

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

**Title: BRIEFING ON HLW ISSUES BY NWTRB, STATE
 OF NEVADA, LOCAL GOVERNMENTS AND
 NATIVE AMERICANS - PUBLIC MEETING**

Location: Rockville, Maryland

Date: Friday, September 9, 1994

Pages: 1 - 118

SECRETARIAT RECORD COPY

ANN RILEY & ASSOCIATES, LTD.
1250 I St., N.W., Suite 300
Washington, D.C. 20005
(202) 842-0034

DISCLAIMER

This is an unofficial transcript of a meeting of the United States Nuclear Regulatory Commission held on September 9, 1994 in the Commission's office at One White Flint North, Rockville, Maryland. The meeting was open to public attendance and observation. This transcript has not been reviewed, corrected or edited, and it may contain inaccuracies.

The transcript is intended solely for general informational purposes. As provided by 10 CFR 9.103, it is not part of the formal or informal record of decision of the matters discussed. Expressions of opinion in this transcript do not necessarily reflect final determination or beliefs. No pleading or other paper may be filed with the Commission in any proceeding as the result of, or addressed to, any statement or argument contained herein, except as the Commission may authorize.

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 ***

4 ***

5 BRIEFING ON HLW ISSUES BY NWTRB, STATE OF
6 NEVADA, LOCAL GOVERNMENTS AND NATIVE AMERICANS

7 ***

8 PUBLIC MEETING

9 ***

10
11 United States Nuclear Regulatory
12 Commission
13 One White Flint North
14 Rockville, Maryland

15
16 Friday, September 9, 1994
17

18 The above-entitled meeting convened, pursuant to
19 notice, at 9:00 a.m., Ivan Selin, Chairman, presiding.
20

21 COMMISSIONERS PRESENT:

22 IVAN SELIN, Chairman of the Commission
23 KENNETH C. ROGERS, Commissioner
24 E. GAIL de PLANQUE, Commissioner
25

ANN RILEY & ASSOCIATES, LTD.
Court Reporters
1250 I Street, N.W., Suite 300
Washington, D.C. 20005
(202) 842-0034

1 STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:

2 JOHN C. HOYLE, Acting Secretary

3 MARTIN MALSCH, Office of the General Counsel

4 DR. JOHN CANTLON, Chairman, NWTRB

5 DR. GARRY BREWER, Member, NWTRB

6 ROBERT LOUX, Director, Nuclear Waste Project

7 Office, State of Nevada

8 DR. CARL JOHNSON, Nuclear Waste Project Office,

9 State of Nevada

10 JIM DAVENPORT, Deputy Attorney General, State of

11 Nevada

12 BRAD METTAM, Project Coordinator, Inyo County

13 LES BRADSHAW, Project Manager, Nye County

14 MALACHY MURPHY, Consultant, Nye County

15 ABIGAIL JOHNSON, Consultant, Eureka County

16 DENNIS BECHTEL, Coordination, Nuclear Waste

17 Division, Clark County

18 RICHARD ARNOLD, Executive Director, Las Vegas

19 Indian Center

20 ROBERT HOLDEN, Director, Nuclear Waste Project,

21 National Congress of American Indians

22 ELWOOD LOWREY, Nevada Indian Environmental

23 Coalition

24

25

ANN RILEY & ASSOCIATES, LTD.
Court Reporters
1250 I Street, N.W., Suite 300
Washington, D.C. 20005
(202) 842-0034

P R O C E E D I N G S

[9:00 a.m.]

CHAIRMAN SELIN: Good morning, ladies and gentlemen.

This morning the Commission is pleased to greet representatives from the Nuclear Waste Technical Review Board, the State of Nevada, local governments and Native Americans.

Our first panel is the Nuclear Waste Technical Review Board and later we'll have panels from the State of Nevada, from affected units of local government and from Native Americans who are here to brief the Commission on issues related to disposal of high-level radioactive waste, specifically at the DOE's proposed repository site at Yucca Mountain in Nevada.

In June of this year, Daniel Dreyfus of the Department of Energy briefed us on the Department's revised approach. This new approach termed the proposed program approach. I doubt that that title is going to last very long. It represents a major departure from existing plants that characterize this proposed site at Yucca Mountain. We are very interested in hearing the Department of Energy's views and we'll continue to follow them, but we're just as interested in hearing the views of the various other organizations, these organizations which are represented

ANN RILEY & ASSOCIATES, LTD.
Court Reporters
1250 I Street, N.W., Suite 300
Washington, D.C. 20005
(202) 842-0034

1 here today concerning the proposed program approach.

2 We welcome whatever other comments each of the
3 organizations might feel is appropriate.

4 I have just two logistic points. The shiny stuff
5 and the matte stuff is water. And the second more important
6 one is we have a lot of people on the schedule today. So,
7 we'll try to exercise unusual discipline and really keep to
8 the time table.

9 Commissioner Rogers?

10 Dr. Cantlon? Thank you very much for coming
11 again.

12 DR. CANTLON: Thank you, Mr. Chairman, fellow
13 Commissioners, ladies and gentlemen. It's a pleasure to be
14 here today. As you know, my name is John Cantlon. I'm
15 Chairman of the Nuclear Waste Technical Review Board. I'm
16 also a former Vice President of Research and Graduate
17 Studies and Dean of the Graduate School at Michigan State.
18 My area of expertise is environmental biology.

19 Accompanying me is Board Member Garry Brewer, who
20 will make part of our presentation today. Dr. Brewer is
21 Professor of Resource, Policy and Management and Dean of the
22 School of Natural Resources and Environment at the
23 University of Michigan.

24 On March 14th of this year, Warner North and I
25 talked to you about the Board and its perspective on the

1 Department of Energy's program to manage civilian spent fuel
2 and defense high-level waste. Today, Dr. Brewer and I would
3 like to focus more specifically on the so-called proposed
4 program approach which DOE is developing to guide its high-
5 level waste program in the years ahead.

6 To begin, I'll provide you with an overview of the
7 PPA as we see it, including our interpretation of the
8 fundamental goals that the approach is trying to achieve.
9 Then Dr. Brewer will summarize the Board's views and
10 concerns regarding the PPA. Finally we would like to
11 discuss with you some questions about site suitability that
12 the Board will try to answer in its meeting next month.
13 Your regulatory perspectives on these questions would be
14 useful to us in our review.

15 Earlier this year we submitted a number of
16 questions to the DOE on the PPA and DOE responded in writing
17 on June 30th and in a presentation to the Board's July
18 meeting. Since, we have already shared the written
19 responses with you. I'll not at this time go over the
20 details of that exchange. Instead, let me try to summarize
21 some of the more important conclusions that we've been able
22 to draw at this early stage.

23 The PPA continues to evolve and many important
24 decisions have not yet been made. Later this month some key
25 information is supposed to be released in the DOE's FY'95

1 technical implementation plan, but it will probably be at
2 least another year before the details, technical
3 justifications and the schedules for testing other site
4 characterization efforts in 1996 and beyond have been worked
5 out.

6 The fundamental goals of the PPA appear to be the
7 following: first, to obtain increased funding from Congress;
8 second, to reduce the scope of the scientific investigations
9 to be pursued prior to application for construction
10 authorization in order to match the funding and schedule
11 constraints within which DOE feels site characterization
12 must be carried out. Then to establish achievable near-
13 term intermediate decision points leading to a site
14 suitability decision and, later, licensing steps. Success
15 in reaching such intermediate decision points will be used
16 to demonstrate both program progress and effective use of
17 funds.

18 They also tend to defer or delete some of the site
19 characterization studies called for in the 1988 site
20 characterization plan related to assessing the long-term
21 waste isolation capability of the repository. They plan to
22 use "conservative" or "bounding" assumptions and analyses to
23 demonstrate repository safety in both the DOE's site
24 suitability determination and its application to NRC for
25 authorization to construct the repository. They intend to

1 verify those assumptions and analyses by further testing and
2 analysis after repository construction begins and to
3 continue the testing and analysis into the operating period.
4 They also propose to extend the repository design
5 retrievability period from the present 50 to 100 years.

6 Another recent change in the program is that the
7 DOE no longer assumes that a monitored retrievable storage
8 facility will necessarily be part of the overall high-level
9 waste management system, although it's not clear to the
10 Board that this is directly related to the PPA. Although
11 our Board has not completed --

12 CHAIRMAN SELIN: Hold it.

13 DR. CANTLON: Yes. Yes.

14 CHAIRMAN SELIN: Would you explain that last
15 sentence?

16 DR. CANTLON: Yes. As you look at the way they
17 have laid out the PPA, there's no provision in any of that
18 discussion for an MRS.

19 CHAIRMAN SELIN: I see.

20 DR. CANTLON: And it's not clear to us that that's
21 an intended part of MRS or whether it just happens that
22 since it isn't there, there doesn't seem to be a timely
23 likelihood of an MRS coming on-line. They've just not
24 discussed it. So, we just noticed that that's --

25 CHAIRMAN SELIN: But the rest of the plan doesn't

1 depend on the MRSSs being achieved or any information?

2 DR. CANTLON: Exactly. That's the point.

3 CHAIRMAN SELIN: I'm a little slow, but I usually
4 get the point.

5 DR. CANTLON: Well, I'm trying to keep to your
6 schedule.

7 Although our Board has not completed its analysis
8 of the PPA, we have identified some preliminary views and
9 concerns about it which Dr. Brewer will now summarize for
10 you.

11 CHAIRMAN SELIN: Good morning, Dr. Brewer.

12 DR. BREWER: Good morning and thank you.

13 Based on what we now know about the PPA, we can
14 say that there appear to be risks as well as opportunities
15 associated with the new approach. Among the risks are the
16 increases in the near-term technical and scientific
17 uncertainties that would result from less data, less
18 analysis being provided up front in 1998 for the DOE site
19 suitability determination and later in 2001 for the initial
20 license application to construct a repository. Potential
21 opportunities include the chance to streamline the program,
22 to better focus on the most critical information needs, and
23 to demonstrate progress by achieving clear, near-term goals
24 leading to a site suitability determination.

25 We believe the Nuclear Waste Technical Review

1 Board can best meet its congressional mandate of assessing
2 the DOE's new approach at this early point by reiterating in
3 somewhat more explicit language some of the fundamental and
4 still relevant technical and scientific recommendations
5 we've been making during the past several years, and making
6 and making.

7 First, to expedite the determination of site
8 suitability and initiation of long-term underground tests,
9 underground exploration needs to proceed in a more timely
10 fashion. You have to get underground. Many of the
11 important structural features of the site, especially
12 faults, are vertical or nearly so. Consequently, they can't
13 be adequately explored with vertical bore holes drilled from
14 the surface. Getting underground to look at the site's
15 complex geology at the repository level is critical in
16 determining whether the site is suitable for repository
17 development.

18 The Board remains concerned about continuing
19 delays in the excavation of the exploratory facility.
20 Start-up of the tunnel boring machine has been delayed, as
21 has purchase of supporting higher capacity much-removal
22 equipment related to it. Further delays of this type will
23 make it difficult if not impossible to complete an adequate
24 amount of underground exploration to support a site
25 suitability finding in 1998 and the 2001 license

1 application. This is the point, the key point. These
2 delays will also hold up initiation of the long-term
3 repository level experiments and science needed for later
4 repository design and licensing decisions.

5 At the same time, it's important to continue
6 critical components of the surface-based program, the
7 underground as well as the surface. They're both important.
8 Surface mapping, trenching, geophysical studies for example
9 are important for deciphering the volcanic and seismic
10 potential of the site. Surface-based drilling helps
11 determine vertical variations in site characteristics, while
12 the underground exploration provides more information about
13 lateral variability. Together, these sources of information
14 contribute to a three dimensional picture of the site and
15 its geologic history. They go together.

16 A second consistent recommendation and concern of
17 the TRB is to look at the management of high-level
18 radioactive waste as a system and set priorities
19 accordingly. John's already mentioned this in his open
20 remarks. A program plan should be developed from a sound
21 analysis of the system, including a total system performance
22 assessment.

23 The plan should also be based on a coherent waste
24 isolation strategy. For example, a determination of the
25 barriers DOE will rely on for waste isolation, the degree of

1 reliance to be placed on each of the different kinds of
2 barriers, whatever the strategy might be. Such a plan or
3 concept or strategy will provide a basis to prioritize
4 activities. It will help avoid wasteful expenditures or
5 errors that may require costly and time consuming
6 remediation. Instead of trying to do everything, have a
7 strategy. Sound planning and prioritization of activities
8 based on an overall systems analysis are essential if the
9 PPA is to succeed.

10 A third area of concern, and we have recommended
11 that DOE set realistic schedules, realistic schedules for
12 achieving important intermediate milestones such as getting
13 underground and determining site suitability. While interim
14 milestones have now been identified, the Board remains, let
15 me stress, very concerned about the schedules.

16 We agree that the schedules are vital to maintain
17 program momentum and measure progress, but important
18 technical and scientific requirements cannot be truncated or
19 eliminated simply to meet arbitrary deadlines. It's just
20 too important. Doing so risks later delays in repository
21 developments or serious uncertainties concerning the
22 suitability of the site. We believe that unrealistic
23 schedule deadlines serve only to increase frustration and
24 erode confidence when they are missed. That's been the
25 history.

1 A longstanding problem has been the need to derive
2 and prioritize realistic plans and schedules for exploration
3 and testing based on the decisions that will have to be
4 made. Ideally, the critical decisions for verification of a
5 disposal concept should be identified first. Then the
6 information needed to make those decisions and the extent of
7 exploration and testing required to produce the information
8 should be determined. That's the logic of it. Finally,
9 flexible schedules can be developed based on the required
10 scope of exploration and testing.

11 As experience is acquired during site
12 characterization, revisions to the original schedules may be
13 needed. it's not evident that the planning process
14 associated with the PPA works this way. On the contrary,
15 the DOE may view the target dates for its site suitability
16 decision and the submittal for license application, they may
17 view them so rigidly that attempting to meet those dates
18 will constrain the amount of technical information to be
19 collected. That's the thing that we're very concerned
20 about.

21 Fourth, we recommend that the DOE increase the
22 resources available for research and development of the
23 robust, long-lived waste package. The use of engineered
24 barriers, including a robust, long-lived waste package, may
25 help reduce uncertainties and overall repository performance

1 and could enhance the safety of the system for thousands of
2 years. It appears the OCRWM plans to increase funding for
3 waste package development. I appears so, including long-
4 term corrosion research, which is an integral part of it.
5 We strong endorse this decision and look forward to seeing
6 the detailed plan. It's important.

7 Fifth, we recommend that the DOE allocate program
8 funds so that more money goes to science and technical work
9 and less to indirect overhead and infrastructure cost. It's
10 been a consistent finding and complaint and recommendation
11 of our Board. The DOE should provide a coherent, coherent
12 organizational structure to enhance the effectiveness of the
13 people and organizations involved in the program.

14 To his credit, Dr. Dreyfus has completed a
15 reorganization of federal personnel at OCRWM in the
16 headquarters and at the Yucca Mountain site office. He's
17 indicated that in the future a greater share of the
18 available funds will be going to scientific and technical
19 work, not to overhead and related cost. We hope so.

20 We also hope that the changes have been initiated
21 and that they'll have the intended results, but we're
22 concerned that a number of high-level program managers are
23 retiring. It's something we have discovered and been quite
24 concerned of in the last several months. We hope the
25 vacancies can be filled promptly with experienced

1 professionals to ensure continued leadership of the program,
2 particularly during this time frame.

3 The Board's biggest concern about the PPA is
4 whether the reduced scope and extended schedule of
5 exploration and testing will provide adequate and timely
6 information, adequately and timely information to support
7 the defensible DOE site suitability determination and a
8 fully adequate application for construction authorization.

9 Until the DOE identifies the technical activities
10 it plans to curtail, defer, delete and the reasons for these
11 changes, the Board can't fully judge the risk posed by the
12 PPA. We can't. It's clear that there's not enough calendar
13 time remaining between excavation of the ESF at the
14 repository level and the 1998 site suitability decision, the
15 2001 date for application for construction. There's not
16 enough time to complete long-term heater tests, corrosion
17 studies and other activities that may require several years
18 to produce adequate information.

19 A key feature of the PPA is the DOE's plan to
20 substitute conservative assumptions and analyses for data
21 that are not available when needed. It's currently unclear
22 how much this strategy will increase the risk of later
23 delays and repository development or serious uncertainties
24 concerning the suitability of the site.

25 The Board retains its concern about the schedule

1 driven nature of the program, even as modified by the PPA.
2 There doesn't seem to be any slack in the schedule to
3 accommodate problems very likely to be encountered during
4 exploration and testing. Something we know, we get
5 underground, you always discover things. That's why you go.

6 And now, Dr. Cantlon will discuss the Board's
7 upcoming meeting on the DOE's plans for evaluating site
8 suitability, the meeting we're having in October in Nevada,
9 and the implications for the PPA of that evaluation.

10 Thank you very much.

11 CHAIRMAN SELIN: Thank you very much.

12 DR. CANTLON: The DOE recently sketched in very
13 general terms its proposed process for arriving at the
14 suitability of the Yucca Mountain site. This process
15 includes development and analysis of technical information
16 by the DOE, external review of that information, possibly by
17 the National Academy of Sciences, an evaluation by DOE of
18 the site's compliance with its own siting guidelines and a
19 phased series of decisions by the DOE regarding submission
20 of license applications concerning the suitability of the
21 site. Assuming the site is found suitable, the DOE would
22 then apply for authorization to construction the repository
23 and later an operating license to receive and possess waste.

24 The following are some further questions that the
25 Board will address in its review of site suitability issues

1 in its meeting next month in Las Vegas. The Board will
2 explore these issues from its technical perspective.
3 However, we recognize that the NRC also has a large role to
4 play in determining the adequacy of the answers to these
5 questions. For example, the Nuclear Waste Policy Act calls
6 for the NRC to make a preliminary comment on the sufficiency
7 of DOE's site characterization analysis at the time that the
8 DOE recommends to the President the development of the site
9 as a repository. Hearing your regulatory perspective on
10 these questions, including the experience of licensing
11 boards in reviewing similar issues, would be very useful to
12 the Board.

