 what changes have taken place from the consultation draft to
12 the statutory version.

13 We look forward to a continuing relationship with the
14 Advisory Committee.

15 COMMISSIONER BERNTHAL: Good. I think that will be
16 very important. That's all I have right now, Mr. Chairman.

17 CHAIRMAN ZECH: Commissioner Carr?

18 COMMISSIONER CARR: Yes, I have some questions. Your
19 plan, your Mission Plan when you first put it out -- not you,
20 but wherever it first came from -- the next time it came by it
21 had a five year slip and a two year revision. We are waiting
22 for the second revision now.

23 How do we stand on it and what does the schedule look
24 like?

25 MR. KAY: It is very optimistic, but we plan to hold

1 to the 2003 schedule, sir.

2 COMMISSIONER CARR: When will we see the Mission Plan
3 for comment?

4 MR. KAY: I can't give you a firm answer on that, as
5 that's under discussion within the Department. The Department
6 staff will put it out for review.

7 COMMISSIONER CARR: So we probably won't see it this
8 month like we expected?

9 MR. KAY: No, sir.

10 COMMISSIONER CARR: According to my notes, we were
11 supposed to have a May meeting to resolve some open items in
12 the QA area. How does that stand?

13 MR. KAY: We hope to be able to -- we had hoped to
14 last week, be able to submit the Nevada Quality Assurance Plan.
15 Later this week I think we may be able to do that. We are
16 running a few days behind on that. I think the latter part of
17 May, we should still be able to have that meeting, if I'm not
18 mistaken.

19 MR. SAGET: I don't know if it will be the latter
20 part of May or the early part of June. It will probably be a
21 safer bet for that one.

22 COMMISSIONER CARR: How many bidders do you have for
23 your M&O Contract?

24 MR. KAY: I'm not allowed to say that, sir.

25 COMMISSIONER CARR: Very well. There's a schedule

1 for your DOE contractor QA plan submittal. He's going to put
2 out a QA plan, too, or is that a different contractor?

3 MR. SAGET: That contractor, the M&O contractor, will
4 probably do it.

5 COMMISSIONER CARR: So that's the guy we have to wait
6 on to get his QA plan?

7 MR. SAGET: That's correct. But in the meantime, we
8 are already putting out QA plans for Headquarters and also the
9 project office QA plans.

10 COMMISSIONER CARR: When you said your 2003 date you
11 are going to hold to, do you think that's an achievable
12 schedule? I would much rather see a realistic one that we can
13 work toward than an optimistic one that everybody knows we are
14 not going to meet. How much confidence do you have in your
15 plan?

16 MR. KAY: I think it is achievable. I think it's
17 optimistic, but achievable. I think we have to set out
18 milestones and goals and attempt to reach them.

19 COMMISSIONER CARR: And the budget will support that,
20 you think?

21 MR. KAY: Yes, sir.

22 COMMISSIONER CARR: I have one more question. What
23 are you waiting on us for, and are we holding you up anywhere?

24 MR. KAY: I think we have had very good interaction,
25 sir, with the NRC staff. We have been getting I think, good

1 guidance from the staff and their interactions with you I think
2 have facilitated that. I think there are going to be
3 continuing times when we would like to expedite the schedule
4 but it's going to take much time and discussion to resolve
5 issues.

6 I think to come to a good resolution of the issues is
7 much more important than trying to press it too quickly
8 sometimes.

9 COMMISSIONER CARR: I'm not sure that you answered my
10 question. You are not waiting on us for anything?

11 MR. KAY: No, sir. We are not waiting on you. You
12 are probably waiting on us for the QA piece right now
13 primarily.

14 COMMISSIONER CARR: That's a better position for us
15 to be in. Thank you. That's all I have.

16 CHAIRMAN ZECH: Commissioner Rogers?

17 COMMISSIONER ROGERS: Yes, just to pick up on a point
18 that Commissioner Bernthal made that not only does this process
19 have to be done well, it has to be seen to have been done well.
20 Just a general comment, and that is that while I fully agree
21 that licensing issues really should be resolved prior to the
22 licensing hearing, I think that it is very important that great
23 care and attention be made along the way and probably at the
24 hearing itself to illustrate the differences that have arisen
25 and how those differences got resolved so that it does not seem

1 to appear at the hearing that there are no differences, that
2 there never have been any differences and that it is really a
3 very, very cut and dried proposition.

4 I am sure that there are differences, that you will
5 work them out, and that there will be many times when there
6 will be great thrashing about in coming to a resolution. That
7 really should all take place prior to the hearing.

8 But then if the hearing looks as if it is a very
9 perfunctory business, the public's perception is or those that
10 describe the events to the public, tend to characterize it as
11 just a very cozy relationship that has not had any strong
12 oversight from the NRC on the process.

13 I am concerned about that perception, and I think
14 that it is important that care be taken to document and
15 illustrate in connection with the ultimate licensing hearing,
16 that it has been an arduous process that has been gone through;
17 that every professional difference has been aired and explored
18 and resolved; and that there have been such events during the
19 course of events.

20 It's really a question of just following through on
21 this point, that if the public is going to be satisfied that a
22 thorough job is done then they have to see the full, in a
23 sense, to have been exposed to what really did happen rather
24 than a licensing hearing which goes through very smoothly as it
25 should.

1 MR. KAY: If I could just briefly respond,
2 Commissioner Rogers. I don't mean to sound flip about this,
3 but I think that we live in such a glass house and it's such an
4 open process that throughout the proceedings of this program
5 and the interactions between the Commission, the State and the
6 Department and other interested parties, that it is going to be
7 very evident that this type of exchange and differences are
8 discussed and then --

9 COMMISSIONER ROGERS: If I can differ on that,
10 because these things take a long time. It is amazingly short
11 how short people's memories are. Even though you have gone
12 through all that process and it's all been exposed along the
13 way, but then if the hearing goes through in a very smooth way
14 it can easily be characterized as something that did not go
15 that way at all.

16 I think that one has to just pay attention to that.
17 I don't think we can rely on the actual history. We have to
18 tell the world exactly at every stage of the game, including
19 the final hearing.

20 MR. KAY: I guess I feel that this is one of a type
21 facility that we are building is so unique that I don't think
22 the memories will be that short.