13 First, what technical information is needed to
14 evaluate the suitability of the Yucca Mountain site? As Dr.
15 Brewer noted, the Board's biggest concern about the PPA is
16 whether the proposed scope and schedule of exploration and
17 testing will provide adequate information to support a
18 defensible DOE site suitability determination and later an
19 adequate application for construction authorization. Only
20 after the technical information needs and the DOE's plans to
21 meet them are identified can we judge whether PPA can
22 fulfill those needs.

23 Of particular interest to the Board is the
24 relationship between the data and analysis needed to support
25 an application for construction authorization versus the

1 data and analysis needed for the DOE's own site suitability
2 determination.

3 Second, when are conservative or bounding
4 assumptions and analyses defensible? Under the PPA, the DOE
5 plans to rely on conservative or bounding assumptions and
6 analyses to substitute for data that cannot be acquired
7 before the 1998 site suitability or the 2001 license
8 application dates. In general, such an approach may prove
9 very useful. However, it is necessary to collect enough
10 data to show that the assumptions are truly conservative,
11 that the importance of each assumption in the overall
12 evaluation of the repository performance is understood and
13 for the more critical assumptions the degree of conservatism
14 that can be estimated with some assurance.

15 Third, can post-1998 data continue to be submitted
16 during the NRC's construction authorization licensing
17 review? The DOE has told the Board that it views the end of
18 1998 as the last practical date for development of data to
19 be included in its 2001 application for construction
20 authorization. The DOE estimates that approximately three
21 years will be needed for documentation, analysis and peer
22 review of data and incorporation of the data into the
23 license application. This means that the PPA would produce
24 only four more years of data for use in supporting a license
25 application. Prospects for success of the PPA would be

1 enhanced if the DOE could continue important testing after
2 1998 and could have in place an agreed upon mechanism for
3 amending or supplementing the license application to
4 incorporate post-1998 data. This is especially critical for
5 studies that have not yet been initiated.

6 In summary, it appears to us that the PPA is an
7 attempt by the DOE to make the best of what has been a very
8 situations. For reasons that need not be repeated here, too
9 much time has elapsed in which too little work has been
10 satisfactorily completed in this program. The DOE seems to
11 believe that the PPA is a politically more acceptable way to
12 proceed with its high-level waste program. The Board sees
13 no reason to disagree with that judgment.

14 However, from a technical and scientific
15 perspective, there are real and substantial risks associated
16 with the PPA. If the PPA is to succeed, it must produce a
17 large amount of information in a short time and there must
18 be a mechanism for considering data and analysis results
19 acquired after the initial application has been filed.
20 Careful planning and prioritization of exploration and
21 testing activities will be important and schedule
22 flexibility will be essential. The ultimate objective of
23 the program must be the development of the necessary
24 technical information for assuring a safe repository, not
25 meeting the scheduled decision points of the PPA.

1 We'd be happy to respond to any questions.

2 CHAIRMAN SELIN: Well, let me first try to answer
3 your questions.

4 DR. CANTLON: Yes.

5 CHAIRMAN SELIN: We've always found your Board to
6 be invaluable in our meetings. You not only do a lot of the
7 work that we would otherwise have to do and which I'm sure
8 we couldn't do as well as you do, or at least not from the
9 same point of view, but on top of that you bring a
10 management perspective as well as a technical perspective to
11 the program. This whole question of schedules, resources,
12 which is not our business, but we think it's very important
13 that the Department have somebody that asks these questions
14 outside and to whom they have to answer.

15 Furthermore, you're willing to characterize some
16 of these broad trends in language in ways that is not easy
17 for us to do. So, before we ask you questions, I think we
18 owe you an attempt to try to answer the questions you've put
19 and I will try to do that.

20 The first point about technical information for
21 evaluation and suitability, what we need and when we need
22 it, the approach the Commission has taken has been one that
23 really does involve some balancing. On the one hand, we are
24 a federal agency. We don't wish to see money wasted. We
25 don't wish to see sandbags or traps in the way. So, we have

1 tried to do a kind of a meta-analysis along the way to look
2 for show stoppers, to look for serious objections. We've
3 made it very clear that we don't sign off on anything until
4 we sign off on everything, but when we see a problem coming
5 up, we don't wait for the application, we try to come back.
6 We will follow the same process all through the suitability.

7 Suitability is a DOE decision, not ours, but in
8 doing the suitability work if we came to a conclusion
9 different from DOE's, if we thought that there were actually
10 positive evidence to say the site is not suitable, we would
11 speak up. We wouldn't wait for a license application. We
12 will not second guess the DOE decision per se, but if we
13 don't agree with some of the conclusions they're drawing, we
14 will speak up. We will not let things wait until an
15 application goes. So, at all points, we will be following
16 this information. Suitability is an included case within
17 licensability. So, if we were to disagree with the finding
18 or at least believe the basis for the finding was
19 incomplete, we would communicate that to DOE. We don't want
20 there to be any surprises. At least if we know something,
21 we want to make sure they know it and this would be known
22 publicly.

23 At the same time, we can't become part of the
24 problem. It's not our decision, it's not our analysis, we
25 cannot allow our staff to get to the point that they have a

1 stake in the work, to the point where they couldn't review
2 what comes in. So, I would expect that we will follow the
3 suitability work. If we see problems arising that lead to
4 serious questions, we will continue to communicate, as we
5 have continuously, to try to call these problems to the
6 attention of the Department of Energy before they go down a
7 path or before they say -- I mean if they were to say,
8 "We're not going to do anymore work in heat transfer," and
9 we say, "We don't think you have enough information to
10 answer our questions," we would call this to their attention
11 quite forcefully.

12 As far as schedules go, we don't know anything
13 about 1998 and 2001. To us, a schedule is a point at which
14 certain milestones have been achieved, not a calendar point.
15 So, I would support very much your statement about event-
16 oriented schedules, not calendar-oriented schedules, to use
17 the concept of flexible scheduling. I think that's what you
18 mean.

19 DR. BREWER: That's exactly it.

20 CHAIRMAN SELIN: But just flat out say, "We don't
21 care if it takes four years or five years or six years, it
22 will take what it takes to answer the questions," and if DOE
23 were otherwise tempted to say, "It's 1998. We must be
24 finished with the research," that won't fly when it comes
25 over here.

1 But as far as conservancy, conservatism and
2 assumptions go, we use bounding analyses all the time. What
3 we would expect and what we will be pushing for is not just
4 confirmatory work. I don't mean that in a regulatory sense,
5 but not just work that proves that the assumptions are
6 really conservative, but as experimental information is
7 gathered to reduce the measure of conservatism rather than
8 to go into it, which leads me to your third question about
9 what happens after -- you said 1998, but I prefer to say
10 what happens after the preparation of the application goes
11 along? I will make a commitment to you that I don't think
12 we've really quite publicly made, but we will start work on
13 the application when we get it, even if there are areas that
14 are incomplete. But the answers based on the data we get
15 may be ones that DOE doesn't want. So, as new information
16 comes in, yes, we will take that new information, but it
17 doesn't necessarily mean that the original schedule will be
18 kept. I mean you can't expect a year before they would like
19 the application to really be locked up for data to come in
20 and say, "That's enough time to do it," that we will not be
21 driven by the schedule, we will take whatever information is
22 available and try to keep to a reasonable schedule. But the
23 schedule is very likely not to be the original schedule.

24 So, on the one hand, we're not going to say to do
25 a kind of a meta-analysis, say, "You can't prove the case

1 with what you have, so we won't do anything." But we're not
2 just going to pour in the data at the last minute and plan.
3 In addition to the inability of our staff to process the
4 data correctly, this is a very public session.

5 The last question you raised had to do with how do
6 our hearings work. I would just make the point that we
7 don't have a set of courts. Our hearings are not trial
8 court, appellate court, supreme court. The people who do
9 the hearings are our magistrates. They follow the policy
10 the Commission does. We don't interfere with the process of
11 the hearing, but the guidance to the hearing examiners is
12 Commission guidance. They represent us at these pieces.
13 So, I would expect that whatever policy the staff has
14 followed in doing the analysis and setting the questions
15 would be the same policy that will be followed in the actual
16 adjudications.

17 I'm sure my colleagues would like to add to this.

18 DR. BREWER: The clarity is really quite
19 appreciated in hearing you out on these subjects. And to
20 see the convergence of the Board's view and yours, at least
21 as I understand what you've just said, that's great.

22 CHAIRMAN SELIN: Well, we could easily have
23 changed sides. Had we had the knowledge, we would have been
24 --

25 DR. BREWER: You could have read my script.

1 CHAIRMAN SELIN: -- pleased with your
2 presentation.

3 Commissioner Rogers, would you care to add
4 anything?

5 COMMISSIONER ROGERS: Well, not to your answers.
6 I think they were fine. But I do have some other matters
7 that I'd like --

8 CHAIRMAN SELIN: Before we get to the questions?

9 COMMISSIONER de PLANQUE: No. No.

10 CHAIRMAN SELIN: Okay.

11 COMMISSIONER ROGERS: Yes. How do you see the
12 DOE's new plan in terms of the relationship between the
13 design of the repository, including basic decisions with
14 respect to engineered barriers and site suitability itself.
15 I mean do you see those fully integrated into a total
16 systems analysis or do you see an attempt to separate the
17 details of design? Now, obviously, it's desirable to leave
18 some flexibility in that design, even after you've
19 characterized the site once you begin. And I think Dr.
20 Dreyfus indicated that to us when he met with us the last
21 time and that seems to be perfectly reasonable.

22 On the other hand, one has the simple question
23 site is suitable for what? For some design suitable, for
24 other designs, not suitable. And how do you see the linkage
25 between basic design decisions, particularly with respect to

1 engineered barriers and a site suitability decision?

2 DR. BREWER: John, you want to take a try?

3 DR. CANTLON: Well, I think the short answer is
4 that as we understood Dr. Dreyfus as he described it, they
5 were going to rely somewhat on a much more robust
6 containment in the waste packages as one way of handling the
7 larger uncertainty about the geologic containment,
8 particularly in the early years of containment. So, there
9 is apparently a greater reliance on the engineered barrier
10 in the new thinking than there was in the original site
11 characterization plan.

12 From our own point of view, I think we come down
13 essentially on the same side that I understand the
14 Commission is, that we've always argued for redundancy. We
15 think very heavily engineered robust barriers, engineered
16 barriers, are a redundancy feature not a substitute for site
17 frailties.

18 DR. BREWER: One of the comments that I made in my
19 prepared remarks had to do with the waste isolation strategy
20 or concept or what the Swedes call a safety concept in the
21 KSB series of experiments that they've run. While I'm
22 relatively new in terms of the Board, I've not seen or heard
23 or been told of anything comparable. Lacking such a
24 concept, it's very difficult to know. I mean is the concept
25 one that's going to rely on engineered barriers and to what

1 extent? Is it going to rely on various ways that the waste
2 might be isolated? Without that concept, you either do
3 everything or you sort of ignore everything equally.

4 That, as I said, in the prepared comments is an
5 important missing element in the PPA and something that
6 needs to be really focused on and clarified. For without
7 that, it's very difficult to make the next judgments as to
8 where should you be putting your research money and what's
9 really important, and I think that gets to your question.

10 COMMISSIONER ROGERS: Yes. Doesn't this really
11 relate to having in place a really complete performance
12 assessment program? I'd like you to comment a little bit on
13 the concept of an iterative process there for performance
14 assessment as it might relate to this use of bounding
15 assumptions that then might eventually be refined somewhat
16 during the course of data collection.

17 DR. BREWER: I'll start and John will pick up the
18 pieces.

19 One of the first things as a new member of the
20 Board that I thought it important to do was to look at the
21 site characterization plan. It is a daunting document. One
22 of the things that I was looking for, being primarily a
23 management and systems analyst trained person at Rand and
24 other places over the years, was what's the concept here?
25 How do all the pieces fit together? If you were really

1 persist and very smart, you might be able to get it out of
2 the SEP and you might get it out of the PPA, but I'm not
3 that persistent and I'm not that smart. I don't know what
4 it is.

5 So, in your terms, there is lacking a very clear
6 statement of what the total system looks like so that you
7 can assess its performance. A key element within that as
8 far as my understanding of it goes is what is the waste
9 isolation concept or strategy? That's a very important part
10 of the whole package. That's missing too.

11 DR. CANTLON: Well, clearly they have already been
12 engaged in an iterative total system performance analysis
13 and they are proceeding. Obviously in the early stages
14 where you lack data sets, particularly on the thermal
15 response of the system, true data sets based on a knowledge
16 of what the repository level will be like, they're having
17 essentially to use data from other smaller scale studies.
18 So, the uncertainty values are very, very large. Obviously
19 by the time they get down to the repository level and put in
20 place the longer term heating experiments, they're going to
21 be able to get some data sets that will allow better
22 projections and better refinement and hopefully a much
23 narrower uncertainty level. Our concern about the process
24 is they've now made a decision to do some of the site
25 suitability determinations before those uncertainty

1 narrowing elements will be in place.

2 There's no question but what if one looks at the
3 risk of building a U.S. repository, the risk isn't going to
4 be there until they put nuclear materials in there, and you
5 people are not going to license the placement of nuclear
6 materials there until you've got that uncertainty level down
7 to a manageable level. So, I look at what they're proposing
8 here as a management scale, a management scheme really, of
9 arriving at a set of very, very difficult and demanding
10 engineering analyses. We in the country look to you to make
11 certain that no decisions are made that will generate risk
12 to anybody before that question is answered with some narrow
13 uncertainty, narrow bars of uncertainty.

14 COMMISSIONER ROGERS: Thank you.

15 CHAIRMAN SELIN: Commissioner de Planque?

16 COMMISSIONER de PLANQUE: Just two questions more
17 along the management line. This shift of resources from the
18 infrastructure to the real work, do you perceive this as
19 being real as opposed to just an accounting --

20 DR. BREWER: That's a leading question.

21 DR. CANTLON: The short answer is we don't know.
22 We really don't know. I'll have to go to my own experience.
23 Having been a vice president for research and a chief
24 academic officer in a university, elements of indirect costs
25 are absolutely as real as any other kinds of cost. So --

1 COMMISSIONER de PLANQUE: It's still dollars.

2 DR. CANTLON: Yes, they're still dollars and
3 they're tough dollars and they're the most difficult in the
4 world to explain to average people because they don't think
5 about heating and lighting and legal problems and all of
6 that sort of thing.

7 COMMISSIONER ROGERS: To the researchers
8 particularly.

9 DR. CANTLON: To the researchers in particular.
10 So, I, I suppose, of the Board members who have been burned
11 on both sides of that question, am very sensitive to the
12 position that manager of a project is in.

13 On the other hand, if you look at the rates that
14 are involved, you're well over 100 percent of the direct
15 costs that are involved in this. So, there are some
16 unnecessarily high and even some redundancy in the indirect
17 cost things which the managers out there have identified and
18 are beginning to address. So, the short answer to your
19 question is I think they really are focusing on ways to get
20 control of some of that, and it's about time.

21 COMMISSIONER de PLANQUE: We care especially from
22 the point of view of how fast is working going to progress
23 and how soon are we going to have to respond to all of that
24 because this dictates our use of resources as well.

25 A second component of that, you mentioned loss of

1 some key people at the top levels. I assume that's because
2 of the latest government buyout plans and --

3 DR. CANTLON: No, these are retirements.

4 COMMISSIONER de PLANQUE: That's what I mean.

5 DR. CANTLON: Two very key people are retiring.

6 COMMISSIONER de PLANQUE: Okay. Do you see that
7 as affecting the schedule aspect of this?

8 DR. CANTLON: Well, it's hard to answer that. We
9 were very, very pleased by having the new manager of the
10 Yucca Mountain office in place because we thought he was
11 coming at it with some really heads up approach of
12 addressing the challenges. We had understood that there was
13 the possibility that he could be in place for as much as
14 three years, but we understand that he will, in fact, leave
15 soon.

16 COMMISSIONER de PLANQUE: Okay. That's all I
17 have. I just find your input extremely valuable for us.

18 DR. CANTLON: Thank you.

19 COMMISSIONER ROGERS: Yes, just a little bit along
20 one of the questions that Commissioner de Planque raised.
21 Some time ago you expressed concern that the activities at
22 the site were not sufficiently directed towards site
23 suitability and were more possibly being directed towards
24 support of an infrastructure and I'm talking about physical
25 infrastructure, I'm not talking about overhead now, that

1 might be necessary when the site hopefully would be found
2 suitable and one could proceed. I think we all felt a bit
3 uncomfortable about the scale of certain things that were
4 going on there, whether that really is necessary for site
5 suitability or whether it's necessary only on the assumption
6 that the site will be found suitable.

7 How do you feel about that question? That's a
8 little different from the how much money you're spending on
9 overhead. It really relates to the overhead management
10 question. That's certainly an important question, but I
11 think that in the past you'd expressed some concern not just
12 on that, but on the direction of the use of major resources
13 in putting in place on the site facilities and supporting
14 infrastructure to proceed.

15 DR. CANTLON: Well, they did amend the original
16 plan and we were able, I think, to get some improvement in
17 it. It's still a little bit more elaborate than is needed
18 directly to assess the site. But you make your
19 recommendations.

20 CHAIRMAN SELIN: Look, I think it's important
21 that, speaking on behalf of the Commission, I make a couple
22 of points based on your presentation at this point. The
23 first is that we cannot assess the licensability of a site,
24 we can only assess the licensability of a site in the
25 context of a specific waste management concept. Therefore,

1 basically absent the model, I think the way Dr. Brewer would
2 put it, that there isn't even a model on which performance
3 assessment can be done. Absent that model, we can only go
4 so far and DOE can only go so far. There's no question that
5 if we're going to be able to do a productive amount of work,
6 we need to have that model, or without that model there's no
7 sense in doing a lot of the other things that you've talked
8 about. That's the first point.

9 The second point, you've brought into focus very
10 clearly something I was worried about and now I'm more
11 worried about, which is that the fundamental physical
12 information on the site which would be necessary to do
13 performance assessment if there were a model, isn't
14 available, isn't likely to be available on the schedule that
15 they're talking about. So, except for we don't have the
16 supply and we don't have the demand, the project is in good
17 shape.

18 So, there clearly is more useful scientific and
19 technical work that can be done even while this model is
20 being developed. There are things you know will be
21 necessary for a wide range of models within which the real
22 model is going to fall. But DOE's got to stop thinking
23 about this as a site suitability. They've got to think
24 about it as a waste emplacement concept and then the second
25 question is is the site suitable for that concept. Now,

1 obviously you've got to know something about the site before
2 you can develop the concept. But from our point of view,
3 real work doesn't start until we have a waste concept. When
4 I say real work, I mean work that isn't just getting
5 preliminaries out of the way, but that could be put up
6 against a schedule.

7 The third point is that although this concept of
8 the PPA really is quite attractive, and I agree the concept
9 is separating out suitability questions from licensing
10 questions, from operational questions and trying to get some
11 sequence in that, we've got a lot more work to do in the
12 short run than I had understood in doing these pieces, to
13 say nothing of what DOE has to do. But we're just dancing.
14 We're just doing preliminaries until we get this concept.
15 So, we're really talking to DOE through you. You certainly
16 have elicited the Commission's response that we need this
17 concept and we need it soon. What soon means depends on
18 what schedule DOE wishes to keep to.

19 When Dr. Dreyfus was here I told him, "No LSS, no
20 application." But the other thing is no concept --

21 COMMISSIONER ROGERS: No concept, no application.

22 CHAIRMAN SELIN: -- no application, no
23 suitability. I mean suitable for what? Sure you could find
24 a fatal flaw in the site that says you couldn't do it no
25 matter what you did, but the other way around, we're not

1 going to say the site is suitable in the sense of there's an
2 existence theorem, that there is a concept someplace that
3 could use that site. It has to be suitable for what? I do
4 want that very clearly understood. I do want that very
5 clearly understood. The question to the Commission, the
6 early question is suitable for what, the second is
7 licensable for what?

8 The third point, Commissioner Rogers' point is
9 when it's all done, if the site is approved and does go
10 forward, you're going to have to operate it. We don't go
11 away once we issue a license.

12 Thank you very much.

13 DR. BREWER: Well, thank you.

14 CHAIRMAN SELIN: The Commission looks forward to
15 the next 30 minutes to Mr. Loux and Dr. Johnson of the
16 Nuclear Waste Project Office of the State of Nevada.

17 Do you have surprise witnesses for us?

18 MR. LOUX: We do, Mr. Chairman. With me also
19 today is Jim Davenport, who is our special Deputy Attorney
20 General. He has a couple very brief remarks at the end of
21 my presentation.

22 CHAIRMAN SELIN: Fine. Thank you.

23 MR. LOUX: And Carl is here, of course, to handle
24 all these tough technical questions that you all are
25 throwing at everyone.

1 But I appreciate the opportunity to be here. Most
2 of us have been involved in this program since the very
3 early '80s, both Carl and I, and we appreciate the
4 opportunity to be here, along with the rest. I must tell
5 you that I enjoyed the previous panel, not only like to
6 associate in some sense ourselves with the remarks of the
7 Board, but also found that your questions and dialogue
8 particularly enlightening in light of the PPA and the other
9 kinds of things that are out there.

10 CHAIRMAN SELIN: Thank you.

11 MR. LOUX: I think our focus today is going to be
12 somewhat different and a little bit in a different
13 perspective, although I think we would agree that the major
14 problem we see with the PPA is primarily the schedule-driven
15 nature of the program and I think that compliments at least
16 some of the other concerns that we've got that we'll bring
17 to attention today.

18 I think the meeting is timely in the sense that
19 the changes that DOE is proposing via the PPA in our mind
20 are very significant and major changes to the overall waste
21 management strategy, at least has been thought of up until
22 now. The DOE's new proposed approach was presented to you,
23 as you know, on the 6th of June and initial staff review of
24 the PPA was provided to you on July 1 by the staff. And
25 understand that results of further staff review will be

1 forwarded as they continue.

2 Because much of the PPA strategy has already been
3 incorporated into DOE's waste program planning and full
4 implementation is expected to begin with the FY '95 time
5 frame. We've been reviewing the evolving PPA ourselves and
6 include in our analysis our potential impacts of the PPA on
7 the NRC's prelicensing and regulatory responsibility since
8 the plan changes, we believe, may require revision of NRC's
9 waste management program approach, additional direction and
10 guidance from the Commission to staff, and possibly a
11 regulatory response from the Commission.

12 We'll be discussing today kind of our conclusions
13 and let me tell you that, as you know, I'm going to
14 summarize our more detailed comments which are in our
15 prepared statement.

16 Working backwards in a normal sense, let me give
17 you the conclusions first. Our primary conclusion --

18 CHAIRMAN SELIN: Completely out of character with
19 everything that's been associated with this project.

20 MR. LOUX: Of course.

21 Our primary conclusion is that the adoption of the
22 PPA, as I mentioned, would represent a significant revision
23 of the national high-level waste policy and this revision I
24 think has serious implications for the Commission despite
25 DOE's claim to you on the 6th that, in fact, the adoption of

1 the PPA would not require a legislative or regulatory
2 revision. Let me describe that in two or three different
3 ways.

4 First of all, according to the Commission's
5 regulations in the Nuclear Waste Policy Act, a repository
6 license is for disposal, emphasize disposal, of spent fuel.
7 As repeated noted by the Commission, a complete high quality
8 license application is expected to be submitted by DOE
9 following the end of site characterization. But instead,
10 under the PPA, it appears that DOE plans to apply for and
11 receive a repository license from the Commission based on
12 less than complete site characterization information. DOE
13 then proposes to operate the repository while it continues
14 to collect the remaining needed site characterization
15 information during this long period of performance
16 confirmation.

17 According to their information provided by DOE to
18 the Technical Review Board in July, most of the intended
19 final site characterization investigations and long-term
20 repository performance assessments will be deferred to the
21 performance confirmation program, to be completed after the
22 receipt of the license to operate the repository.

23 CHAIRMAN SELIN: I want you to know that your
24 description of the program is not our understanding of the
25 program. I mean our understanding is that before there is a

1 license there is sufficient information on a conservative
2 basis --

3 MR. LOUX: I understand.

4 CHAIRMAN SELIN: -- to say, "Even if nothing
5 improves in the waste form design or barrier or in
6 experimental information, we are confident that you can
7 operate that site under those conditions indefinitely. But
8 that if you can get better information, if you can improve
9 the design, et cetera, we'd be delighted to allow that to
10 continue to happen."

11 So this is a very important point, not only your
12 conclusion but the basis on which you raise it. Obviously
13 we're going to go back to DOE to make sure that our
14 understanding is, in fact, correct, as opposed to your
15 characterization, Mr. Loux.

16 MR. LOUX: These are our impressions of what we
17 have seen, of course, of the program --

18 CHAIRMAN SELIN: It's very important that we hear
19 your impressions.

20 MR. LOUX: -- today and hearing the presentation.

21 CHAIRMAN SELIN: In effect I'm saying that if your
22 characterization is correct, we probably would agree with
23 your conclusion and therefore whether the characterization
24 is correct or not is a critical issue.

25 MR. LOUX: That yet remains to be seen, obviously.

1 The proposed use of this extended 100 year
2 performance confirmation period appears to us to be in
3 conflict with the Commission's regulatory intent and
4 requiring the performance confirmation program. The intent
5 of the requirement in Part 60 is to assure evaluation of the
6 accuracy and adequacy of the information used in the
7 Commission's original disposal decision. NRC regulations,
8 of course, require performance confirmation to begin during
9 site characterization and continue for some period of time
10 after the issuance of repository license.

11 The impact of the PPA's conflict with the
12 Commission's regulations in the NWPA I think has to be
13 examined relative to both its own repository licensing
14 regulations, meaning yours obviously, and the concurrence
15 decision regarding DOE's Part 960 siting guidelines. It is
16 an inherent conflict, it appears to us, in those two areas.

17 We also recommend in another area --

18 CHAIRMAN SELIN: Are you going to follow-up to
19 explain what the conflicts are because that would be most
20 helpful to us.

21 MR. LOUX: Well, I think the conflict arises in
22 the nature of the amount of information that's available at
23 each stage and I think it reflects the conversation you had
24 earlier with the TRB about what information is available for
25 what decision point.

1 CHAIRMAN SELIN: Okay. Let me just make it clear.
2 The Commission does not intend to issue a hundred-year
3 license that says that this site looks okay to us for 100
4 years, but we don't know if it's okay thereafter. We
5 intend, if we issue a license at all, that it be based on
6 information conservatively understood at the time of the
7 license with the confirmation period, some possibility that
8 we're wrong and we find that out, but almost focused on can
9 things be done better than they've been done up until that
10 point?

11 MR. LOUX: Well, I think in putting -- and I think
12 this next point will bring it in context. The conflict also
13 that we see is in relative to your waste confidence decision
14 in 1990. As you know, the decision in part was the
15 Commission finds reasonable assurance that at least one
16 mined geologic repository be available within the first
17 quarter of the 21st century to dispose, highlighted, of
18 commercial spent fuel and radioactive waste.

19 DOE's PPA, in essence, would defer the real
20 decision regarding disposal to some hundred years in the
21 future, until the next century. That is where I see the
22 fundamental rub with the entire PPA as it relates to this
23 issue of when does disposal actually occur and when can it
24 be thought to have occurred, whether it occurs when you
25 issue a license for construction and receipt or is it really

1 indeed at the end of this hundred-year period. I think that
2 is where I see the problem occurring and I think that it may
3 create a problem relative to your own waste confidence
4 proceeding.

5 CHAIRMAN SELIN: Are you saying that something is
6 put into the ground that could be retrieved within a hundred
7 years is by definition not disposal?

8 MR. LOUX: I think that if you look at the strict
9 definition of disposal in the act and in your regulations, I
10 think that's clearly the meaning that it is has, that
11 disposal does not occur until -- at least in the PPA
12 context, until the hundred-year performance period is over.

13 CHAIRMAN SELIN: Okay. When I say okay, it means
14 I note your point.

15 MR. LOUX: I understand.

16 CHAIRMAN SELIN: Fair enough.

17 MR. LOUX: The other elements of DOE's PPA that
18 would impact, I think, the regulatory program as well
19 include the MPC. As you know, DOE intends to develop a
20 multiple purpose container to use with different overpacks
21 for spent fuel storage transport and disposal. It already
22 has a set schedule leading to NRC certification and
23 deployment of the MPC for spent fuel and storage and
24 transportation by 1998 and, as reported to you by the staff
25 in its initial review, disposal considerations are going to

1 await further information from DOE on repository site and
2 design. Of course, DOE plans to deploy the NRC certified
3 MPC for storage and transport about three years prior to
4 submitting an application at the Commission for a
5 construction authorization. However, as a result of PPA
6 planning, the MPC already has become embedded as the design
7 waste package for the repository.

8 This has driven decisions, in our estimation,
9 about the exploratory studies facility design since the ESF
10 is intended to be incorporated in the repository facility.
11 Use of the MPC as the planning basis waste package also
12 continues to constrain DOE's evaluation of repository design
13 alternatives, thermal loading and distribution options,
14 effects of a couple processes on waste isolation, human
15 intrusion scenarios, backfill repository, sealing
16 operations, retrieval options and numerous other site
17 characterization considerations that I think are important
18 to repository safety.

19 CHAIRMAN SELIN: May I stop you?

20 MR. LOUX: Sure.

21 CHAIRMAN SELIN: There's no chance that we will
22 certify an MPC for disposal until we know an awful lot more
23 about the disposal concept in the site than we know today.
24 I mean an awful lot. So, are you saying that what's being
25 constrained is DOE's assumption that someplace there will be

1 a container? Not necessarily the one that comes based on
2 the bid that's out today, but someplace there will be a
3 container that could be both transported and used for
4 disposal or that the particular designs that are out now
5 they're assuming will be the disposal designs.

6 MR. LOUX: I think more to the point, our concern
7 is that decisions that are being made about MPC today
8 principally for transport and storage are going to drive
9 repository characterization and repository design decisions
10 in the cart before the horse, if you would, that we've got a
11 situation where we may get locked in to certain MPC designs
12 --

13 CHAIRMAN SELIN: Specific designs.

14 MR. LOUX: Designs that end up driving
15 repository --

16 CHAIRMAN SELIN: Our view is there's no way we can
17 certify a design for disposal until we have a full concept
18 for the disposal system and an understanding of how the
19 design fits into the system. What we've told DOE is if we
20 had an application for an MPC today, we would consider
21 certification for transport and for storage and then we
22 would look for showstoppers as we have in the overall system
23 concept from a disposal point of view, but that's all we
24 would do. We would -- I mean it's out of the question that
25 we could --

1 MR. LOUX: The concern is that it's driving DOE's
2 decisions on design and other considerations in
3 characterizing the repository. Thermal loading for example.

4 CHAIRMAN SELIN: Thank you.

5 MR. LOUX: And again, DOE's initiative for early
6 MPC deployment is driven by the intent to provide the MPC to
7 utilities for reactor spent fuel storage by 1998, again the
8 schedule-driven nature. This initiative again constrains
9 DOE's waste program to the extent that some alternative
10 repository safety considerations perhaps are being
11 foreclosed. In our point of view, it's important that the
12 current stage of DOE's planning that the Commission evaluate
13 the broad safety regulatory compliance implications of the
14 MPC's conceptual incorporation as the waste package into
15 site characterization and repository planning and design,
16 and it's our opinion that the MPC should not be permitted to
17 drive irreversible safety decisions regarding the repository
18 only because it's planned to be developed and deployed prior
19 to the issuance of license by the Commission.

20 Another area that I want to touch on is on the
21 Commission's NEPA responsibilities. Included in the PPA is
22 DOE's strategy and schedule for compliance with the National
23 Environmental Policy Act. Three environmental impact
24 statements are currently planned, one for the decision to
25 deploy the MPC, one for the decision by the Secretary to

1 recommend a site for development as a repository, and one
2 for the decision to construct a rail line to permit MPC
3 delivery to Yucca Mountain for emplacement in a repository.
4 Of course, we understand that the rail line EIS will be
5 incorporated as a supplement to the repository EIS.

6 The Commission, as you know, has a separate NEPA
7 responsibility relative to the certification compliance
8 decisions for the MPC and the other storage and
9 transportation casks. The Nuclear Waste Policy Act
10 instructs the Commission to adopt, to the extent
11 practicable, the DOE's repository recommendation to the EIS
12 to accompany its repository license decision.

13 DOE plans to begin the scoping process for the
14 development of both the MPC and the repository
15 recommendation EISs during FY'95. Because NRC's NEPA
16 compliance documentation for its decision relies to some
17 extent on DOE's EISs, there's an opportunity for the NRC to
18 participate in DOE's EIS development processes at various
19 levels, but the NRC also must consider its independent
20 regulatory role of separate NEPA responsibilities when
21 deciding the extent, if any, of its participation in the DOE
22 process. The Commission may want to analyze the situation
23 and give guidance in order to assure that the proper NRC
24 independent is maintained.

25 In 1988, as you may recall, the NRC issued a

1 proposed rule which has not been finalized on the procedures
2 that will follow the NEPA requirement to adopt DOE's EIS to
3 the extent practicable. At that time, of course, we took
4 issue with the NRC staff position that the relevant
5 considerations in the two EISs were identical even though
6 the decisions by the two agencies were really for different
7 purposes. I think our 1988 concerns over differing EIS
8 scopes for the two independent decisions have increased
9 weight now because DOE's proposed program approach includes
10 deployment of the MPC, a less than complete license
11 application, and an extended period of time in which waste
12 in reality will be in a retrievable storage in a repository
13 rather than disposed.

14 In reviewing the PPA, the Commission should
15 consider the impacts on the independent NEPA
16 responsibilities. It may be timely for the Commission staff
17 to prepare a new draft proposed rule once DOE has solidified
18 the PPA for public review and comment on your NEPA
19 responsibilities and procedures for reviewing the high-
20 level repository license decision. The new regulatory
21 proposal should also take into account the different scopes
22 of DOE and NRC's evaluation responsibilities in the EIS.

23 My final point has to do with the interactions
24 with DOE regarding the technical site suitability decisions
25 called for in the PPA. Under the PPA, eight separate

1 preliminary topical site suitability decisions will be made
2 between 1995 and 1998 according to the current schedule
3 using DOE's 960 guidelines. Final site-wide technical
4 suitability decision is planned for 1998, three years prior
5 to the planned submission of a repository license
6 application to the Commission.

7 The Secretary, according to NEPA NWPA must use the
8 960 guidelines to support a repository recommendation
9 decision. The Commission really has two statutory
10 responsibilities relative to the decision. First, it must
11 concur in the promulgation of the guidelines which it
12 already has done. Second it must provide preliminary
13 comments, which you've already mentioned earlier, to the
14 extent that DOE's site characterization and waste form
15 proposal seem to be sufficient for inclusion in a repository
16 license application to the Commission. These all, of
17 course, to accompany the Secretary's recommendation.

18 It appears from the July 1 staff memo to the
19 Commission, as mentioned earlier, that the staff intends to
20 review and comment on DOE's site suitability decisions as
21 they're issued. Our concern is that the staff has certain
22 prelicensing duties to perform pursuant to Part 60 as well
23 as the statutory responsibility for the preliminary comments
24 to accompany the Secretary's recommendation, but it really
25 has little basis for authority to review the site

1 suitability decisions for any reason other than as a part of
2 its ongoing technical review and interaction with DOE
3 regarding sufficiency of information for a license
4 application.