23 COMMISSIONER BERNTHAL: In other words, if you are
24 going to have a fight, Ed, do it in public.

25 MR. KAY: Yes. I don't think that we will do

1 anything in private.

2 COMMISSIONER ROGERS: It isn't so much that. It's
3 just that it is so easy to forget how detailed these studies
4 and differences are that have to be resolved before a hearing.
5 And then when the hearing goes through smoothly, it very often
6 is forgotten that that's the process that led to that being a
7 smooth event.

8 The other point is on the LSS. You do mention the
9 LSS Rule. Is that just the requirement that there be a
10 detailed set of specific system specifications? What do you
11 mean by the LSS Rule?

12 MR. KAY: The License for System Rule which is being
13 conducted by the Commission, the Commission is chairing the
14 effort, the negotiated rulemaking. It lays out the actual
15 parameters that will be used, the basic parameters for it, who
16 will be operating the system.

17 COMMISSIONER ROGERS: It is a specification really?

18 MR. KAY: Yes, sir. It doesn't specify everything,
19 but it specifies the major parameters, yes, sir.

20 COMMISSIONER ROGERS: Right. Now, what are the major
21 issues there? Is there a disagreement of any kind? Are there
22 any significant differences?

23 MR. KAY: I am not aware of any disagreements at this
24 time. I think that the NRC staff, the DOE staff, the State of
25 Nevada and other people, the industry that have been involved

1 in it have worked very hard. I think that there still may be
2 some philosophical differences, how well it will work, how long
3 it will take, what improvements it will make to the licensing
4 process.

5 As I stated, I think in my statement, I sincerely
6 believe that the licensing support system can provide some real
7 good forward measures for the licensing proceeding. But then
8 too, it stands to hinder the licensing proceeding too, because
9 objections can be raised by intervenors at some point. And
10 when you go through a very formal process like this, I think
11 you can lengthen the process sometimes.

12 This is the first time such a system has been used in
13 a licensing proceeding.

14 COMMISSIONER ROGERS: Yes. It is terribly important
15 that there be commonality throughout all aspects of this
16 compatibility and commonality of databases and the information.

17 MR. KAY: Yes, sir.

18 COMMISSIONER ROGERS: I would hope that any questions
19 about those things would all be ironed very early on, before an
20 enormous mass of information is accumulated that is not readily
21 accessible by all interested parties.

22 Thank you, sir.

23 CHAIRMAN ZECH: Does the DOE intend to meet the
24 milestones that you have discussed here very briefly today,
25 those milestones particularly that require NRC concurrence or

1 comment? How do you view that?

2 I believe you answered that you thought it was
3 feasible and all. I guess my concerns is that for example, you
4 are developing I understand, over 100 study plans associated
5 with the Yucca Mountain site. My concern on that would be,
6 will we receive those documents -- I think the time schedule we
7 are looking for is somewhere near the end of the year.

8 In other words, will we receive those documents and
9 other comments that we are required to make in time for the
10 staff to give them the review that I know is going to take
11 time?

12 MR. KAY: Mr. Stein and Mr. Bernie, I will let Ralph
13 address this more directly. They are working, I think, to
14 develop a schedule so that the NRC receives these in a timely
15 way, not all at once, but on a schedule.

16 CHAIRMAN ZECH: Perhaps you can address that. Thank
17 you.

18 MR. STEIN: We have sent over to the NRC a schedule
19 for the next 18 months on the release of study plans. Our
20 current plan is to release on the order of about five study
21 plans in the near term. These are important study plans that
22 we think go to the types of site characterization that we think
23 we ought to start now even before the exploratory shaft
24 proceeds.

25 COMMISSIONER CARR: Can I ask if that's geologic near

1 term or is it something that I can relate to?

2 MR. STEIN: Geologic near term. In addition to that,
3 earlier -- actually in May of 1986, we identified those study
4 plans that would need to be released as part of the release of
5 a statutory SEP, that the staff would want to look at
6 concurrently, both for near term and work that would start
7 within the next six months to a year.

8 We count, at the present time -- and I would
9 appreciate not being held to this number -- 26 study plans that
10 we plan to release. We could count as many as 40. We are on a
11 track to release those study plans to the NRC in a period of
12 the next year to 18 months, and they will support the issuance
13 of the statutory SEP.

14 CHAIRMAN ZECH: Good. The milestones are important
15 and the timing is important, of course, but also we are in a
16 new field, a unique field and the quality of our product is
17 what is really important. So, we need the time, our staff
18 needs the time, of course, to review carefully and thoroughly
19 the important issues before them. I hope that you will do your
20 best to meet those milestones so that we can also have the time
21 to do our job thoroughly.

22 COMMISSIONER CARR: Can I piggyback on that? When do
23 you think we will see those first five that you are talking
24 about?

25 MR. STEIN: The first one should be released within

1 the next -- within a matter of a week or two. The others,
2 hopefully, within the next two to four months.

3 COMMISSIONER CARR: Thank you.

4 CHAIRMAN ZECH: I hope that you will get those to us
5 when you are satisfied so that we can get on them as soon as
6 possible. Concerning Part 60, what areas of Part 60 do you see
7 needing additional clarification in order that you can proceed
8 and develop your own program?

9 MR. KAY: There are several areas, I think Mr.
10 Chairman, that have been under discussion between our staff and
11 the staff of NRC anticipated, unanticipated events, containment
12 and design basis -- assessment limit, actually the dose limit.

13 We have had these items under discussion with the
14 Commission, and we think that we may need further discussion
15 and perhaps rulemaking to help refine this.

16 CHAIRMAN ZECH: I think you are right. We have the
17 same concern here. I hope those discussions will continue and
18 we will get on with those decisions, if it looks like decisions
19 are necessary in that regard as soon as possible.

20 I guess what concerns me as much as anything too, we
21 are talking dates in the future. It sounds like it's a far way
22 off, but in my judgment it is not and the time is now to make
23 these decisions and to make the plans. In other words, a
24 strong plan so that we can start executing is so important.

25 I think that it is important that Part 60 be looked

1 at very carefully to see if decisions need to be made, and if
2 they need to be made, let's discuss them. Some of those
3 decisions, as far as I can understand, will very likely take
4 time too. So, we should make those decisions and plans as soon
5 as possible.

6 You mentioned the NRC objections, comments and
7 questions that we have given you. Do you see, in your review
8 so far, do you see any real significant problems in answering
9 the concerns that we have? In other words, do you see anything
10 that perhaps could be a very significant impediment to
11 proceeding, or do you think the problems that we have given to
12 you can be resolved in an adequate manner?

13 MR. KAY: I believe from what I am told, that the
14 issues can be resolved in a compatible manner. That doesn't
15 necessarily mean that we are going to 100 percent agree with
16 the staff. We have concurred with some of the comments of the
17 staff. We are taking the opportunity to further discuss with
18 the staff our position and to further understand the position
19 of the staff.

20 Also, I would like to leave this to both Mr. Kale and
21 Mr. Stein to comment on too, so that they may have an
22 opportunity to answer.

23 CHAIRMAN ZECH: Please do.

24 MR. KALE: There are some very significant issues
25 which we think, based on our discussions with the staff,

1 following discussions with the staff, that we have a good
2 indication from them as to what their requirements are and
3 their parameters are.

4 Certainly, the objection that was raised on quality
5 assurance is a very serious one and will require a lot of hard
6 work to implement and bring us up to the point where we can
7 have the program in place by the end of the year. We know the
8 need to do that, and we think we know how to get there. It
9 will be an enormous amount of work for us to do, but it is
10 necessary and we will do it.

11 We have spent a lot of time in the discussions on the
12 alternate conceptual models. We think we know what to do, the
13 corrections we need to make, and the additions we will make to
14 the site characterization plan. Again, I think we can do these
15 things that will satisfy their comments and their questions.

16 We have to have some more discussions with them on
17 design issues related to the exploratory shaft facility, and to
18 further understand the comments they have made and we plan to
19 do that during the summer and make whatever additions we need
20 to make to the site characterization plan.

21 So, there are some significant issues but we are
22 exploring them. I am hopeful that we will be able to make
23 whatever adjustments we need to the SCP.

24 CHAIRMAN ZECH: Thank you. Any other comments?

25 MR. STEIN: I think that I would answer your question

1 by saying that I don't envision any impediment to our moving
2 ahead from the staff towards the start of the exploratory shaft
3 next summer. I believe that Mr. Kale is correct in his
4 assessment of those issues. And I think that some of the areas
5 that Mr. Kay talked about, particularly on questions on
6 substantially complete containment, anticipated and
7 unanticipated or groundwater travel time, these are very
8 important matters that need to be addressed.

9 They don't serve, at least in my view, as an
10 impediment for starting the characterization of the site. I
11 think that they do need, and I agree with you completely, that
12 they do need to get resolved in the near term rather than
13 letting those matters just drag on for a much longer time in
14 the future.

15 CHAIRMAN ZECH: Thank you. Let me mention also the
16 emphasis on quality assurance, the importance I think the
17 Commission and the staff pay to this particular issue. Quality
18 assurance -- and I am pleased that you have the bill filled
19 now. I think that's very important, and I hope you can develop
20 your program rapidly. Quality assurance, having it in place as
21 soon as possible and having it up to speed as soon as possible,
22 I think is going to give all of us a degree of confidence that
23 is extremely important.

24 The Commission is interested in the development of
25 the licensing support system. I guess my question here would

1 be, had DOE in your judgment, allocated sufficient resources to
2 cover the development and operation of this system?

3 MR. KAY: I believe we have, sir. The system is
4 evolving with the Advisory Committee.

5 CHAIRMAN ZECH: It is a significant undertaking
6 though, a rather enormous project. I am just concerned that
7 you feel that you have the resources applied to it that you
8 need.

9 MR. KAY: I think we do now have sufficient resources
10 for the state of development that we are in. It is going to
11 require, I think from the Commission, as the system becomes
12 operational -- in the operating of the system with the DOE,
13 with the State of Nevada and other interested parties. It is
14 going to be a joint effort in making the system itself operate.

15 CHAIRMAN ZECH: It's going to be a great value, of
16 course, to the whole project and to all of us, I agree with
17 that. The status we are in right now, of course, is still kind
18 of making sure that we have asked the right questions and we
19 are trying to put our arms around the big problem and make the
20 plans accordingly.

21 So, I hope that DOE will continue the close
22 relationship that you have with the staff and the Commission so
23 that any perhaps new problems that you see or any new questions
24 that we may not have addressed yet do get laid on the table
25 just as soon as possible. We will quickly be in the stage

1 where we are doing a lot of execution of the plans that we have
2 laid in the past and are still laying now.

3 So, while we are still laying the plans and asking
4 the questions and defining the problems, let's make sure that
5 we have done that as well as we can. I would ask you to make
6 sure, as the one with the mandate from Congress to put this
7 repository in place, that you just ensure that you have to the
8 best of your ability, defined the problems and asked the
9 questions and laid the key issues on the table.

10 MR. KAY: If I could, this partially responds to
11 Commissioner Carr's statement and question, too. When we
12 developed the site characterization consultation draft, I feel
13 that the Commission staff was just very responsive in wanting
14 to know what our time schedule was, and they laid out a
15 schedule for review. As you know, and I think a very
16 optimistic schedule, gave us draft comments and now as of the
17 last week -- I guess it was last week -- gave us the formal
18 comments on the site characterization consultation draft.

19 I feel that was very responsible on the part of Mr.
20 Thompson and his staff to develop a schedule to give us these
21 comments. I think in the sense that we are very close, I
22 believe, to signing an agreement by which we will provide the
23 funding back to the Commission for the activities of the
24 Commission, I think that's very important because it allows you
25 to do your resource planning.

1 It has taken some negotiation between your staff and
2 our staff to come to this, but I think we have come to a good
3 resolution of this and I expect within the next week or so to
4 be able to sign this.

5 CHAIRMAN ZECH: Good. On the same line, where we are
6 still making sure that we have looked at the whole issue
7 carefully, again, I will just make a last reference to the
8 areas of Part 60 that you think need to be looked into and
9 provide additional clarification and so forth because I know
10 that our people are looking at that also, but I hope that you
11 will do the same so that we can make sure if there are any
12 initiatives that we should be starting that we look at them
13 carefully and get those actions underway.

14 Are there any other questions? Commissioner
15 Bernthal?

16 COMMISSIONER BERNTHAL: One item. We had a briefing
17 here recently by our own staff and I recall that the question
18 of sinking shafts came up; the size of the shaft, how big the
19 shaft had to be in diameter to do, perhaps depth as well as to
20 do what you need to do.