5 CHAIRMAN SELIN: What other kind of review would
6 they make? I don't follow. I mean I understand the words
7 and I agree with them, but what else might we do other than
8 the qualified review that you just described, Mr. Loux?

9 MR. LOUX: If, in fact, other sorts of
10 determinations I think are made relative to these early
11 decisions, blocking of issues, for example. The concern is
12 the idea of sort of in a prejudgment of an ultimately
13 license application --

14 CHAIRMAN SELIN: To put it differently, is this
15 preemptive or are we doing something wrong today in your
16 opinion?

17 MR. LOUX: I think the potential is there that
18 there could be an interaction that goes beyond, I think,
19 what we're talking about.

20 CHAIRMAN SELIN: Okay. We're very sensitive to
21 this potential. I mean I've said -- every time I've talked
22 on this topic I've talked about the necessity of being very
23 careful about not sandbagging the department, but not
24 locking up issues beforehand or taking a position or making
25 it our proposal. Have we done something that you consider

1 to be improper yet? No, have we done something yet that you
2 consider to be improper?

3 MR. LOUX: I don't think we have yet. The
4 potential, I think, is what we're talking about.

5 Carl, do you want to maybe answer a little bit --

6 DR. JOHNSON: Yes. I think Bob's made it clear.
7 We're starting to get some signs that the potential is there
8 moving in that direction and it may be just enthusiasm on
9 the part of the staff, but --

10 CHAIRMAN SELIN: Our staff?

11 DR. JOHNSON: NRC staff.

12 CHAIRMAN SELIN: NRC staff showing enthusiasm?

13 DR. JOHNSON: I'll give them credit for that.

14 MR. LOUX: Well, I think there is a concern in the
15 sense of being too helpful. I think the point has been made
16 that our concern is about the possible prejudgment on the
17 license application side itself. As you well know, the DOE
18 has often been advocating for early resolution of issues
19 which the Commission has made clear that that is not going
20 to happen, at least in any sort of final sense, until we get
21 to the license application and that's been very helpful.
22 DOE still is moving in that direction to try and induce some
23 sort of decision making in that area. So, I think our
24 reason is important now that we make this at least know to
25 you our concern so that, in fact, things in the future don't

1 move in that direction.

2 That was our final point. Let me just indicate I
3 appreciate the opportunity to be here. Jim Davenport has
4 one final comment and concern that he'd like to raise and
5 then we'd, of course, be happy to answer questions.

6 CHAIRMAN SELIN: Welcome, Mr. Davenport.

7 MR. DAVENPORT: Good morning and thank you.

8 Let me preface my remarks and question by saying
9 that we take some comfort in your statements about the
10 completeness of application that you'll expect and your
11 attitude with respect to the schedule and the timing. That,
12 however, to a certain extent, exacerbates the issue that I
13 want to raise with you this morning. That issue is the
14 stale information, the information that was collected early
15 on which may not be available in personal testimony form by
16 the time we get to a licensing proceeding.

17 You may know that in June of '93 Nevada filed a
18 proceeding in the U.S. District Court for the District of
19 Nevada pursuant to Rule 27 of the Federal Rules of Civil
20 Procedure. That rule basically permits you to perpetuate
21 testimony that may be usable in a later proceeding
22 cognizable before the -- or by the federal courts.

23 We named the NRC as one of the parties that may be
24 a defendant in a subsequent action and the case that could
25 be contemplated would be the judicial review of an NRC

1 license should that ever become necessary and explained to
2 the court that we wanted to be able to seek depositions of
3 scientists who have done reports for DOE at this point.
4 Those reports are locked away in safes and libraries and so
5 on.

6 The position that we took was opposed by the
7 Department of Energy and the Department of Energy took the
8 position in its opposition that the NRC was with it, that
9 the NRC also opposed Nevada's inquiry into the creation of
10 testimony, perpetuating testimony for later use. But we
11 never saw any official statement from this body that, in
12 fact, you opposed it.

13 CHAIRMAN SELIN: I hope you're not going to ask me
14 what our --

15 MR. DAVENPORT: That's precisely where I'm headed.

16 CHAIRMAN SELIN: We will have to get back to you.

17 MR. DAVENPORT: Thank you. Let me just put a
18 little context on the question so that you can think about
19 it full force.

20 Presuming that Nevada is not able to perpetuate
21 testimony through this fortunate, we feel fortunate device,
22 it raises the question whether at an ultimate NRC licensing
23 proceeding Nevada will be able to seek to have this
24 testimony excluded from consideration because we will not at
25 that point in some instances be able to cross examine the

1 authors of these reports. You can anticipate, I think, that
2 that is the position we would take in those hearings. So, I
3 would pose to you the sort of rhetorical question, do you
4 think it's better to have the evidence excluded or is it
5 better to not explore the issue or, as we would propose, is
6 it better to find the information, get it on record now --

7 CHAIRMAN SELIN: You've certainly raised a very
8 interesting question. In our adjudicatory hearings we
9 pretty much follow the rules of evidence in the federal
10 court. So, I was not aware of this issue. You put it very
11 graphically and certainly we'll -- I'm sure it's already
12 received consideration that I just don't happen to know
13 about.

14 MR. DAVENPORT: Let me advise you of one other
15 fact. The NRC did sign on to the response brief as the
16 matter has been taken on appeal. On the 23rd of May, John
17 Cordiss of the Solicitor's Office signed onto the pleading
18 of the Department of Energy opposing Nevada's position in
19 this matter.

20 CHAIRMAN SELIN: Okay. Thank you.

21 MR. DAVENPORT: Thank you.

22 CHAIRMAN SELIN: Commissioner Rogers?

23 COMMISSIONER ROGERS: I don't have anything.

24 CHAIRMAN SELIN: Commissioner de Planque?

25 COMMISSIONER de PLANQUE: No.

1 CHAIRMAN SELIN: You basically have stated a
2 number of very important points. One of our problems is
3 that -- you've heard Dr. Dreyfus' briefing. You've seen the
4 staff. We really don't know what the PPA is at this point.
5 So, a lot of the questions don't have to do with the logic,
6 you know, if X is true, does Y follow? They have to do with
7 what's the nature of X? We're trying to find that out. I
8 mean I think the Department of Energy is trying to find that
9 out as well.

10 The current system calls for 50 years
11 retrievability. Now, I don't see why changing it to 100
12 years quantitatively changes the differences. So, the devil
13 is in the details. It's not -- we really have to get into
14 this program and find out not so much is the period of
15 retrievability being extended, but is DOE relying on
16 information they don't have at the time of the license
17 application or are they going to give us a conservative
18 application which they will improve over time? Certainly if
19 they can come up with a better barrier 25 years later, there
20 should be the opportunity to use that.

21 I mean if I were going to be fighting a little bit
22 -- you have two complaints. One is they're not designing
23 their system and the second is but they're doing it
24 prematurely. So, we really need to get into the details
25 about what their program is. You certainly raise questions

1 that are very important to us and I agree that the
2 conclusions in most cases follow from your statement of the
3 facts.

4 Now, I have a different question, if I might ask
5 you. We've spent a lot of time trying to work out
6 procedures so that everybody seems to know what everybody
7 else knows about what's going on and our work on the
8 process. Does this seem to be working or not working? You
9 know what I mean about the gazetting of the meetings and the
10 --

11 MR. LOUX: Yes. I think for the most part things
12 are proceeding very effectively at this point. I know that
13 early on -- and we brought to your attention some years ago
14 some concerns. I think for the most part those have been
15 resolved and I think from all accounts we can see things are
16 progressing along the lines that we think that they ought to
17 have been.

18 Let me say I am in agreement generally, back on
19 your previous point, with a lack of some understanding
20 that's out here. Our concern for some years has been that
21 there isn't any sort of over arching plan, concept of what
22 is going on here overall in the program and how the pieces
23 link up. I guess our suspicions, if I'll call them that,
24 are based on sort of historical operations of the Department
25 to date in the way the business has been conducted and yet

1 now we're being looked at, told about a PPA without any
2 detail and it's kind of more of "trust us again."

3 So, I'm in agreement with you that we need to see
4 the details. What we're attempting to do is highlight based
5 on our historical experiences how these systems operate and
6 how we think they intend to operate them without really
7 knowing.

8 CHAIRMAN SELIN: If it's any comfort to you, we do
9 not intend to license a hundred-year MRS to be followed by a
10 final repository in the year 2125. That's not our
11 intention. If we issue a license for the site, it will be
12 that if nothing is learned from the point of first
13 emplacement to the rest of the time, the site should still
14 be safe according to the rules that are set up.

15 MR. LOUX: I think that's comforting.

16 CHAIRMAN SELIN: Thank you very much.

17 MR. LOUX: Thank you.

18 CHAIRMAN SELIN: We now have a panel from several
19 of the local governments. As far as I know, from Clark
20 County, Eureka County, Nye County and Inyo County. There
21 are a lot of counties in Nevada. So, if another one shows
22 up that I don't know about, it wouldn't be a complete
23 surprise.

24 Do you folks have a chairperson?

25 MR. METTAM: I'll be opening the meeting.

1 CHAIRMAN SELIN: Fine. Thank you very much, Mr.
2 Mettam. We would like to hear everything you have to say
3 and hopefully hear it in 45 minutes, including our
4 questions, if you could keep to that schedule.

5 MR. METTAM: We'll do our very best.

6 CHAIRMAN SELIN: Fine. Thank you.

7 MR. METTAM: Thank you and good morning.

8 Mr. Chairman, members of the Commission, my name
9 is Brad Mettam. I'm with Inyo County and I have the easy
10 task of introducing the people who are here today. We have
11 approximately 14 members of different counties, nine in
12 Nevada and one in California.

13 If I could have the map, please.

14 [Slide.]

15 MR. METTAM: Thank you.

16 In your briefing packet you have this map. I'd
17 like to run through who's here, sort of working clockwise
18 around the map from Inyo County.

19 Attending with me today is Robert Gracie, the
20 Chairman of the Inyo County Board of Supervisors.

21 From Esmeralda County, Juanita Hoffman, Program
22 Director.

23 From Mineral County we have Herman Statt, Chairman
24 of the Board, and Vernon Poe, the Program Director.

25 From Churchill County we have Jim Regan.

1 From Lander County we have Jim Williams, the
2 Chairman of the Board, and Lisa Bond.

3 From Eureka County we have Abigail Johnson.

4 From White Pine County we have Florindo Mariani,
5 the Program Coordinator.

6 From Lincoln County we have Jason Pitts, the
7 Program Coordinator.

8 From Clark County we have Dennis Bechtel, the
9 Program Coordinator.

10 And from Nye County we have Les Bradshaw, Phil
11 Niezielski-Eichner and Malachy Murphy.

12 I'd also like to note that in Tab 3 of the
13 briefing book that you have there's a brief description of
14 each county, a paragraph on each county, plus an annual
15 report. We won't go into those, but they're available for
16 you.

17 CHAIRMAN SELIN: Thank you.

18 MR. METTAM: We'll be presenting our key issues in
19 our parts this morning. Les Bradshaw will present the
20 geotechnical issues, Mal Murphy will present licensing
21 issues and the proposed program approach. Abigail Johnson
22 will be presenting transportation issues and Dennis Bechtel
23 will be presenting socioeconomic issues.

24 With that I'd like to turn it over to Les.

25 CHAIRMAN SELIN: Thank you.

1 MR. BRADSHAW: Thank you and good morning. I
2 appreciate being here.

3 [Slide.]

4 MR. BRADSHAW: With that introduction of the
5 counties, I'll say that all the counties are concerned about
6 health and safety issues at Yucca Mountain and that is the
7 over arching principle upon which our oversight programs are
8 based.

9 We believe that the integrity of the DOE site
10 characterization work at Yucca Mountain is the only thing
11 that will assure that health and safety being enjoyed by the
12 residents of surrounding counties. So, we're very concerned
13 about the integrity and the extent of the scientific work
14 that's being done by DOE.

15 [Slide.]

16 MR. BRADSHAW: We have the ability to go in and do
17 oversight work. The Nuclear Waste Policy Act, of course,
18 allows us to do that. So, all the counties have what I'd
19 term proactive oversight approaches. Nye County, in fact,
20 has an on-site scientific program which I'll explain just a
21 minute.

22 [Slide.]

23 MR. BRADSHAW: Clark, Inyo and Nye County have
24 what we will term technical oversight people assigned to
25 monitor the technical work at Yucca Mountain. Nye County

1 has a formalized on-site representation protocol with DOE
2 which allows us to have a qualified scientist on-site ,
3 mingling and participating in meetings, talking to people.
4 He essentially has full access to whatever data that DOE is
5 pulling out of the ground and we appreciate DOE's courtesies
6 extended to us in this regard. We, in fact, have a small
7 office at the field operation center at Yucca Mountain.

8 [Slide.]

9 MR. BRADSHAW: Most of the counties circulate to
10 the meetings, the DOE meetings, the NRC meetings, the TRB
11 meetings and so on. We try to participate in those meetings
12 and to understand the issues, track and review documents,
13 and attend meetings here in Washington when it's appropriate
14 to be aware of the issues and to understand those issues and
15 the ramifications on the DOE program.

16 [Slide.]

17 MR. BRADSHAW: Several of the counties are going
18 forward with a regional hydrology study. We believe that
19 DOE are not adequately funding this aspect of their site
20 characterization work. There's very little resources going
21 into understanding the hydrologic regime between Yucca
22 Mountain or somewhat north of Yucca Mountain and as that
23 flows generally southward, but also eastward and westward,
24 but southward down towards Death Valley.

25 We believe that -- we want to make sure that this

1 work is undertaken and done, so we are forming a cooperative
2 group to study the regional hydrology to identify the data
3 that is available and to highlight or identify gaps in that
4 data which we believe DOE will not -- do not appear to be
5 interested in funding, so that there can be a good
6 understanding of the original hydrology in the area of Yucca
7 Mountain. Of course the groundwater movement and where it
8 moves and how fast it moves and whether it's going to carry
9 contaminants is of great concern to the residents that
10 surround Yucca Mountain and down into California. So, we
11 believe that this is a good activity for the counties to
12 undertake.

13 We intend to characterize the nature and
14 interrelationships of the three aquifers, deep carbonate,
15 tuff and alluvial aquifers, and we hope to be able to -- not
16 to be able to fund this work forever and ever because
17 obviously we will never have enough resources to do that,
18 but certainly to characterize the gaps in the data and to go
19 out and seek funding for that, whether that's with DOE or
20 some other kind of funding.

21 [Slide.]

22 MR. BRADSHAW: The literature research on that is
23 underway, is essentially complete or partially complete,
24 I'll say, and a cooperative work plan is being formulated,
25 being funded by the four counties that are participating in

1 this study.

2 [Slide.]

3 MR. BRADSHAW: Nye County has undertaken an on-
4 site independent scientific investigations program. We
5 worked a long time to get a protocol agreement with DOE in
6 place so that we could do that. We believe that we have a
7 good working agreement with them which will allow us to go
8 on-site, drill some holes, to use some of their drill holes,
9 do some down hole instrumentation and long-term monitoring.
10 We intend to share the samples that come out of the holes
11 with DOE. They'll take their split and we'll take ours, and
12 they'll do whatever they do with theirs and we'll do our own
13 independent analyses of those samples. That would be
14 cuttings, air and water samples as we might come upon them.

15 We intend to do that work under a quality
16 assurance program and what we call the scientific notebook
17 quality assurance program so that this data will be
18 meaningful, will be credible, and eventually will be
19 acceptable before this body at some point in the future if
20 this data appears to be useful in those eventual hearings
21 that we've been talking about this morning. We intend to
22 demonstrate that down hole data gathering can be done much
23 cheaper using off-the-shelf drilling technology and off-
24 the-shelf instrumentation packages that are available
25 commercially. The whole effort doesn't need to be quite as

1 expensive as DOE is making it at this point. And therefore,
2 if it's less expensive, they can gather more data and
3 they'll have a better data set upon which to -- that you
4 folks will be presented with and can base your decisions on.

5 COMMISSIONER de PLANQUE: May I interrupt with one
6 question before you go on? With the data that you're
7 gathering, is there any agreement or anything in your
8 agreement with DOE that addresses what you do if you have
9 discrepancies in the results or in the information derived
10 from the data?

11 MR. BRADSHAW: I'm sorry, I didn't hear you.
12 Somebody slammed the door.

13 COMMISSIONER de PLANQUE: I'm sorry. If you are
14 gathering your own data, your own samples, or you're
15 splitting them with DOE, if you have any discrepancies in
16 either the data or the interpretation of the data as a
17 result, is there any part of the MOU that addresses what you
18 do about those discrepancies?

19 MR. BRADSHAW: Well, not specifically, but we
20 fully intend that there will -- I mean, we don't intend to
21 have discrepancies, but there will be discrepancies. The
22 issue here is that Nye County wants to preserve the
23 appearance and the reality of independent data gathering,
24 independent verification. I think to answer your question,
25 national peer review -- in other words, we'll both put our

1 data out to the world and let people decide and you folks,
2 if both of us came in with conflicting data from the same
3 drill hole, then, you know, you folks would have to make
4 those kind of -- you know, the kind of decisions that you
5 make to be able to --

6 COMMISSIONER de PLANQUE: But there's nothing
7 specific in the MOU as how you might address this as you go
8 along?

9 MR. BRADSHAW: No, I don't think specific, but we
10 would intend to discuss it as we go along and we intend and
11 we hope to have a very good working relationship with DOE.
12 They have their bureau -- administrative framework --

13 COMMISSIONER de PLANQUE: We use that word too.
14 It's okay.

15 MR. BRADSHAW: -- to work within and we think that
16 national peer review is the best way to resolve these
17 issues. And part of our objective is to demonstrate the
18 different and better -- what we would consider better ways
19 and cheaper ways to do business. As in any scientific
20 program, certainly, if two labs take the same split there
21 could be differences.