21 Related to that then, the ability of DOE after the
22 shaft sinking process including any separate effort I gather
23 that the State of Nevada may want to undertake. The ability of
24 DOE then to assure the integrity of that shaft against vertical
25 migration of ground water.

1 Has that issue been substantially resolved at this
2 point or where are we?

3 MR. KAY: You go ahead, Ralph.

4 MR. STEIN: I hope that we will resolve the issue
5 soon. We are trying to establish a meeting with the staff
6 sometime early to middle of June to cover that item
7 specifically. The staff has raised a number of concerns
8 relative to the location of the shaft and the constructability
9 of the shaft.

10 We are prepared to discuss it to the extent that we
11 can. There is still data that is being developed that we think
12 that we can support our present design satisfactorily.
13 Hopefully after that meeting, we will have a resolution with
14 the staff.

15 COMMISSIONER BERNTHAL: Good. I would hope that we
16 are somewhat cautious at this point. It may be worth spending
17 a few weeks to make sure that there are not serious questions
18 raised later on that could jeopardize the whole project. I
19 have no reason personally at this point to think that's not a
20 resolvable question and problem, but we ought to make sure that
21 it is clearly resolved in the eyes of all of those with an
22 interest.

23 One other quick one. I guess I ask this almost every
24 time that DOE comes over here, Ed. It reflects a personal
25 interest of mine that I have taken in this Agency over the

1 years. What about your data handling system at this point,
2 document handling system? You were in the lead of a rather
3 innovative system and proposal initially that would have used
4 optical disk and associated equipment.

5 Is that still going to happen and are you still in
6 the lead, and is this Agency learning from you in that effort?

7 MR. KAY: Commissioner Bernthal, this is the
8 licensing support system which we were discussing. We now have
9 the negotiated rulemaking which is taking place under the
10 leadership of the Commission. I believe the Negotiated
11 Rulemaking Advisory Committee has one more meeting next month.

12 I am hopeful that what is developing out of the
13 negotiated rulemaking is going to be a workable system that we
14 can live with. But I still am awfully cautious that it is
15 innovate and anytime we try a new system like this, while it
16 has great potential for expediting the process it also has the
17 same potentials for hindering the process.

18 I believe we have developed a very workable system
19 with all the parties. I think that NRC has been very
20 responsible in their leadership in the negotiated rulemaking.

21 COMMISSIONER BERNTHAL: I am not focusing so much on
22 the procedural aspect here. I really was curious about how the
23 technology is working out.

24 MR. KAY: I think the technology -- the use of the
25 technology, which will not be, as I understand the negotiated

1 rulemaking is coming, there are degrees of how the technology
2 will be used. It will not all be optical disks but there will
3 be some information that may be passed on in 24, 42, 48 hours,
4 based on the priority of that information.

5 COMMISSIONER BERNTHAL: Thank you.

6 CHAIRMAN ZECH: Mr. Thompson, I think you wanted to
7 make a comment?

8 MR. THOMPSON: Hugh Thompson, NRC Staff. Mr.
9 Chairman, it might be that Mr. Kay could clarify one issue. I
10 thought I heard you make a comment that the head of the QA
11 position was filled. I am not sure, Mr. Kay, if that's the
12 correct interpretation. You might want to clarify that
13 particular position, or it may be filled and I am not aware.

14 MR. KAY: No, that's correct. As I said in my
15 talking about the QA office, I wish Mr. Saget was willing to
16 move to the East Coast on a permanent basis to join us, but he
17 does not wish to do so.

18 COMMISSIONER BERNTHAL: Why don't we just get him to
19 do that right now.

20 [Laughter.]

21 MR. KAY: At such a time as I get final approval from
22 the Department and OPM on the new SES position, whoever will be
23 the director of that office I will be advertising it. I am
24 hopeful that we can fill this very important position very
25 soon.

1 On the subject of QA, I would like to if I can, try
2 to correct possibly a mis-impression in the discussion that we
3 might need to wait on QA plan for the M&O contractor which is
4 yet to be selected and will be some months off. I think what
5 the Commission is waiting on right now is the Nevada project of
6 this QA plan and the Headquarters plan which we hope to be able
7 to get to the Commission staff shortly.

8 The M&O contractor, of course, can't produce this
9 until such time as he is selected. That will have to be based
10 then on the Headquarters plan, as a flow down document.

11 CHAIRMAN ZECH: Thank you very much. I appreciate
12 the clarification.

13 COMMISSIONER CARR: Can I add one other comment?

14 CHAIRMAN ZECH: Yes, go ahead.

15 COMMISSIONER CARR: Is somebody going to tell us
16 about the show and tell us what we have here?

17 MR. KAY: What I might do is, if Carl Gertz would
18 come up. Carl is our Project Manager from Nevada. This is a
19 model that was developed by one of the contractors that worked
20 with us in Nevada. It's a two-scale model.

21 MR. GERTZ: This is a model of Yucca Mountain, which
22 runs North/South here. It is a one to one scale, so it is not
23 exaggerated vertical or horizontal. This is all a relative
24 scale. It shows the repository horizon about 1,000 feet below
25 the Mountain and about 1,000 feet above the water table.

1 This is a visualization of the water table as we have
2 been able to portray it from our monitoring holes out there.
3 It portrays our exploratory shaft which goes down here, and
4 certainly our surface facilities over here which, when the
5 repository is built if it is built, we would bring the waste in
6 on a replacement ramp.

7 If you recall, Yucca Mountain waste will be driven
8 down into the repository horizon and not put down a shaft. I
9 will be glad to respond to any questions. It's about a mile
10 and one-half in the long direction and about a mile in the
11 shorter direction, the footprint.

12 We hope to, as Ed pointed out, start exploratory
13 shaft construction right in this area [pointing] in about a
14 year from now, June of 1989. We use this as a model to kind of
15 visualize and help people understand how the repository horizon
16 lies below the mountain and above the water table. That is our
17 main use of it, as a visualization tool.

18 I will sure respond to any questions that you have.

19 COMMISSIONER CARR: So actually, the repository will
20 all be on the same plane nearly?

21 MR. GERTZ: Yes, sir.

22 COMMISSIONER CARR: And the shafts, what are they for
23 then?

24 MR. GERTZ: They will be for air exchange,
25 essentially, ventilation.

1 COMMISSIONER CARR: Okay.

2 MR. GERTZ: The tuft will be moved out in a ramp, so
3 to speak. It will be mined out in a ramp and the waste will be
4 moved in a ramp. Our exploratory shaft will be incorporated
5 into the design facilities as ventilation shafts.

6 It does lie on a plane but it lies on a tilted plane,
7 and that's one of the pictures that we are trying to portray.
8 It is not level, it's on a tilt.

9 MR. KAY: For those of you who have been to the
10 Nevada test site, this is North on this end. The Western
11 boundary of the Nevada test site, Carl, I guess runs about
12 along here; is that correct?

13 MR. GERTZ: You are right, exactly right.

14 MR. KAY: So the surface facilities will be located
15 on what is now the Nevada test site with the repository itself
16 and the exploratory shaft, this is on Ellis Air Force, BLM
17 land, approximately like this [indicating] and on BLM land here
18 with the Nevada test site over to the Eastern boundary.

19 MR. GERTZ: We do have depicted on here also, the
20 layers of the tuft that underlay the mountain.

21 COMMISSIONER CARR: Thank you very much.

22 CHAIRMAN ZECH: Let me thank you for clarifying the
23 quality assurance status. The chart that you gave us
24 originally that the position is vacant, at least you brought a
25 gentleman to the table here. I appreciate that.

1 [Laughter.]

2 MR. KAY: That was a chart that wasn't provided by
3 us, but I think by your staff. I think we were indicating that
4 we had not filled that with a fulltime person that will be here
5 permanently.

6 CHAIRMAN ZECH: Well, at least you have a part-time
7 person; is that about right?

8 MR. KAY: Yes, sir. I am very happy to have him.

9 CHAIRMAN ZECH: Fine. I hope you get a full-time
10 person as soon as you can. It is important to do that.

11 Are there any other questions by any of the
12 Commissioners?

13 MR. GERTZ: I was just told that perhaps I portrayed
14 the ramps as going up. The ramps go down at about an 8 percent
15 grade. It slopes down into the repository.

16 CHAIRMAN ZECH: Thank you very much.

17 MR. GERTZ: We have it tilted up.

18 CHAIRMAN ZECH: On behalf of the Commission, Mr. Kay,
19 and your colleagues, let me thank you very much for a very
20 informative briefing today. I think that it is important that
21 the Commission be briefed periodically by the Department of
22 Energy.

23 I know that you are working with our staff on a daily
24 basis, and I commend you for those efforts. I think the staff
25 is also working hard to make sure that they are providing the

1 regulatory insight that is so necessary to have early on in
2 this unique project.

3 We are involved in a national program, and the early
4 resolution of the technical issues are certainly to the benefit
5 of all of us. For that reason, I think that the continuing
6 meetings that you have on a daily basis and the continuing
7 interface that you have with the staff is extremely important,
8 and I hope that you will keep that up. I hope that you will
9 also let us know if there is anything that does come up from
10 time to time, that you feel should be emphasized; that you
11 don't have to wait for these periodic meetings, you can get the
12 word to the Commission through the staff or directly to the
13 Commission as you see fit at any time.

14 We do want to stay abreast and working in parallel if
15 we possibly can, so that we will be able to make at the
16 appropriate time, the regulatory decisions that are necessary.
17 I would also like to emphasize that I would certainly hope that
18 you would continue to work with the State of Nevada and ensure
19 that they are informed and other parties, regarding the
20 resolution of all the issues. I think that that interaction is
21 extremely important.

22 I think that the progress you are making to date is
23 certainly effective as regards making a real good first start
24 as this initial phase of the effort. But I would only
25 emphasize that I think all of us should be alert to any

1 potential issues that we may have missed so that we can get on
2 them as soon as possible and continue to work together so that
3 as Commissioner Rogers pointed out earlier, these hard issues
4 can be addressed openly and constructively analytically.

5 And that we can use the best advice, analysis that we
6 can get within our country, both within the government and
7 outside the government, so that when the time comes we will
8 make the proper decision and have an effective repository.
9 That's what we all want and that's what we want to have. Our
10 obligation, of course, is to ensure that from the regulatory
11 standpoint the public health and safety will be protected.
12 That's what this Commission certainly intends to do.

13 Thank you very much for a very informative briefing.
14 Unless there are other comments, we stand adjourned.

15 [Whereupon, at 3:18 p.m., the briefing was
16 concluded.]

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CERTIFICATE OF TRANSCRIBER

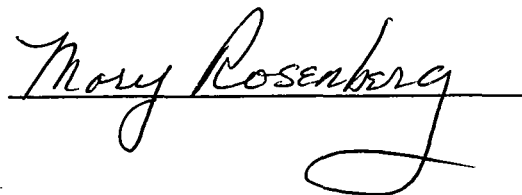
This is to certify that the attached events
of a meeting of the U.S. Nuclear Regulatory Commission
entitled:

TITLE OF MEETING: BRIEFING BY DOE ON HIGH-LEVEL WASTE PROGRAM

PLACE OF MEETING: Washington, D.C.

DATE OF MEETING: TUESDAY, MAY 17, 1988

were transcribed by me. I further certify that said
transcription is accurate and complete, to the best
of my ability, and that the transcript is a true and
accurate record of the foregoing events.

A handwritten signature in cursive script, reading "Mary Rosenberg", is written over a horizontal line.

Ann Riley & Associates, Ltd.

May 17, 1988

PRESENTATION TO NUCLEAR REGULATORY COMMISSION

Charles E. Kay, Acting Director,
Office of Civilian Radioactive Waste Management
May 17, 1988

Because communication and interactions are an abiding element of the DOE and NRC relationship, I welcome the opportunity to continue the practice of periodic presentations to the Commission of OCRWM program activities and significant accomplishments. Today's presentation, my first, is especially important because of the many events that have taken place since the last briefing to you on June 11, 1987.

In addition to reviewing some program highlights with you, including changes resulting from the passage of the Nuclear Waste Policy Amendments Act of 1987 (often referred to as the Amendments Act), I will focus on areas of joint and special NRC and DOE interest, with some general comments on the overall program and the DOE/NRC relationship. Before addressing these subjects, I want to let you know that I appreciate the interest of the Commission in this program, and your efforts to provide guidance to the staff.