22 We identified four holes that we want to do
23 instrumentation in. This program, in fact -- in fact,
24 probably at this moment there's ongoing discussions about
25 the exact configuration of the sites. We intend to use --

1 DOE has offered to let us use one of their existing drill
2 holes which we would simply recondition and then insert the
3 down hole instrumentation.

4 We would also hope to drill some independent
5 holes, new holes at new sites for collection of that data.
6 Obviously, based on the funding that we expect this year,
7 this four hole program will be stretched over at least two
8 funding periods, so we obviously don't have the resources to
9 keep up with them hole for hole and so on. We have to be
10 very careful about how we use those resources.

11 We are also concerned about the PPA. We won't go
12 into that, but, as you have indicated in TRB, we don't
13 understand all the ramifications of it. We were told
14 yesterday, in fact, that they're still figuring it out
15 themselves, so we're not sure what it means and we're not
16 sure how we want to react to it except to say that it
17 appears that the PPA is going to abbreviate the amount of
18 data that will be available at licensing time. We're
19 concerned about that because it forces you to overly rely on
20 engineered barriers and modeling and we don't think that's
21 the best way to characterize the mountain.

22 CHAIRMAN SELIN: We have not come to the
23 conclusion that you've come to. We haven't come to any
24 conclusion about whether PPA will be better or worse from
25 our point of view than what it's replacing. We just don't

1 know at this point.

2 MR. BRADSHAW: And we are waiting also to hear
3 DOE's final description of the PPA and what it means, but it
4 would appear that -- it appears to be not as good for us as
5 we would like.

6 Just very briefly, some of the other issues that
7 we're concerned with are listed. I won't go through those,
8 but they're issues that we believe that we can address with
9 our available resources and that DOE are either under-
10 funding or are not funding and we believe that some of these
11 issues are very basic issues that DOE are sort of passing by
12 because of pressures in other areas such as getting a TBM
13 going and so forth.

14 CHAIRMAN SELIN: I have to tell you, Mr. Bradshaw,
15 this is a pretty sophisticated briefing. I really am sort
16 of stunned by not only the content and the language but how
17 you really have honed down on issues that we -- some we
18 agree with and some we probably will agree with when we've
19 examined what you've done a little bit more.

20 MR. BRADSHAW: Thank you.

21 COMMISSIONER ROGERS: Excuse me, just before you
22 go on could you just tell us roughly what is your funding
23 level for these technical studies?

24 MR. BRADSHAW: We hope to spend in this fiscal
25 year just a few dollars over a million dollars on this part.

1 Nye County received \$2.4 million in the last fiscal year for
2 its oversight work and essentially half of that is going to
3 a technical program, and that reflects the importance that
4 we put upon the technical issues. I mean, we're the people
5 that live next door to this place and our citizens are the
6 ones that are asking us, "What is that ground water doing
7 and how soon is it going to poison my well?" We want to be
8 able to answer those questions.

9 CHAIRMAN SELIN: Mr. Murphy?

10 MR. MURPHY: Thank you, Mr. Chairman, members of
11 the Commission.

12 Let me just very, very briefly make a few points
13 about the proposed program approach. I think I can safely
14 say that we agree with everything you said this morning and
15 we agree with everything that Doctors Cantlon and Brewer
16 said this morning and we agree with everything that Mr. Loux
17 said this morning, any questions, but I'll go on from there.
18 We have the same concerns that the PRB expressed this
19 morning, that the state expressed this morning, and that you
20 did, and I won't go into the details of those concerns.

21 Our major concern is the lack of data that's going
22 to be available to DOE before they make this sort of
23 technical site suitability determination in 1998 and,
24 theoretically at least, bring you folks a license
25 application in the year 2001. We place a little different

1 emphasis than the TRB does, I think, on the importance of
2 the surface-based testing than the underground exploration,
3 exploratory shaft activities. We recognize the importance
4 of the ESF activities, but we would place a little different
5 emphasis, a little higher emphasis on the surface based
6 testing, but let me just give you an example in that area.

7 You've heard, and you've heard from your staff and
8 everybody else how this data is not going to be available as
9 quickly as DOE hopes. We have heard informally within just
10 the last several days that DOE has told the USGS that data
11 will be cut off 18 months from now, so that we are not
12 talking about between today's date and 1998 as the calendar
13 period in which to gather data in order to make this
14 technical site suitability determination.

15 We understand that at least informally that DOE is
16 saying you've only got 18 months in which to gather this
17 data. After that, data will be cut off and we go into a
18 total systems performance assessment. And we are convinced,
19 as you are and the TRB is, that that is woefully
20 insufficient for them to make the kind of -- to gather the
21 kind of data even to use the so-called conservative
22 assumptions and bounding calculations which they propose to
23 use, so under those circumstances we oppose the approach in
24 its current form.

25 Retrievability is another problem to us. It's a

1 problem in the sense that at least we see at this point in
2 time in the proposed program approach -- and this may be
3 wrong, but, if it is, the Department of Energy hasn't yet
4 made it perfectly clear to us -- that they are in large
5 measure at least proposing indirectly to base their safety
6 case, their waste isolation concept on the availability of
7 retrievability as an ultimate option, and we absolutely
8 cannot support that under the current circumstances.

9 We're not saying -- and I think in that respect
10 let me support the statements that Bob Loux just made.
11 We're not saying that retrievability is wrong and that
12 retrievability is not currently part of the program. What
13 we are saying is that you do not or should not come to
14 licensing with a safety case that is based in large part on,
15 well, "We feel comfortable. The site is not disqualified.
16 We don't have all of the data in yet, but give us a
17 construction authorization. Let us build it and operate it
18 for 100 years and if something does go wrong we can always
19 retrieve it."

20 Retrievability is certainly a very, very important
21 concept in the program, has been since its inception, is
22 written into your rules. We all recognize that. But you
23 don't base your safety case on it is our point,
24 particularly, in my view at least, in our view, the view of
25 all of the local governments, particularly when, number one,

1 to our knowledge DOE has not spent an awful lot of money, if
2 any, on developing retrieval technology. And that, under
3 the heated conditions in a repository 90 years from the day
4 they start emplacing waste, is not going to be necessarily
5 an easy thing to do. And they haven't even started, as far
6 as I know, to develop the technology with which to do that.

7 And secondly, we, all of the local governments,
8 have very, very serious reservations about the Department's
9 ability to extract from the Congress, with the fiscal
10 pressures that Congress is facing today and will be facing
11 for the next 100 years, funding necessary to do the R&D, to
12 develop retrieval technology and to put in place retrieval,
13 while at the same time DOE is telling Congress "This is a
14 good site. It's suitable. The NRC is going to license it.
15 We won't need to retrieve this waste because it's a
16 perfectly adequate site, but give us X hundred million
17 dollars in any case to provide this added cushion." We're
18 not comfortable with the notion that Congress is ever going
19 to be willing to do that, so retrieval is important but
20 don't base your safety concept, don't base your licensing on
21 it. You folks understand that perfectly well and we're
22 comfortable with that.

23 And finally, we could not agree more with what Dr.
24 Brewer said and what you said, Chairman Selin, about the
25 absolute imperative that DOE bring as quickly as possible

1 its so-called safety concept or waste isolation concept.
2 None of us have the ability to adequately assess the
3 acceptability of this proposed program approach without
4 knowing what DOE's safety case is, and they haven't yet done
5 it. I think Dr. Brewer put it as well as anybody could.

6 You can read the site characterization report. I
7 don't know how many people in the room have done that. I
8 have. I'm not a scientist, but I read it sort of as a
9 lawyer and a systems person. You've got to be pretty good
10 to find the safety case in there.

11 That concludes my prepared remarks. Let me just
12 address and, if I could, amplify on Mr. Bradshaw's answer to
13 your question, Commissioner de Planque, on discrepancies.

14 One of the reasons why Nye County is going into
15 its independent scientific investigations program is to find
16 out whether or not there are discrepancies between the data
17 we will gather and the data DOE has gathered in the past.
18 That's one of the big reasons for the program. And if there
19 are discrepancies, the place to resolve which data set is
20 the better and most accurate one, of course, is in
21 licensing.

22 COMMISSIONER de PLANQUE: Well, what I was looking
23 for is, is there some mechanism for addressing those
24 discrepancies as they come along rather than have them pile
25 up and kept in a closet and they resurface years later.

1 MR. MURPHY: Well, there will be constant dialogue
2 about discrepancies in the data, of course, but there's no
3 mechanism in the protocol for us to force DOE to say, yes,
4 your data is better than ours or vice versa.

5 COMMISSIONER de PLANQUE: Or no agreement that on
6 some discrepancy you get another party to go in and
7 investigate?

8 MR. MURPHY: Oh, sure, but scientists do that all
9 the time.

10 COMMISSIONER de PLANQUE: I understand.

11 MR. MURPHY: You know, they sit down in rooms over
12 coffee and figure out what's going on here, but there's no
13 formal mechanism for doing that. But I just wanted to make
14 the point that that's a major reason for us undertaking this
15 program is to find out whether or not there are
16 discrepancies.

17 COMMISSIONER de PLANQUE: I understand the reason.
18 I was just trying to see if there was some way of not
19 leaving that issue to the last minute and trying to resolve
20 it along the way.

21 MR. MURPHY: Then just very, very briefly, a few
22 points on licensing support system. These essentially are
23 repeating what the Chairman and I have previously talked
24 about. The counties think this is more critical to their
25 ability to operate effectively in licensing than even the

1 NRC or the DOE's ability because of the difference in
2 resources.

3 The management and control of the LSS is still the
4 most critical issue in our view. We support fully the
5 compromise we reached at the last ARP meeting in October if
6 that compromise can be effected, and we're still very
7 interested in the notion of, if possible, doing a pilot test
8 sort of LSS in any MPC certification proceedings, not as an
9 LSS itself but as a means of debugging this system.

10 MR. METTAM: Thank you, Mal.

11 Abigail?

12 MS. JOHNSON: Thank you.

13 Mr. Chairman, members of the Commission, my name
14 is Abigail C. Johnson. I represent Eureka County, Nevada,
15 which would be bisected by one of the rail routes being
16 proposed by DOE.

17 The affected units of local government, as you may
18 have already heard, view their responsibility for the Yucca
19 Mountain issue to protect the public health and safety. We
20 expect the public health and safety of local residents
21 should receive the same high priority as for citizens in
22 other parts of the country. Because we are all at the
23 receiving end of the transportation funnel and the major
24 risk of exposure in the first 30 years is likely to be from
25 transportation, it is a very important issue to all of our

1 countries.

2 We are committed to full and public participation
3 with DOE and NRC. What I'd like to do is to tell you about
4 our program activities and then highlight five key areas
5 where we believe the NRC can make a difference in the
6 quality and performance of the transportation aspects of the
7 high-level waste program transportation activities.

8 Like you, we are challenged to plan in the face of
9 DOE uncertainties. Of the many things DOE has deferred,
10 transportation is paramount. Thus, we have become proactive
11 in seeking transportation information in order to be
12 prepared for DOE's present and future transportation plans.
13 For example, in October we will sponsor a workshop on the
14 multi-purpose canister and NEPA to prepare county
15 representatives for full participation in the MPC EIS
16 scoping hearings this fall.

17 Our transportation nuclear waste programs include
18 baseline data development, highway and rural transportation
19 network analysis of risk, and analysis of current conditions
20 on existing rail lines and potential new rail corridors and
21 their impacts on people and the environment.

22 Next slide, please. Next slide.

23 CHAIRMAN SELIN: I don't think he has any idea
24 what slide you're on, so you might --

25 MS. JOHNSON: Okay. We'll just skip it.

1 MR. METTAM: We know where we are.

2 MS. JOHNSON: These took so much work to prepare.

3 MR. METTAM: There we are. We're set.

4 [Slide.]

5 MS. JOHNSON: The main implication of the MPC
6 decision for transportation is that 90 percent of the waste
7 would be transported by rail, 10 percent by highway. Thus,
8 the ten affected counties must be concerned with both rail
9 and highway shipments and impacts and we must plan for both.

10 The counties are concerned that DOE has not
11 consulted closely with the railroad industry. Can the
12 nation's rail network infrastructure handle 125 ton MPC?
13 Although the request for proposals requires that the MPC
14 cask and transporter be able to travel anywhere on the
15 national rail network, DOE has not adequately considered the
16 potential limits on curves, load limits, bridge heights.
17 DOE needs to fully involve the railroad industry in cask
18 development and transportation planning.

19 Next slide.

20 [Slide.]

21 MS. JOHNSON: Public trust is a key element to a
22 successful repository program. Nevadans continue to
23 distrust the federal government with nuclear waste. This
24 was apparent during a forum in White Pine County, Nevada, in
25 February when a student asked DOE representatives, "After

1 being lied to and misled by the government concerning
2 nuclear testing in the '40s and '50s, why should we believe
3 you when you say Yucca Mountain will be safe?"

4 DOE's response to this student was, "Don't trust
5 the DOE. The Yucca Mountain project is one of the most
6 closely scrutinized endeavors ever conducted by the DOE.
7 Oversight organizations, including the NRC, are looking over
8 our shoulder." And that was their answer, these oversight
9 organizations are handling the trust issue.

10 To us it sounds like DOE, in addition to making
11 attempts to improve their trust levels with the public, is
12 also using the NRC and other oversight agencies as its
13 safety surrogates.

14 CHAIRMAN SELIN: Ms. Johnson?

15 MS. JOHNSON: Yes?

16 CHAIRMAN SELIN: The proper statement is, do you
17 trust DOE as they are supervised by the NRC? I mean, we do
18 not -- you know, a licensing decision is just that, it's a
19 licensing decision. We're not reproducing everything DOE is
20 doing. We're not going to operate the site. The theory,
21 and I think it's borne out pretty well in the utility
22 industry, is that an externally regulated agency, whether
23 it's DOE, will perform differently from the way a
24 predecessor department not subject to external regulation
25 might have performed in the past.

1 So it's not, "Don't trust us, trust the NRC." The
2 question is, do you trust the DOE/NRC combination more than
3 you would trust, say, a DOE without the regulator? But the
4 responsibility for safety falls on the operator as regulated
5 by, in this case, the NRC. I mean, we're not going to
6 operate the site. We're not going to match in terms of
7 numbers or knowledge the information that DOE folk have or
8 that the operators have.

9 MS. JOHNSON: Right. And my point is that they
10 not deflect the responsibility for competence or safety to
11 you guys.

12 CHAIRMAN SELIN: We won't take it. Don't worry.

13 MS. JOHNSON: Good.

14 We have two recommendations. One is that we'd
15 like you to be more visible in Nevada. NRC should hold an
16 annual workshop in Nevada to inform the public of its
17 activities and involvement in the Yucca Mountain project and
18 include an opportunity for NRC to answer questions from the
19 public, to have some interaction.

20 Also, you've already heard this from other people,
21 the NRC should not let the DOE drive the MPC certification
22 of repository licensing schedule. Public health and safety
23 must come first and must be demonstrable.

24 [Slide.]

25 MS. JOHNSON: Going on to transportation and NEPA

1 --

2 CHAIRMAN SELIN: Stop. From your point of view,
3 what is the NRC's presence in Nevada? I mean, I think I
4 know what we think we're doing, but what are we perceived as
5 doing?

6 MS. JOHNSON: I believe that you have two on-site
7 representatives who are on-site.

8 CHAIRMAN SELIN: And that's it?

9 COMMISSIONER de PLANQUE: That's good.

10 CHAIRMAN SELIN: No meetings, no --

11 MS. JOHNSON: Sometimes there is an NRC
12 representative at special meetings that we attend.
13 Sometimes there's an NRC representative at some of the DOE
14 meetings that the counties attend. And we have organized
15 some special meetings where we invited the NRC to
16 participate and they did. They sent staff people.

17 COMMISSIONER de PLANQUE: Are they accessible to
18 you for answering questions?

19 MS. JOHNSON: I would like to defer that one to
20 Les, because I think he has more direct involvement with the
21 NRC. In terms of it being accessible to the public, I'd say
22 not really, not very visible, not very accessible. From a
23 technical point of view, that's a different matter, I think.

24 MR. BRADSHAW: Yes. Acceptable or available on a
25 technical basis, and that's not addressing the issue of

1 whether, for instance, county commissions have ready access,
2 but, I mean, we interact very well with the outside
3 representative.

4 CHAIRMAN SELIN: Okay. We've noted your point.
5 Thank you for the clarification or the expansion.

6 MS. JOHNSON: We're also committed to full
7 participation with DOE and NRC on all aspects of NEPA. We
8 feel it's essential in order for the NEPA process to work
9 and is in the best interests of the federal agencies to
10 ensure that public and stakeholders are fully involved.

11 As local governments, we are the experts in our
12 areas, familiar with unique local conditions and hazards.
13 For example, in Nevada we are experiencing the increased
14 presence of military training, including the relocation of
15 the Top Gun program to Central Nevada. Any canister that
16 will travel Nevada's highways or rail lines must withstand
17 the impact of a plane crash and a bomb dropping. That's the
18 kind of thing we know.

19 We suggest that the NRC provide the counties and
20 the public with a full opportunity to participate in and
21 interact with your NEPA process and responsibilities and
22 clarify your role in relation to the preparation and
23 adoption of the repository EIS.

24 CHAIRMAN SELIN: Mr. Loux raised an interesting
25 question, which is, is our interest any different from DOE's

1 interest on the EIS.

2 But the second question, which is, just because
3 they've done it will we accept the answers, no. I mean,
4 when we do an EIS, it will be our EIS and we will be
5 comfortable that the questions are correct and the answers
6 are correct.

7 And the third question was, is our approach to
8 environmental issues comparable to our approach to the
9 safety issues. We're going to try to identify dead-end
10 questions so that people have a chance to fix them, not just
11 wait until they come in.

12 But I don't think we're prepared to readdress his
13 first question, which is, does what would satisfy DOE
14 satisfy us automatically if it's done properly. We're not
15 prepared to answer that question at this point.

16 [Slide.]