Program Highlights

The Amendments Act

The Amendments Act streamlines and focuses the waste management program established by the Nuclear Waste Policy Act of 1982 (NWPA). In terms of program implementation, the most significant provisions include:

- o Site characterization of the Yucca Mountain site in Nevada as the only candidate site at this time for a permanent geologic repository;
- o Authorization, with conditions, of a Monitored Retrievable Storage (MRS) facility as part of the integrated waste management system; and
- o The establishment of several new entities, e.g. the Nuclear Waste Technical Review Board and the Monitored Retrievable Storage Review Commission, that should enhance the public's confidence in the scientific and technical quality of the program.

Plans for implementing the new focus of the OCRWM program are currently under development.

OCRWM Reorganization

In response to the statutory changes and the continuing evolution of the nuclear waste disposal program, OCRWM has been reorganized along functional lines to facilitate and enhance the integration of the waste management system. The new organization places increased emphasis on quality assurance, systems integration,

licensing and regulations. The Office will function with four associate directors and a director of the Office of Quality Assurance. Like the associate directors, the director of the Office of Quality Assurance will report directly to the OCRWM Director. The personnel paper work has been submitted but not yet completely acted upon. Therefore the incumbents to these positions are temporarily designated as "acting", but be assured that the organization is functioning fully with leadership ready and willing to make decisions and exercise the responsibilities of management.

Solicitation for Management and Operating Contractor for Systems Engineering, Development and Management (M&O)

To facilitate the technical management and integration of the waste management program, OCRWM issued a solicitation for an M&O contractor on October 5, 1987. This solicitation was revised due to the passage of the Amendments Act and on April 25, 1988, the solicitation for an M&O contractor closed. The proposals are now being evaluated.

The major responsibilities of this contractor will be to:

- o Help ensure that the Yucca Mountain site is characterized in accordance with the requirements of the NWPA as amended, and if found suitable, the site is developed as a repository.
- o Assist the DOE in MRS-siting activities.
- o Assist in the design and integration of the repository, the waste package, and the MRS facility and maintain oversight of transportation design activities, and its integration into the waste management system.
- o Assist the DOE in obtaining NRC licenses and certifications for the repository, the MRS facility, and transportation casks.
- o Integrate the work of various program participants, such as the national laboratories, other Federal agencies, and DOE prime contractors.
- o Help ensure that all work meets safety, technical, environmental, quality, schedule, and cost requirements; the regulatory requirements of the NRC and the EPA; and is consistent with applicable DOE Orders.

Issuance of the SCP/CD

On January 8, 1988, DOE issued the SCP/CD for the Yucca Mountain site to serve as a vehicle for technical discussions with the State of Nevada and the NRC. To start these discussions a meeting was held in Reno, NV on January 28-29, 1988. After the meeting in Nevada, the NRC transmitted to DOE on March 7, 1988, its Draft Point Paper containing the results of its technical review of the SCP/CD.

In the NRC Draft Point Paper five principal objections were identified. These five objections pertain to difficult issues

which have been discussed extensively in the past. A workshop was held on March 21-24 at NRC Headquarters to clarify and discuss these objections as well as other NRC comments and questions. DOE is pleased with the thoroughness of the NRC review - such a review is what was sought when the SCP was issued in consultation draft form. DOE intends to address and resolve the NRC objections as appropriate during the consultation period prior to the release of the statutory SCP. DOE will also address NRC concerns, to the extent possible, prior to the release of the statutory SCP. We are planning to meet with NRC staff later this summer to discuss proposed disposition of NRC comments contained in the NRC Point Paper.

We are currently planning to issue the SCP formally, as required by the NWPA, by the end of 1988. By having provided an opportunity for input from the NRC and the State of Nevada, we will have fully considered the views of the parties to ensure a high quality statutory site characterization plan. Start up of the exploratory shaft facility is now scheduled for June 1989.

Recently, we attended an ACRS, soon to be ACNW, meeting and offered to review the logic and contents of the SCP/CD. We understand the staff is making arrangements for this presentation to take place in the near future. In addition, we are planning upon release of the statutory SCP, at the staff's suggestion, to brief the ACNW on the SCP and any differences from the SCP/CD.

Monitored Retrievable Storage

The Amendments Act and other Congressional actions have created new opportunities for OCRWM to maximize the contributions of an MRS facility to the overall waste system. We need to put in place not just a mined geologic repository, but a complete operational system that will actively manage the safe, and efficient storage, transport and packaging of waste over a fifty year period, in addition to providing for the ultimate permanent isolation of these wastes.

The role for an MRS in the waste management system may change as a result of several activities, including the recommendations of the MRS Commission, the actions of the Negotiator, several ongoing DOE systems studies including the use of dry cask storage technology at reactor sites (that I will discuss in a moment), and further Congressional actions. To accomodate these uncertainties, we are in the process of developing a near term strategy that will allow optimization as a continuing process and does not detract from our ultimate goal of permanent isolation.

Dry Cask Storage Study

In accordance with Section 5064 of the Amendments Act, OCRWM is preparing a report on the use of dry cask storage at reactor sites. The study will assess the utility industry's spent nuclear fuel storage needs through the start of operation of the

geologic repository. The primary objectives of the study are to:

- o Consider the costs of dry cask storage technology, the extent to which dry cask storage will affect human health and the environment, the extent to which the storage at reactor sites affects the costs and risks of transporting spent nuclear fuel to a central location such as an MRS facility, and any other appropriate factors.
- o Consider the extent to which the Nuclear Waste Fund can be used and should be used to provide funds to construct, operate, maintain and safeguard spent nuclear fuel in dry cask storage at reactor sites.

An initial version of this report is scheduled for release this summer.

Transportation

We view the development of transportation capabilities as an essential element of the waste management system. Fortunately, we are able to build on a long history of safe shipping experience and a comprehensive system of Federal regulation and international standards. Because the schedule for the transportation program is linked to the schedule for the development and operation of waste disposal and storage facilities we have both the opportunity and time to refine and improve shipping equipment and procedures, and to coordinate transportation planning with other Federal agencies, industry, States, Indian Tribes and other interested parties.

As you know, DOE and NRC have established a procedural agreement on the certification of transportation casks. Under this agreement, and as required by section 180(a), as amended, all cask designs used for NWPAs shipping will be certified by the NRC, including casks designed for defense and commercial high-level waste. In addition, DOE will comply with NRC shipment prenotification procedures when shipping waste to NWPAs disposal and storage facilities. I mention these constructive actions, which were undertaken prior to recent Congressional directives, to indicate our past and continuing commitment to work with the NRC to address technical issues affecting high-level waste transportation.

As a specific indication of the growing importance we are placing on transportation, our FY 1988 budget for transportation activities shows a 50% increase over FY 1987, and our request for FY 1989 is 33% greater than our FY 1988 budget. With this increase in funding, our plan is to ensure that transportation activities are performed in a safe, secure, and efficient manner, using private industry to the greatest extent possible; comply with applicable laws and regulations; and foster broad based public understanding of and participation in program planning.

NRC Fee

NRC and DOE staff have been working together to develop a Memorandum of Understanding between our two agencies that deals with the reimbursements to NRC of actual costs incurred by the NRC for its work related to the pre-licensing application phase of the high-level waste management program. Issues have been resolved satisfactorily and I anticipate no difficulties in providing fee payments to NRC for its costs that are currently being budgeted at \$15 million.

Areas of Joint and Special NRC Interest

I will turn now to action items relating to key aspects of the NRC/DOE pre-licensing consultation program. The Amendments Act reduction of the number of sites to be characterized from three to one will allow more technical interactions to take place on that one site between DOE and NRC staff. That process is well underway and I will now discuss it in terms of our completed and planned joint consultations, and some important subjects of those consultations.

DOE/NRC Consultations

In addition to the consultations on the SCP/CD, we have also had other interactions such as the recent DOE/NRC site visit to observe the USGS Southern Great Basin Seismic Monitoring Network. I mention this joint site visit as an example because of the various participating organizations and the dual purpose it served. The prime purpose was to provide the NRC and the State of Nevada with an opportunity to observe and learn more about the equipment and procedures associated with monitoring seismicity in the region surrounding the proposed repository at Yucca Mountain. In addition, the site visit provided information in preparation for audits of the network which will be conducted following adoption of a formal quality assurance (QA) program.

In addition to the meetings mentioned above, we have completed a useful five day workshop on Alternative Conceptual Models; a QA meeting; and NRC staff has attended our Technical Project Office meetings, as well as observed DOE audits of our contractors.

Clearly, the value of consultations is accepted and recognized by the Department. We see as a priority, near-term consultation on the topics of: (1) quality assurance, (2) the exploratory shaft location, design, and construction, (3) clarification of definitions in 10 CFR 60, including substantially complete containment and anticipated and unanticipated events, (4) determination of methodology for calculating ground water time, and (5) seismicity characterization methodology.

Repository Design Parameters

In the Third Quarterly Progress Report to the Commissioners dated February 9, 1988, NRC staff identified repository design

parameters as an action item that covers a key aspect of the NRC/DOE pre-licensing consultation program. The NRC and DOE have agreed that, in developing the site characterization program, DOE will use performance allocation. In the words of the NRC staff, "DOE will select tentative values for the contributions that each of the natural and engineered barriers can reasonably be expected to provide to the overall waste isolation performance of the site. Such allocation is the rationale for establishing specifically what information site characterization will have to produce". It should be emphasized that these "tentative values", are simply guides for developing a testing program and designs. As data is obtained and the site characterization program matures these values may change.

The NRC Position Point Paper and regular interactions between NRC and DOE staff are important vehicles for assessing how well DOE is implementing performance allocation. As the program matures, changes in our parameters will be reported in our semi-annual progress reports. While there may be some technical differences, I believe that the performance allocation process for guiding the site characterization program is currently proceeding well.

Policy of Conservatism

I would like to return to the alternative conceptual models workshop held recently, as an example of DOE's efforts to address the NRC's objections and concerns.

At this meeting, the NRC staff clearly explained their concerns and the basis for their objection to the SCP/CD on the subject of alternative conceptual models of the ground-water flow system at the Yucca Mountain site. The DOE concurs with the NRC concerns, and an approach to adequately address the concerns such that the NRC objection can be rescinded was discussed at the meeting.

The NRC staff indicated their concerns may be largely a problem with inadequate documentation in the SCP/CD. The DOE concurs that the documentation of alternative conceptual models can be substantially improved in the statutory SCP. The DOE believes that the approach discussed at the technical workshop will provide adequate documentation in a form easily understood by all parties, and accordingly, the DOE has implemented the approach in each of the "-ologies" as recommended by the NRC staff.

The DOE recognizes, however, that a part of the problem was related to consideration of a broader range of alternative conceptual models that were considered then discarded and those alternative conceptual models, both internal and external to the OCRWM program, that may be supported by the existing data base. DOE used the technical meeting to solicit additional alternative conceptual models, and DOE is appreciative of those persons who provided descriptions of alternative conceptual models and/or comments on the DOE conceptual models. DOE is currently

reviewing the transcript of the technical meeting and will incorporate the alternative conceptual models and comments on the DOE conceptual models in the planned revisions to the SCP/CD.

Further, DOE agrees with the NRC comment related to the integration of the site data in the various "-ologies" and in the repository and waste package designs. Accordingly, DOE will prepare tables for the statutory SCP that address the alternative conceptual models and their significance on both site characterization and repository performance. DOE will define the interrelationships among natural processes in order to integrate across the various "-ologies" and the designs of the repository and waste package. For example, DOE will consider the potential effects of increased hydrothermal activity under the site on not only the ground-water flow system, but also the geochemistry of the ground water, the waste package environment, the stability of clay minerals, the in-situ stresses within the host rock, and the designs of the repository and waste package. In addition, DOE will identify the testing to discriminate between the alternative conceptual models during site characterization and will provide a schedule of testing in order to evaluate potential interferences between planned tests.

The DOE is confident that the actions currently being implemented will adequately address the NRC concerns and will provide the basis for rescinding the objection on consideration of alternative conceptual models.