17 MS. JOHNSON: NRC standards for cask performance
18 and safeguards were developed prior to the high-level waste
19 shipping campaign being contemplated, which is anticipated
20 to last over 30 years and could affect over 40 states. The
21 previous standards may not have fully contemplated the
22 implications of cross-country long hauls, rural
23 vulnerability, aging infrastructure and current population
24 demographics and densities.

25 [Slide.]

1 MS. JOHNSON: We'd like to see the NRC revisit the
2 safeguards and cask performance standards to ensure that
3 these procedures are adequate and rigorous and to involve us
4 in the review of these standards to enable us to provide our
5 own regional and local expertise and to review a draft.

6 CHAIRMAN SELIN: Are you questioning whether the
7 qualitative aspects are still right or is the volume so
8 different from what had been foreseen that, you know --

9 MS. JOHNSON: Both.

10 CHAIRMAN SELIN: -- the Hegel principle that major
11 changes in quantity lead to changes in quality?

12 MS. JOHNSON: Both.

13 CHAIRMAN SELIN: Both.

14 MS. JOHNSON: Yes.

15 CHAIRMAN SELIN: Okay.

16 [Slide.]

17 MS. JOHNSON: Regarding the systems approach, the
18 Department of Energy lacks a systems approach to high-level
19 waste disposal. Any acceptable analysis of the repository
20 must be on a systems basis.

21 For example, with reliance on the MPC, rail access
22 to Yucca Mountain is more important than ever. We are very
23 concerned that the DOE is proposing to postpone an EIS on
24 the rail spur until at least 2006 while planning by 1998 to
25 certify and build MPCs that would require a rail spur to

1 function in the transportation and disposal mode. Even in
2 the newly released draft Department of Energy transportation
3 plan, construction of railroads is not addressed.

4 We recommend that the NRC adopt and implement
5 systems approach in its own regulatory studies and demand
6 the same of DOE to avoid costly errors and the compromising
7 of public health and safety.

8 [Slide.]

9 MS. JOHNSON: To conclude, the affected units of
10 local government expect the NRC to provide vigilant
11 oversight of the DOE's nuclear waste program.

12 We want meaningful involvement in NRC's
13 certification and licensing process, including NEPA. We
14 don't want to spend time getting access. We want to
15 participate to ensure that our issues are understood and
16 addressed.

17 We also encourage the NRC to increase its
18 visibility and interaction with the public in Nevada to
19 improve the public's understanding of NRC's role in relation
20 to Yucca Mountain.

21 CHAIRMAN SELIN: Thank you very much.

22 MR. METTAM: Dennis?

23 MR. BECHTEL: Thank you.

24 Mr. Chairman and members of the Committee, my name
25 is Dennis Bechtel. I'm a Planning Coordinator for the Clark

1 County Department of Comprehensive Planning in Las Vegas,
2 Nevada. I appreciate the ability to come here and provide
3 some comments on an area that's very important to local
4 governments, and that's socioeconomic effects, a kind of
5 context information for you in your review.

6 [Slide.]

7 MR. BECHTEL: The affected units of local
8 government have significant concerns about socioeconomic
9 effects on their communities from activities associated with
10 the Yucca Mountain program.

11 As background, as you are aware, the Nuclear Waste
12 Policy Act of 1987 enables governments to determine any
13 potential economic and social effects to an AULG and its
14 residents from Yucca Mountain questions.

15 [Slide.]

16 MR. BECHTEL: Likewise, 10 CFR 960 (the siting
17 guidelines) technical guidelines also include socioeconomic
18 impacts as issues to be considered in site evaluation.

19 The briefing I'll provide will address concerns
20 and socioeconomic effects and assessment efforts being
21 undertaken by the counties in this area.

22 [Slide.]

23 MR. BECHTEL: Among the major socioeconomic issues
24 we're concerned about, a major project such as Yucca
25 Mountain creates service demands that can impact

1 communities, especially smaller ones with minimal
2 infrastructure.

3 Likewise, the dependence of many Nevada
4 communities on tourism requires that AULGs be sensitive to
5 potential adverse economic effects, particularly in
6 consideration of the potential for large numbers of
7 shipments of high-level waste and the potential for
8 accidents.

9 CHAIRMAN SELIN: Could you explain something to
10 me? I mean, this is something I really am puzzled with.
11 There's so much activity going on already in the area,
12 whether it's testing or low-level airplanes dropping bombs,
13 is the public perception of a high-level waste site
14 qualitatively different from what people have gotten used
15 to?

16 MR. BECHTEL: I think the part that makes it
17 different is the fact of the transportation of the waste.
18 We're limited in Nevada by geography to potentially several
19 routes and I think when you have an economy that's based on
20 tourism there's an unknown there. And if you consider what
21 happened with regard to the plane that was hijacked in
22 Europe and the effect on tourism to Europe from the fact
23 that Americans were afraid of going there because it might
24 happen anywhere, I think it's kind of -- it's definitely of
25 concern to us. We don't really know what the effects would

1 be, but we need to question it.

2 CHAIRMAN SELIN: Let me then ask if -- this is not
3 an NRC function, but, you know, I am a citizen also and I'm
4 interested in the overall program. If more attention were
5 paid to developing in a more public way and explaining in a
6 more public way and discussing the transportation plan,
7 which is relatively simple compared to what's involved in
8 the site itself, et cetera, do you think that would have a
9 positive effect on the acceptability of the overall concept?

10 MR. BECHTEL: Well, I guess it can work two ways.
11 Education can assist the public in understanding what the
12 risks may be of something like this happening.

13 CHAIRMAN SELIN: I assume it would affect the
14 transportation plan also. It wouldn't be just a one way
15 communication.

16 MR. BECHTEL: Right. But I think also,
17 considering other issues -- we had some shipments of New
18 Jersey dirt that were proposed for the Beatty site, very
19 benign material, and the shippers had proposed to ship it by
20 rail into what they perceived to be a secure area in
21 downtown Las Vegas without telling anybody. I was not
22 involved in nuclear waste at the time, but I do things for
23 our County Commission and I have never seen so many people
24 in my life show up.

25 So you have a -- the public, I think, is

1 inherently fearful of anything radioactive, however benign
2 it might be, and I think unfortunately the media has a
3 tendency to amplify these things as well. So the result was
4 that shipments didn't take place and I was amazed just by
5 the concern of the community because I would have never
6 guessed that, you know -- but so I guess that the point is
7 that because we're so dependent on tourism we really don't
8 know what the effects might be.

9 And of course, transportation is the one element
10 that differentiates it from activities at the test site. In
11 fact, Yucca Mountain is actually further out than the test
12 site, so --

13 CHAIRMAN SELIN: Thank you.

14 [Slide.]

15 MR. BECHTEL: In addition, to carry on, Nevada's
16 excellent quality of life has attracted retirees and others
17 to the Silver State. The concern is that Yuccas Mountain
18 program activities could reduce the desirability of Southern
19 Nevada as a place of residence. A significant need,
20 therefore, is to have regulatory agencies recognize the
21 importance of socioeconomic issues, context issues, in those
22 locales potentially impacted by this program.

23 [Slide.]

24 MR. BECHTEL: What are socioeconomic effects?
25 Essentially, we break them down into two areas, standard

1 effects, the effects you would have of a major project on
2 our community, and, as we were talking about, special or
3 stigma effects, potential impacts on economy, quality of
4 life, et cetera, from a program such as this.

5 [Slide.]

6 MR. BECHTEL: A little more detail on standard
7 effects, impacts on service demands, police, emergency
8 response if in fact there were an accident, even if there
9 wasn't a release of material -- local communities are the
10 first responders, so we need to consider that -- schools,
11 water, treatment facilities as well. The law entitles us to
12 determine what the cost would be for the effects and we
13 understand the impact would vary based on the community,
14 where the community is located, and the phase of the
15 program.

16 [Slide.]

17 MR. BECHTEL: With regard to special or stigma
18 effects, these relate, as I indicated, to potentially
19 adverse impacts to the economy, et cetera. There are a
20 number of examples of adverse effects out there.

21 I don't know if you're familiar with the Santa Fe
22 versus Komis decision. The City of Santa Fe defined some
23 transportation routes, quite appropriately avoiding the City
24 of Santa Fe, for WIPP shipments. And as a result of that, a
25 party attempted to sell their property and it was apparent

1 that there were enough people knowledgeable about the routes
2 in the community to be fearful of the routes designated.
3 The courts ruled that that was a taking of property and
4 awarded the property owner \$300,000.00 based strictly on
5 fear and they utilized some surveys as backup to the fact
6 that, well, you know, the public did have an impression of
7 where the routes were at and potential effects.

8 Likewise, there's Goiana in Brazil, of course a
9 fairly minimal accident. There were one or two people
10 killed, not minimal in that sense, but there was an effect
11 on the economy because of that.

12 CHAIRMAN SELIN: Goiana?

13 MR. BECHTEL: Goiana in Brazil, yes, sir.

14 And of course Three Mile Island, even with that
15 there was an evacuation after the event.

16 While often considered as "perceived risks,"
17 therefore, special effects may be well employed in decision-
18 making.

19 [Slide.]

20 MR. BECHTEL: What is being done to quantify
21 impacts by the affected units of local government? The
22 state of Nevada and Nye and Clark Counties are cooperating
23 in the development of what we call a "project description
24 system" to enable potential DOE project effects to be
25 estimated. Everything we do on a local level is contingency

1 and, because so little is known in some respects about
2 certain aspects of the project, we feel we need to be able
3 to have some sort of a system to react to different
4 situations.

5 Likewise an econometric model is being refined to
6 evaluate ripple effects, given Yucca Mountain employment and
7 inputs.

8 [Slide.]

9 MR. BECHTEL: Surveys are being conducted.

10 Clark County is currently refining models by which
11 to evaluate Yucca Mountain program service demands and costs
12 in an integrated fashion.

13 [Slide.]

14 MR. BECHTEL: To summarize, in addition to the
15 important on-site and public health and safety issues which
16 we feel are our primary concern, regulators must also be
17 sensitive to the many potential disruptions that this
18 program could have on communities and people. The affected
19 units of government, as part of their oversight
20 responsibilities, are developing the tools and capabilities
21 to assess community-wide impacts.

22 [Slide.]

23 MR. BECHTEL: The affected governments would like
24 the opportunity at a later date to brief NRC staff on
25 socioeconomic impact assessment methodologies and issues in

1 an interactive workshop setting to kind of show you where
2 we're coming from and what we see as some of the effects.

3 To kind of tag onto a few comments that Mal made,
4 we're also concerned about LSS rulemaking. We feel we do
5 need the data to enable us to evaluate various aspects of
6 the program, feel that the MPC would be an appropriate pilot
7 to assist us and to assist NRC and others just on the
8 operations of the system.

9 We're a little concerned, though, that several
10 years ago we went through a negotiated rulemaking. I was a
11 minor partner in that, but we did list socioeconomic issues
12 as something to be included in the topical guidelines.
13 We've rejuvenated this committee over the last year and
14 somehow the socioeconomic part of it has been lost and we
15 have some concern that --

16 CHAIRMAN SELIN: this is the LSS Advisory --

17 MR. BECHTEL: Yes, Review Panel, and we feel that
18 socioeconomic is an appropriate topic to be included in the
19 topical guidelines.

20 CHAIRMAN SELIN: Mr. Hoyle is taking good notes.
21 I hope you've --

22 MR. MURPHY: We're going to be meeting this
23 afternoon, Mr. Chairman. John will have an opportunity to
24 correct that immediately.

25 MR. BECHTEL: With that, I'd like to close. If

1 you all have any questions for any of us --

2 CHAIRMAN SELIN: I do want to say a word about
3 this Advisory Review Panel. It's a terribly important
4 organization. Curiously, the LSS has gotten in many ways
5 more public input and approval than the underlying program
6 which this is supposed to provide the information support.

7 I am personally responsible for a major shift of
8 the program because I thought a lot of money was being
9 wasted in duplicating stuff that, although it had been
10 agreed to, really didn't provide what the affected
11 governments needed, namely assurance that data would be kept
12 and et cetera, and I wanted to see more resources go to
13 control mechanisms and less just to duplicating records
14 which might not have been trustworthy to begin with.

15 I'm very, very pleased that the Review Panel has
16 played a function other than just saying yes or no. I mean,
17 clearly we have a better program coming out of the Review
18 Panel than we did going into the Panel and in a way it's
19 become kind of a vehicle for some of the broader issues that
20 don't have another vehicle for expression at this point.
21 So, it's a good model and we need to do some thinking about
22 lessons we've learned there and how they might be brought
23 into some of these other questions.

24 Mr. Mettam, did you have some --

25 MR. METTAM: I just wanted to mention on the LSS

1 --

2 COMMISSIONER de PLANQUE: Can I just --

3 CHAIRMAN SELIN: I'm sorry. Excuse me.

4 MR. METTAM: Oh, I'm sorry.

5 CHAIRMAN SELIN: Commissioner de Planque?

6 COMMISSIONER de PLANQUE: If you want to continue
7 on that, I just had another question.

8 MR. METTAM: Just a quick follow-up. A few months
9 ago, we were briefed on the shift of the LSS implementation
10 to Las Vegas. The briefer in Las Vegas was unaware that the
11 Revisory Review Panel existed.

12 MR. MURPHY: That's a DOE briefer.

13 MR. METTAM: Yes.

14 CHAIRMAN SELIN: I was wondering how blunt we were
15 going to be about that.

16 Commissioner de Planque?

17 COMMISSIONER de PLANQUE: I'd like to ask you a
18 question, again not so much as a regulator but as a citizen
19 and as someone who's interested in public decision-making,
20 especially how you use risk, cost, and benefit.

21 It's obvious that you want to bring to our
22 attention some of the negative aspects in the socioeconomic
23 category, but are you paying much attention to the other
24 side of the coin, to the possible positives, jobs or things
25 like that? Does that play a role?

1 MR. BECHTEL: Well, I guess it's a weighing of
2 what is good and what is bad and I guess the feeling is that
3 the jobs actually are probably not that extensive. It sort
4 of depends on the phase of the program. There's probably
5 more jobs in, say, the construction phase, but, given the
6 fact that Las Vegas is a rapidly growing urban area, I don't
7 think the jobs are that much of a positive.

8 The downside, the potential effects on the
9 economy, is probably a greater negative --

10 CHAIRMAN SELIN: You're speaking for Clark County
11 now, not for all the units?

12 MR. BECHTEL: Well, potentially all the counties.
13 It depends on where the transportation routes are. In a
14 smaller community you do have the jobs and of course there
15 is some transition going on at the test site. But then
16 again, you know, do the potential dangers make the jobs
17 palatable, I guess? I guess it depends on the area and
18 there's a wide spectrum of opinions in Nevada. For Clark
19 County, the negatives would be greater.

20 COMMISSIONER de PLANQUE: I guess my interest is
21 mainly is it discussed as a balancing issue or do these
22 aspects get --

23 MR. BECHTEL: Yes. We do consider that and right
24 now, at least, the downsides appear to be greater than the
25 upsides.

1 COMMISSIONER de PLANQUE: Sure, and clearly we're
2 interested in your view of those.

3 MR. BECHTEL: Sure.

4 COMMISSIONER de PLANQUE: Thank you.

5 MR. BECHTEL: Thank you for the question.

6 CHAIRMAN SELIN: I think you folks have done a
7 terrific job. Not only have you made what to us was a set
8 of unrememberable initials into having faces, but you really
9 have covered yourself with -- I mean, you've just built a
10 great deal of credibility and respect in having appeared
11 this morning.

12 Obviously, you've given a responsible discussion,
13 but, as I said before, I'm on the one hand quite impressed
14 with areas where I thought I knew something but I didn't
15 realize how much you knew about it. And there are other
16 areas that I just -- you know, this whole question of
17 centrality of transportation and the different mechanisms
18 and whether we the NRC are really appearing as much as I
19 thought we were in the state of Nevada. You've delivered a
20 message very effectively and from my point of view you've
21 done yourselves and I hope us a great service by coming this
22 morning.

23 MR. METTAM: Thank you, Mr. Chairman. We'd be
24 happy to come at any time.

25 CHAIRMAN SELIN: We tried to set up a meeting in

1 Las Vegas and there were some complications that had nothing
2 to do with the substance of the meeting, but we'll try it
3 again. We shouldn't have to do everything out here.

4 Thank you.

5 We now have a panel of representatives from tribal
6 governments and Native American groups to appear before us.

7 Do you put the names on both sides of the signs or
8 do people have to figure out where they're -- now, why
9 couldn't Carl Johnson find his sign?

10 Welcome, gentlemen.

11 Welcome, Mr. Arnold.

12 MR. ARNOLD: Thank you very much.

13 My name is Richard Arnold and I guess I'll go
14 ahead and start.

15 First and foremost, I want to let you all know
16 that I'm Southern Paiute and that's a tribe of Indian people
17 that are right by and indigenous from the Yucca Mountain
18 area along with two other tribal large ethnic groups, one
19 being the Owens Valley Paiutes and Shoshones, and then the
20 Western Shoshones also.

21 I'm going to address this in a little bit
22 different context probably than what you're used to seeing,
23 only because I think that we're talking about things that
24 have to do with people culturally, spiritually and
25 religiously, everything that you can imagine that is part of

1 our lifestyle.

2 Yucca Mountain is a place, actually, that several
3 of our people that are involved with the process have very
4 vivid memories about, either living by, on or near, riding
5 over on horseback, whatever, in the area, so there's a lot
6 of strong, strong ties. The strong ties go so far as that
7 they are basically divided within the three ethnic groups of
8 Southern Paiute, Western Shoshones and Owens Valley Paiutes
9 and Shoshones, that they take in four different states.
10 They take in Southern Nevada, Utah, Northern Arizona and
11 Southern California.