Early Resolution of Issues

Issue resolution is a key purpose of site characterization in order to demonstrate compliance with the applicable Federal regulations. We concur with the NRC that a major goal of the high-level repository program is to ensure, to the extent practicable, resolution of licensing issues prior to the licensing hearing:

To achieve that goal, we are developing a process of interactions with the staff that should lead to the early resolution of issues. This process includes the development of position papers for review with the staff, followed by reports that will consider the issue in greater depth, and possibly, if warranted, rulemaking.

As I noted we are developing this proposed process now, and will be discussing the approach with the staff, prior to recommending its adoption to the Commission.

Development of an Information Retrieval System

As you know, the Licensing Support System (LSS) computer system being developed by OCRWM to support the requirements of all parties in the repository licensing process will be based on a detailed set of system specifications. These specifications will

be derived from statutory, programmatic, and user requirements. Some of these requirements are being defined through the efforts of the Negotiated Rulemaking Advisory Committee (NRAC) that was convened by the NRC. Because of the importance and magnitude of the LSS, the OMB has made development of the LSS system a top priority within the Executive Branch.

As a first effort toward developing a sound requirements foundation for subsequent design work, two reports in a series of four reports have been issued by OCRWM. The Preliminary Needs Analysis and the Preliminary Data Scope constitute the system requirements basis for developing a conceptual LSS design, which will be presented in the third report scheduled for completion this month. The fourth report, a Benefit-Cost Analysis which will evaluate the conceptual design alternatives, is scheduled for delivery to OMB with copies to the NRC and other parties in July.

In addition to these studies, a multi-user prototype is to be tested both in Nevada and Washington D.C. that will contain 120,000 pages of the SCP/CD and its over 2000 associated references, as well as associated program documents all in full text with images of the pages of the documents. This prototype can be used to assess user reaction to such a system and test hardware and software components in order to develop tighter specifications. The prototype is expected to be available for use in early 1989.

Building on these reports and later refinements, I am hopeful that we will be able to facilitate the discovery process and review of relevant licensing information for licensing proceedings; establish the information base for the licensing proceedings before the license applications are submitted; and make it possible for the NRC to meet the statutory three year application review period. The LSS is a tool that is new to the formal licensing process. It provides real opportunities for enhancing the process, but on the other hand, it offers opportunities just as real to hinder the licensing process.

I am pleased to note the considerable progress made by NRAC. The participants have worked hard and cooperatively to reach consensus on important issues. I am hopeful that the work of the Committee will result in a product that we can all live and work with. We welcome and look forward to continuing interactions with the NRC, the State of Nevada, and other appropriate groups. Further, as we reach consensus on the LSS rule, we should also consider the possibility of other changes to the procedural rule which would enhance the licensing process.

Implementation of a Quality Assurance Program

Policy guidance for the QA program is provided by the Director of OCRWM - a responsibility that I take with the utmost seriousness.

To emphasize the importance of managing for quality, OCRWM has, as I mentioned earlier, established an Office of Quality Assurance to be managed by a Director who reports directly to the Director of OCRWM.

Current goals of this new Office are to establish a qualified QA program by January 1, 1989, secure approval of the OCRWM QA program by the NRC, and achieve a favorable review of the QA program by the Nuclear Waste Technical Review Board when it becomes operative. To do this, QA program documents are being modified as needed, required procedures are being identified and prepared, and efforts are underway to resolve outstanding issues at both Headquarters and our Nevada Office and the NRC. Other actions include establishing an audit/surveillance schedule, implementing verification activities, and management reviews of recommended improvements.

State and Local Government Interactions

Informal Cooperation

DOE has worked cooperatively with the State of Nevada in many forums. For example, State representatives have attended the Project Office's monthly technical project manager's (TPO) meetings, arrangements were made for the contractors of the State to tour the Yucca Mountain site, a protocol has been established for their access, as appropriate, to the Nevada Test Site, and office space near Yucca Mountain has been offered to State scientists.

The DOE has also participated with the State's Local Government Advisory Group, the Nevada Commission on Nuclear Projects, and the Nevada Legislative Committee on High-Level Radioactive Waste in many meetings and workshops and has attended meetings of the Nye County Commission. And of particular importance, the State attends all NRC/DOE technical meetings. The DOE remains committed to maintaining positive, cooperative interactions with the State of Nevada and appropriate local governments.

Consultation and Cooperation

The DOE continues to hold open its offer to the State of Nevada to begin consultation and cooperation negotiations under Section 117 of the NWPA. The DOE reaffirms the general policy, goals, and intentions that were contained in Section 4.2, "Consultation and Cooperation" of the 1985 Mission Plan.

Benefits Agreements

The Amendments Act authorizes the DOE to enter into benefits agreements with the State of Nevada concerning a repository. On April 6, 1988, Secretary Herrington informed Governor Bryan of Nevada, that the DOE is prepared to enter into negotiations with Nevada on the development of a Benefits Agreement under Section 5031 of the Amendments Act. Among other benefits, such an

agreement would provide for State and local representation on a Review Panel with broad review and advisory responsibilities. It would also include a schedule of annual payments to Nevada. No response has been received from the State of Nevada.

Financial Assistance

The DOE intends to ensure that the State of Nevada and affected units of local government are adequately funded so that they may fully and effectively participate in the program. The DOE will work closely with representatives from the State of Nevada and local governments in establishing appropriate mechanisms for the efficient processing of grant applications.

On April 21, 1988, in response to a request from the Board of County Commissioners of Clark County which is contiguous with Nye County where the Yucca Mountain site is located, Secretary Herrington designated Clark County as an affected unit of local government. This will facilitate Clark County's active participation in the development of an acceptable repository site. Last week, the Department received from Lincoln County, which is contiguous with Nye County, a request that they be designated as an affected unit of local government.

Conclusions

I hope that my discussion of program highlights and areas of joint and special concern has demonstrated that DOE will conduct the site characterization program so as to assure sound management, efficient use of resources, and above all the successful demonstration of regulatory compliance. Our approach will be determined, realistic, and credible.

In the past, there has been a tendency to view the assurance of safety as a purely technical question. The NWPA as amended tells us that the affected public and its public representatives no longer accept that view. We accept this more enlightened view.

We fully expect that the NRC will be very demanding of the DOE program in order to develop the confidence and reasonable assurance that the public health and safety will be protected. We believe that a technically competent and astute regulator is in the program's best interest, and we have and will foster a healthy relationship of mutual respect with NRC so that useful and constructive technical and policy exchanges can take place.