12 We have sometimes difficulty when we talk about
13 the Nuclear Waste Policy act and affected units of
14 government and things and we talk about counties that are
15 contiguous to Nye. That's fine, with all due respect, when
16 you deal with counties. But when you deal with tribal
17 governments that have -- they view themselves in essence as
18 nations that were one time traveling all over the place,
19 that have traditional stories that take them into a lot of
20 places that are close by the Yucca Mountain area, they again
21 feel as though they have a right to become involved.

22 By way of background, the Southern Paiute people
23 believe that our place of origin, our place where we evolved
24 from was at Mt. Charleston, which is about 40 miles away
25 from Yucca Mountain. It's a highly significant religious

1 place. In our stories of our afterlife, we go on journeys
2 that take you actually and touch on spots by Yucca Mountain.
3 So, again, you can see the importance of the area.

4 The Western Shoshone site, a treaty, the Ruby
5 Valley Treaty of 1863, which they feel is their right to the
6 area and an opportunity to become involved.

7 The group that I basically am here to represent is
8 called the Consolidated Group of Tribes and Organizations.
9 We have been kind of actively involved, I guess, with
10 Department of Energy and Yucca Mountain since actually the
11 inception of the site suitability and the involvement of
12 Indian people. What's driving is that is a couple different
13 things. One is the American Indian Religious Freedom Act
14 and the other is the Native American Grave Protection or
15 Repatriation Act.

16 We have developed actually a lot of good different
17 programs in which Indian people are involved, that there are
18 representatives that are involved in the process that are
19 designated by their tribal governments. We also have
20 monitors that work with the archaeologists and things to
21 make sure things are going okay and basically acting as the
22 eyes and ears and conscience of the Indian people.

23 That's all fine and good, but when I sat here and
24 I was listening to all the concerns, not only from the
25 county and the state and all the vested people that have --

1 or the people that have the vested interests, we -- actually
2 the three of us here are from groups and organizations that
3 feel as though we've been left out of the loop. Quite
4 frankly, there has been really no formal mechanism of
5 funding. The funding is the thing that is going to be the
6 driving force to be involved. When you were asking the
7 questions about, well, what are the perceptions of the NRC,
8 at least there are some people that can say yes, they know
9 what the NRC is or what it represents. You ask the Indian
10 people that are at the local levels and a lot of them don't
11 know what the NRC is or what they do or what they represent.
12 Or you ask them maybe perhaps about stakeholders meetings or
13 you ask them about TRB meetings and things and they don't
14 know because there's not a formal mechanism in which they
15 can attend meetings.

16 The difficulty comes in as an Indian person when
17 you see counties that in essence get funding for being an
18 affected county, but yet you have reservations within those
19 counties that don't get the same privilege. There's
20 something drastically wrong with that concept.

21 There has been some movements, and you will be
22 hearing about that from Mr. Lowrey about some movements
23 about trying to gain affected status, but it goes beyond
24 affected status as I cited earlier, that it's not only just
25 trying to give it to those tribes that are within the

1 counties that are contiguous, but also to the groups that
2 have the cultural ties, the ties that are there as part of
3 their religion. It goes beyond the law. It goes beyond
4 whatever that you cannot define. I think that that really
5 needs to be considered.

6 We as Indian people, for lack of a better term, I
7 guess, sometimes we're just limited to being interested in
8 just the artifacts, just the cultural things and we are
9 interested in those things.

10 CHAIRMAN SELIN: I mean the government limits you
11 to the artifacts, doesn't pay attention to the more
12 spiritual?

13 MR. ARNOLD: That's correct. Or actually that
14 they assume that that's the areas that our interests lie,
15 where they lie. That's true in part. I mean that is an
16 integral part of our culture and our religion and our
17 heritage and everything else. But we as human beings too
18 are interested just as much about transportation issues,
19 just as much as hydrology, volcanism, all the different
20 issues that take place. We have the socioeconomic concerns,
21 as Mr. Bechtel had discussed with the county. We too have
22 those on the local level.

23 I would urge the Commission to try to improve that
24 in whatever power that the Commission has over this process.
25 I think that it's imperative that we try to rectify all

1 those problems.

2 CHAIRMAN SELIN: How are the people of, say, those
3 three tribal groups to be reached? Do they get reached
4 through tribal governments, through local governments,
5 through informal associations, all of the above?

6 MR. ARNOLD: The Department of Energy on the Yucca
7 Mountain project has adopted a government to government
8 policy in essence. We believe that that needs to be adhered
9 to. We believe that the tribes need to be contacted through
10 the proper protocol, which is through the tribal chairperson
11 or the governing body. Secondly, that if that governing
12 body decides that they want to have representatives, as what
13 they've done with the Yucca Mountain project, that they have
14 -- they're called OTCRs, which are official tribal contact
15 representatives, another creative acronym, that those
16 individuals are the ones that serve as, in essence, the
17 points of contact for those tribes or those reservations.
18 That would be one of the key things, I think, to happen.

19 Secondly, I think that there needs to be
20 extensively more outreach done with the tribes that are
21 involved. We see sometimes the lack or the absence of that
22 information that flows, or it may be, "Well, we'll give you
23 a brief synopsis or overview of the project status and
24 what's happening." Sometimes in very technical terms, which
25 I understand the technical nature of the project, and

1 sometimes it's hard to get away from that, but also just the
2 -- as an effort or a way of trying to make some meaningful
3 dialogue. Again, we are citizens of the United States and
4 have been since 1924, but it really kind of makes you wonder
5 in 1994 whether or not we really are afforded the true
6 rights that we're supposed to have.

7 I think it's also important that the NRC really
8 consider institutionalizing the Indian components, if you
9 will, within the process of being advised and notified of
10 meetings and such, that again we don't see that. This
11 particular meeting, which is my first experience here, is
12 something that through various efforts of individuals
13 finally came to light. But I think that obviously all the
14 other folks have been afforded the opportunity to be here at
15 a much earlier stage in the game than we have been. But yet
16 we were the first ones there in that whole area and then
17 again the ones that are overlooked.

18 CHAIRMAN SELIN: Are there other ethnic groups
19 that would have a comparable claim to interest or do these
20 three groups pretty much cover the Native Americans who are
21 involved in this question?

22 MR. ARNOLD: I guess it would really depend upon
23 what the definition of concerns. I mean if you want to talk
24 specifically cultural ties, we are looking at legislation
25 basically that drives the Department of Energy, trying to --

1 or working with Indian people. To the best of my knowledge,
2 there's no other legislation in that vein that says that
3 yes, you must work with someone from this ethnic group or
4 that ethnic group.

5 CHAIRMAN SELIN: I was thinking of other tribes,
6 not qualitatively different ethnic groups.

7 MR. ARNOLD: Oh, okay. There are -- the group
8 that I am speaking on behalf of represents 17 different
9 groups, tribes and organizations. Mr. Lowrey works for an
10 organization that represents all the tribes within the State
11 of Nevada. Within that there's an overlap, quite frankly,
12 of five of the tribes that are involved in the component
13 that we currently work with are also five of the member
14 tribes of Mr. Lowrey's coalition. But we still believe and
15 don't want to give the appearance that, one, there's not a
16 matter of dissention, and I think that there is a
17 presentation here of a united front because we definitely
18 feel as though that's the only way that we're going to make
19 any in-roads into this whole process.

20 This is nothing new too, I might add. Actually,
21 since the very beginning, the Indian tribes have made
22 recommendations to Department of Energy. We do have
23 meetings that occur three times a year funded by the
24 Department of Energy for these tribes that I am
25 representing. That's all fine and good. We make the

1 recommendations at the local level. So, we get responses on
2 the local level. But sometimes, with all due respect to the
3 Department of Energy, because it's a large agency, sometimes
4 the right hand doesn't know what the left hand is doing.
5 So, we just see some real sometimes communication gaps that
6 occur. We think that those are things that are not -- that
7 can't be remedied, but we believe that it just needs to be a
8 really concerted effort in which there's, in essence,
9 putting money where the mouth is. I just think that we're
10 not seeing that.

11 I can't understand, it goes beyond me that why
12 we're excluded from the process. Again, getting back to
13 some of those issues that we're concerned about, we can hear
14 the things, well, we're looking at models and we're looking
15 at study designs and this hasn't been decided and that
16 hasn't been decided, but everybody else, they're looking at
17 those issues too. We often times from the Indian
18 perspective are sometimes behind the times because we're not
19 afforded the opportunity to get the information. So then if
20 you can imagine the state's concerns and then amplified by
21 the county because they're smaller, well amplify that again
22 by the Indian people because by the time it gets to us, it's
23 like okay, we're there the day before the grand opening kind
24 of thing. I don't think that that's appropriate.

25 The other thing is that again, just in closing,

1 that I would hope that we would be afforded some serious
2 consideration. There's been a lot of meaningful dialogue.
3 We unfortunately do not have the resources to attend these
4 meetings, but we feel that they're important. We need to
5 find those mechanisms. All of us, at least out from the
6 West, we in essence have to beg, borrow and steal to get out
7 to these meetings, wherever they are, but we need to so we
8 can have our voice of concern.

9 So, with that, I would just appreciate your
10 support and consideration and not here to fix the blame, but
11 hopefully to fix a problem.

12 CHAIRMAN SELIN: Thank you, Mr. Arnold.

13 MR. ARNOLD: Thank you.

14 MR. LOWREY: My name is Elwood Lowrey. I'm the
15 President of Nevada Indian Environmental Coalition,
16 representing 24 or 25 tribes within the State of Nevada.
17 All the tribal chairmen who run their governing bodies are
18 the members of the board that I represent. In their
19 respective tribal reservations, they're all federally
20 recognized by the government of the United States.

21 Since April and May, some time back, we petitioned
22 the Secretary of Energy for affected status for tribes
23 within the State of Nevada between DOI and DOE. Since then,
24 the Secretary of Energy had closed that door for us, denying
25 us affected status. So, we are still pursuing that.

1 September 16th we wrote a letter to the Secretary of Indian
2 Affairs to again ask for some type of funding to represent,
3 just as Richard said, in reference to all of the problems
4 that occurred since.

5 Yesterday we had a meeting at DOE and fine and
6 dandy, we're looking at '95 funding, but basically we've
7 been hearing that for the last eight or nine months. It's
8 been promised and promised and we haven't really received
9 anything. So, basically last night I drafted a letter dated
10 September 8th to Robert Nelson of Yucca Mountain project,
11 making sure that we have interim funding between then to
12 address all of the issues as the counties and the states do
13 in reference to the Yucca Mountain project.

14 The tribes in Nevada do have a direct tie,
15 culturally, air, water, et cetera, to Yucca Mountain. I sit
16 on several boards. The Ruby Valley Treaty, we advise
17 environmentally to that group also in reference to
18 groundwater and et cetera. So, we're on that committee as
19 they negotiate between Interior in Salt Lake City next week.

20 I'd like to say that the tribes in Nevada do need
21 to be represented and I'd like to ask the Commission that
22 maybe through some mechanism -- I realize maybe it's not
23 your legal way of doing things, but basically what we did is
24 we have given most of the DOE project manager at Yucca
25 Mountain and the Interior Department ten days to answer to

1 what we have to do and then we'll turn it over to our legal
2 department after that. We've seem to come to the end of the
3 rope. In their meeting last week in Reno, the chairmen have
4 decided through vote that they would do a legal matter thing
5 if it's not pursued.

6 We'd like to be part of Yucca Mountain, not only
7 on culture. We'd like to do it in hydrology. We'd like to
8 hire people to do hydrology work such as the counties and
9 the states do so that we could be part of the package on
10 site characterization.

11 Basically I'll leave all these documents with you
12 guys.

13 CHAIRMAN SELIN: If you'd leave them with the
14 Secretary, we'd appreciate that.

15 MR. LOWREY: Okay.

16 CHAIRMAN SELIN: May I ask you question? It's
17 clear that people who live or have an in land have the same
18 kind of interest that other people have in the land,
19 hydrology, safety, transportation. Part of your argument,
20 very understandable argument, is decisions are being made
21 that affect you as well as everybody else, you want to be
22 there when they're made. Do you have other kinds of
23 interests? By that I mean would steps that could be taken
24 that would satisfy say the town-based white residents of
25 Nevada not satisfy Indian concerns because they're

1 qualitatively different? I mean are the kinds of things
2 different from what the counties are interested in that
3 you're interested in? Are there things that the counties
4 may be happy with that you would consider desecrating the
5 land or the sites or, conversely, are there things that
6 would satisfy you that the counties wouldn't really care
7 about?

8 MR. ARNOLD: It would occur to me that I think
9 there is a lot of concerns that we have that echo both the
10 county and the state. We obviously may not have the
11 necessary scientific expertise in things, so we have to rely
12 upon other people to get that information. But conversely,
13 we go beyond that, as I mentioned earlier, through our
14 traditional ways of which John Q. Citizen typically doesn't
15 have or may not have that mind set or those cultural
16 beliefs.

17 So, I think that there is a lot of over shadow
18 there. But one of the things too is that we are aware of
19 various meetings that occur in Nevada on different issues
20 relative to Yucca Mountain and high-level nuclear waste.
21 But a lot of times we are basically just -- we go there as
22 observers. We're not, in essence, viewed as --

23 CHAIRMAN SELIN: I understand that. That's the
24 procedural side, but I'm talking about the substance side.
25 Obviously, as you said, you care about the artifacts whereas

1 other people may not care about the artifacts. Are there
2 other things that the program might do that would bother the
3 tribal groups that wouldn't affect other groups?

4 MR. ARNOLD: Sure.

5 CHAIRMAN SELIN: Give some examples.

6 MR. ARNOLD: Actually, when you look at cultural
7 resources, for example, that is defined by Department of
8 Energy, I guess, as dealing with several of the issues and
9 the environmental issues, particularly those who that may be
10 of importance to the Indian people. We look at cultural
11 resources, to us is everything around us, the environment,
12 the air, the water, the land, the rocks. Everything that is
13 out there we believe in a traditional way has a spirit and
14 is something that if it's going to be impacted is going to
15 impact not only our cultural but it's also going to impact a
16 lot of the believes and whether or not people either buy
17 into the information that is being shared with them.

18 So, most definitely. The hydrology. I mean you
19 guys call it hydrology. We call it something else.
20 Everything that's out there. You talk about geology. We
21 talk about -- when we talk to elders and they talk about
22 radiation, you try to define radiation in Indian or
23 interpret that into Indian, and we can't. The
24 interpretation or the description that comes back is
25 something that an angry rock, something that is very

1 powerful.

2 So, all those things are all inclusive within our
3 culture. You guys call it something else and we call it
4 something else, but it's an integral part. Because of that,
5 that's why we have to be involved in all those different
6 things. When you look at transportation studies, we also
7 have to realize the areas in which those go through. I mean
8 it may not just necessarily be the highway, the blacktop
9 that it's on, but it may be passing through a very sacred or
10 special area.

11 CHAIRMAN SELIN: So, certain areas which the
12 governments would not be sensitive --

13 MR. ARNOLD: Absolutely not --

14 CHAIRMAN SELIN: -- would be more off limits to
15 you, but other areas might be more acceptable?

16 MR. ARNOLD: They would have absolutely no
17 knowledge of that without the interface of Indian people.

18 CHAIRMAN SELIN: Is there an absolute prohibition
19 against any of the experiments that are currently being
20 considered?

21 MR. ARNOLD: I have to be quite honest with you
22 and tell you that without knowing all the experience, and
23 remember we're the ones that have been left out of the loop,
24 it's a hard question to answer.

25 CHAIRMAN SELIN: Thank you.

1 Did I interrupt you, Mr. Lowrey?

2 MR. LOWREY: No.

3 CHAIRMAN SELIN: Mr. Holden?

4 MR. HOLDEN: Thank you. Good morning,
5 Commissioners and Chairman. I appreciate the opportunity to
6 sit here in a supportive role as Director of the Nuclear
7 Waste Program with the National Congress of American
8 Indians.

9 The NCAI is the oldest, largest national Indian
10 organization in the country. We have over 165 tribal
11 governments that belong to NCAI and we also have a body
12 called the National Indian Nuclear Waste Policy Committee
13 which meets regularly and discusses nuclear waste management
14 issues and their impact on the Indian country. These are in
15 regard to not only Yucca Mountain and the repository, but
16 also monitored retrieval storage issues, transportation and
17 so forth.

18 We've held some emergency preparedness programs
19 which is a component of Section 180(c) of the Nuclear Waste
20 Policy Act in regard to repository action and we're finding
21 that the tribes are ill prepared for anything that would --
22 even though transportation might not being for many years.
23 Radiological emergency preparedness takes many years to
24 prepare for, as you're quite aware, and that the tribes are
25 starting from basically ground zero. So, this is one of the

1 things and it's an example of some of the projects that we
2 do.

3 However, we do work through a cooperative
4 agreement with the Department of Energy. It's our role to
5 be a conduit of information from the Department of Energy
6 programs under the Nuclear Waste Policy Act, under the
7 radioactive waste program and also we assess what the tribes
8 are feeling and support their statements as we're doing
9 here.

10 I guess my statement would be that I'm sort of
11 concerned about a process regarding tribal government input.
12 The NRC, I'm sure, wants to have an effective process and
13 review when the time comes to review licensing for a
14 repository and canister and other license processes. But as
15 these gentlemen have said on behalf of the Indian nations
16 that are definitely impacted by repository licensing
17 process, they have not -- their representatives whom they
18 represent and the tribal governments with whom the federal
19 government has a direct government to government
20 relationship with have not been able to sit at the table as
21 often as they should.

22 You mentioned and you're aware that there may be
23 other groups and other ethnic folks that might be interested
24 and may not have the same concerns as tribes, and also the
25 counties have been sitting at the table as well as states,

1 but that's part of our job to remind federal government
2 entities that as part of the federal government they share
3 in a trust responsibility reiterated by the Constitution and
4 Supreme Court cases and Congress that whenever there was
5 inadequate participation, those regulatory and those federal
6 agencies should ensure that all parties are at the table and
7 that they are provided with the resources to do their
8 studies, the impact studies on cultural resource
9 assessments, whatever that may be, hydrological studies, and
10 have that into the record because when your license renewal
11 process begins, I dare say that there will not be very much
12 from the tribal standpoint and further on down the line then
13 they come back to -- there may be some statements and action
14 on the part of the tribes because they are indeed necessary
15 parties, as you are aware.

16 It seems to be from an engineering standpoint that
17 it seems that there -- it's their opinion that there would
18 be no risk until there's placement of radiological waste in
19 canisters at a repository. But as these gentlemen have
20 stated, there is some risk to cultural integrity at this
21 point. When you disturb the group for studies, for
22 feasibility studies, when you traverse those roads, there
23 are plants, animals and a complete ecosystem which is
24 integral to a culture which has meaning, which has
25 significance and which should be protected. Many of these

1 entities and many of these things that should be protected
2 fall through the cracks and are not regulated by
3 Archeological Resources Protection Act, by the Native
4 American Graves Protection Act. Some may receive protection
5 under the Native American Free Exercise Religion Act which
6 is being discussed over at Congress and which is likely to
7 be tabled until next year. It doesn't look like there's
8 going to be a bill coming out on that this year.

9 I should say that I hope that something can be
10 done by the Commission and you may not have the authority to
11 call for Department of Energy to include some of the tribes
12 as necessary parties, but still I think the question should
13 be asked where are the Indian tribal governments.

14 The NRC in the past may have -- there are question
15 in terms of the NRC licensing process in Indian country at
16 this point. Some examples are the licensing of nuclear
17 utilities at Prairie Island, in Ohio, Fernald, and some of
18 the other plants in Ohio. There were treaty implications in
19 those instances. There were about nine tribes enumerated in
20 the Treaty of Greenville which we think should be brought in
21 in the Environmental Restoration Waste Management Program.
22 They're former lands. It's questionable that they may still
23 have hunting, fishing, gathering rights in that area. In
24 Prairie Island there are artifacts, there are mounds in that
25 area and no one has been able to assess what types of

1 cultural resource assessments were done and if those are
2 available, where are they.

3 Those are just some of the questions that have
4 arisen from previous NRC licensing applications.

5 With that, the only thing I would say is that once
6 in awhile Hollywood is able to depict something truthful and
7 something that does indeed show the historical relationship
8 between the federal government and the tribes. One movie
9 that sticks in my mind that's quite vivid in my memory is
10 the Cheyenne Autumn where the tribal government wanted a
11 treaty with the Cheyenne and the tribe agreed and they were
12 awaiting provisions, they were waiting for what had been
13 promised and they came to this place day after day after day
14 and the tribal chief would not give up. Even beyond that,
15 they went to Washington, D.C.

16 I submit that these people have been to Las Vegas,
17 they've been to Washington, D.C. and they've been here many
18 times. I don't know how many times they'll have to come
19 again to ask for resources. It's available. It's available
20 now. Others are receiving it who don't come under this
21 trust responsibility. I would hope that something is done
22 about it.

23 Thank you.

24 CHAIRMAN SELIN: Clearly your arguments are very
25 strong and your feelings are equally strong. Most of the

1 arguments really do affect the Department of Energy, not the
2 NRC. But the one area, you referred to this, Mr. Holden,
3 that does affect us is the environmental impact statement
4 and whatever decommissioning plans are made for any of the
5 facilities.

6 The last thing you said is we didn't properly take
7 the -- not just the tribal but the treaty responsibilities
8 into account I assume when we did the environmental impact
9 statements. Fernald isn't ours, but Prairie Island is, nor
10 when we look at the reclamation plants. Is that true? Is
11 that I said true, that your interests were not -- or the
12 tribal interests were not taken care of in the preparation
13 of the environmental impact statements or the reclamation
14 plans for the facilities that you cited?

15 MR. HOLDEN: That appears to be the situation.
16 And I must say that also many of these same tribes that are
17 involved in the radioactive waste side should be involved
18 with the EM side in terms of environmental restoration and
19 reclamation of the Nevada test site. They might not be
20 direct NRC issues, but still they will be doing some things.

21 CHAIRMAN SELIN: Right. I hate to sound so
22 bureaucratic. That's not our issue, but some of them are.
23 If we do the environmental impact statements correctly for
24 the three projects that were discussed today, will tribal
25 interests be taken into account? In other words, do the

1 rules for the EISS protect the tribal interest or do we have
2 to go a step beyond what we would normally expect to do?

3 MR. HOLDEN: I think that they would submit their
4 studies, their assessments into the same -- into a NEPA
5 requirement documents, if they're allowed to do so.

6 CHAIRMAN SELIN: Assuming they had the resources
7 to do the studies.

8 MR. HOLDEN: Exactly.

9 CHAIRMAN SELIN: Commissioner Rogers?

10 COMMISSIONER ROGERS: Yes, just on this question
11 of being alert to meetings and things of that sort. As you
12 probably know, NRC is making considerable effort these days
13 to provide public access to information about our meetings
14 through electronic bulletin boards and using electronic
15 technology much more for that purpose. Of course the
16 reinventing government initiative of the Vice President is
17 connected very much into the use of that technology.

18 To what extent can that help you to stay better
19 informed? Do you have ways of accessing that and sharing
20 some access to it?

21 MR. ARNOLD: It gets back to the same situation.
22 I think, first of all, that would be very helpful, the
23 information. The second part is that the resources could be
24 made available if we have the funding. It would be just
25 like if I came to you and I took all your budget away and I

1 took everything out and I say, "Okay, we have all this
2 modern technology here. Is that going to help you?" It
3 will help you if you can access it. We can access it if we
4 have the appropriate funding to get the things that we need.

5 COMMISSIONER ROGERS: Well, for example, I think
6 one of the things that we're trying to do is make sure that
7 libraries have a technology that -- you know, a public
8 library that could be used to access bulletin boards and
9 things of this sort. Of course there's a way that at least
10 a facility can be shared that way. It's a start. It's not
11 the full access, but it is a start.

12 MR. ARNOLD: But once again, I think you have to
13 realize the uniqueness of the reservation setting and that
14 not all -- necessarily all those libraries are necessarily
15 close to the reservations. So, you have to look at trying
16 to at least find the mechanism to get it to all the people
17 that we possibly can. Yes, a public library may be a start,
18 but also there are, I think, mechanisms or ways that --
19 there may be a tribal library, for example.

20 COMMISSIONER ROGERS: Yes. Well, that's what I
21 was thinking, yes.

22 MR. ARNOLD: Or maybe the tribal office that
23 doesn't necessarily have a library per se, but at least a
24 place or focal point where people would go and congregate.
25 I think in that way that would definitely help.

1 COMMISSIONER ROGERS: Well, it might be something
2 that we should look at to see what ways could be found to
3 make sure that at least the NRC bulletin board information
4 on meetings and issues, and this whole technology is
5 developing to the point that an enormous amount of
6 information can be available through it. It would seem that
7 your access to that would be very important.

8 MR. ARNOLD: Or course, historically being 20
9 years behind the times, we wouldn't expect to get involved
10 with that, I guess, until the year 2000 or beyond.

11 COMMISSIONER ROGERS: Well, the 20 years is not
12 constant, you know.

13 MR. ARNOLD: Well, it is on the tribal side.

14 COMMISSIONER ROGERS: It may be that one leap frog
15 over that.

16 MR. ARNOLD: We hope so.

17 COMMISSIONER ROGERS: Well, I'll personally make
18 an effort to look into what the possibilities are at least
19 from our end and see if something can't be done to be able
20 to provide some centers for access to NRC information.

21 MR. ARNOLD: We appreciate that. Thank you.

22 CHAIRMAN SELIN: Commissioner?

23 COMMISSIONER de PLANQUE: I have no questions.

24 CHAIRMAN SELIN: I'm trying to figure out if it's
25 harder to explain radiation or Internet to your elders.

1 MR. ARNOLD: Probably all. It's all in the same
2 kind of bolts.

3 CHAIRMAN SELIN: Well, Mr. Arnold, thank you.
4 Thank you, Mr. Lowrey, Mr. Holden, for attending.

5 As I said, most of your problem isn't yet with us,
6 but we'll try to take care of our share of the issues that
7 you've brought up.

8 MR. ARNOLD: We appreciate it. Thank you.

9 CHAIRMAN SELIN: Thank you.

10 [Whereupon, 11:36 a.m., the above-entitled meeting
11 was concluded.]

12

13

14

15

16

17

18

19

20

21

22

23

24

25

CERTIFICATE

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

TITLE OF MEETING: BRIEFING ON HLW ISSUES BY NWTRB, STATE
OF NEVADA, LOCAL GOVERNMENTS AND
NATIVE AMERICANS - PUBLIC MEETING

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Friday, September 9, 1994

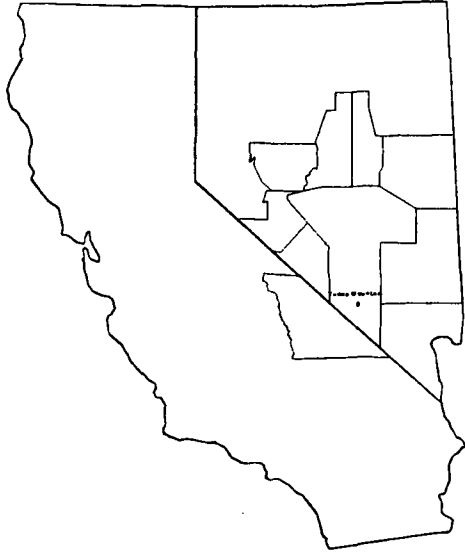
was held as herein appears, is a true and accurate record of the meeting, and that this is the original transcript thereof taken stenographically by me, thereafter reduced to typewriting by me or under the direction of the court reporting company

Transcriber: _____

Carol Lynch

Reporter: _____

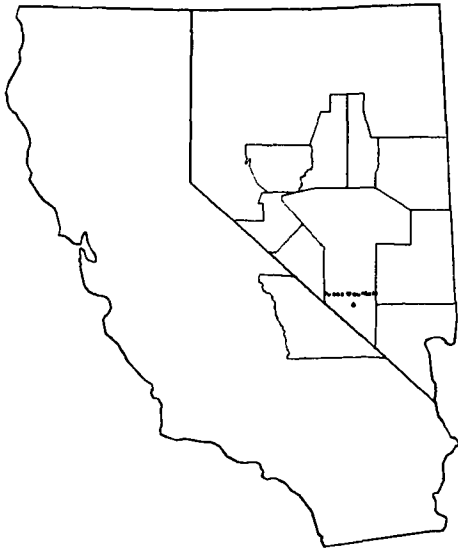
Peter Lynch



AFFECTED UNITS OF LOCAL GOVERNMENT

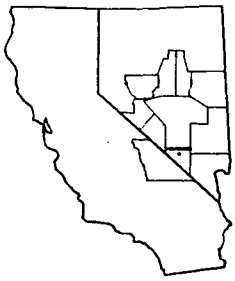
**PRESENTATION TO THE
NUCLEAR REGULATORY COMMISSION**

SEPTEMBER 9th, 1994



PRESENTATION TO THE NUCLEAR REGULATORY COMMISSION INTRODUCTION AND OVERVIEW

**BRAD METTAM, PROJECT COORDINATOR
INYO COUNTY REPOSITORY ASSESSMENT OFFICE
INYO COUNTY, CALIFORNIA
SEPTEMBER 9, 1994**



INTRODUCTION AND OVERVIEW

AFFECTED UNITS OF LOCAL GOVERNMENT

LEGEND

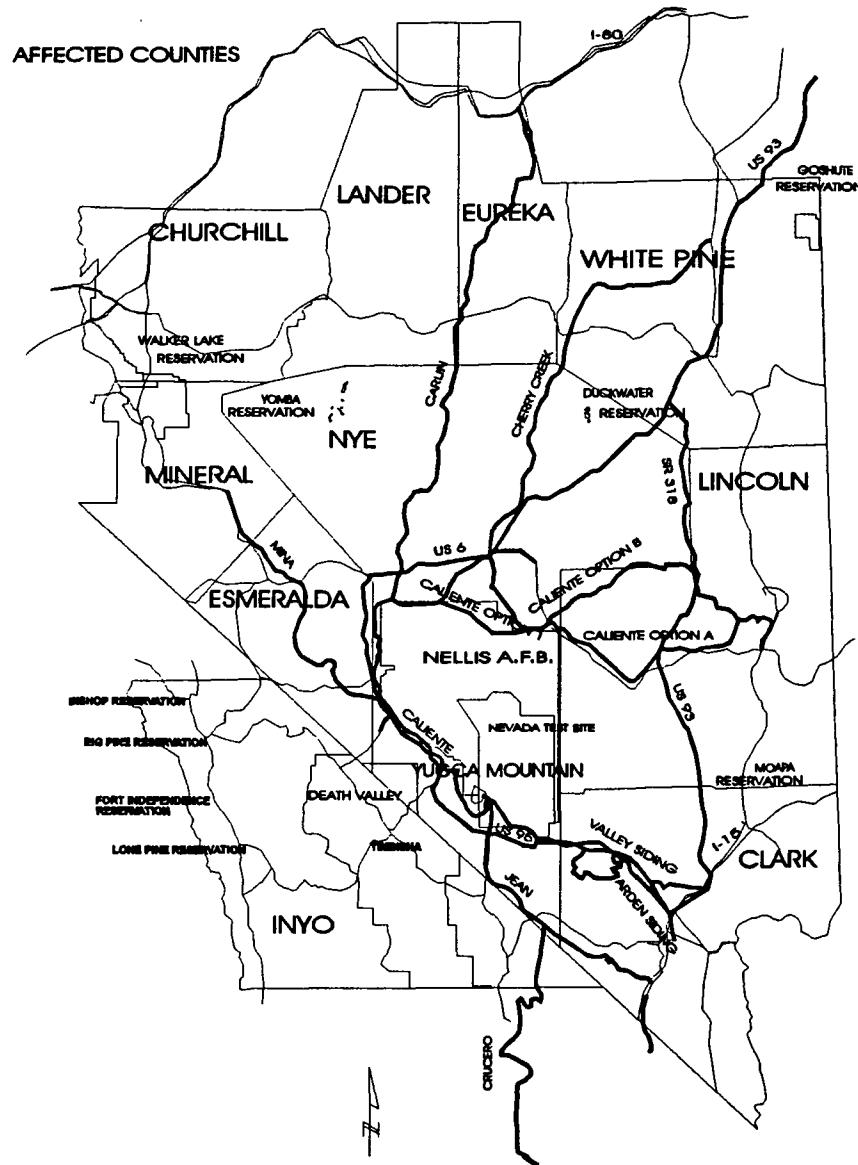
HIGHWAY ROUTE OPTIONS

RAIL ROUTE OPTIONS

COUNTY BOUNDARIES

EXISTING ROADS

EXISTING RAIL

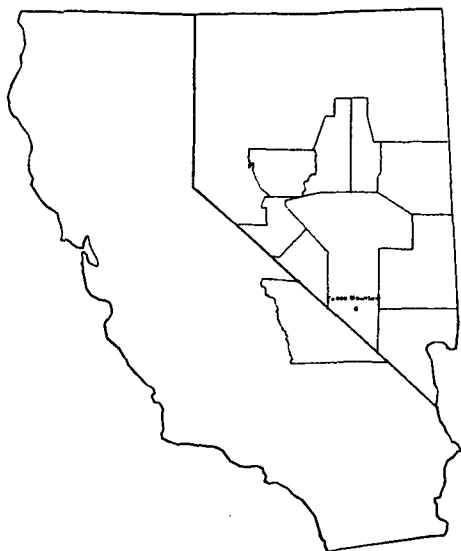




INTRODUCTION AND OVERVIEW

AFFECTED UNITS OF LOCAL GOVERNMENT

- **GEOTECHNICAL ISSUES, LES BRADSHAW**
- **LICENSING ISSUES, MALACHY MURPHY**
- **TRANSPORTATION ISSUES, ABIGAIL JOHNSON**
- **SOCIOECONOMIC ISSUES, DENNIS BECHTEL**



PRESENTATION TO THE NUCLEAR REGULATORY COMMISSION ON GEOTECHNICAL ISSUES

**LES W. BRADSHAW, PROJECT MANAGER
NUCLEAR WASTE REPOSITORY PROJECT OFFICE
NYE COUNTY, NEVADA
SEPTEMBER 9, 1994**



INTRODUCTION

AFFECTED UNITS OF LOCAL GOVERNMENT

- **AFFECTED UNITS OF LOCAL GOVERNMENT'S YUCCA MOUNTAIN OVERSIGHT PROGRAMS ARE FUNDAMENTALLY CONCERNED WITH PROTECTING THE PUBLIC'S HEALTH AND SAFETY**
- **THE INTEGRITY OF THE SCIENCE SUPPORTING AN EVALUATION OF THE SUITABILITY OF YUCCA MOUNTAIN AND THE SAFETY OF THE ASSOCIATED TRANSPORTATION SYSTEM WILL BE KEY DETERMINANTS OF AULG CONFIDENCE IN ANY OUTCOME**



INTRODUCTION (CONT.)

AFFECTED UNITS OF LOCAL GOVERNMENT

- **THE AULG ARE MAKING USE OF PROACTIVE AND REACTIVE OVERSIGHT APPROACHES TO MEASURE AND ASSESS THE INTEGRITY OF THE SCIENCE BEING IMPLEMENTED BY DOE**
- **THESE REMARKS WILL ADDRESS AULG GEOTECHNICAL OVERSIGHT ACTIVITIES AND IDENTIFY FOR THE COMMISSION THE AULG'S KEY GEOTECHNICAL CONCERNS**



REACTIVE OVERSIGHT ACTIVITIES

AFFECTED UNITS OF LOCAL GOVERNMENT

- **CLARK, INYO, AND NYE COUNTIES HAVE TECHNICAL EXPERTS CONDUCTING DAILY SITE CHARACTERIZATION OVERSIGHT**
- **NYE HAS FORMALIZED ON-SITE REPRESENTATION PROCEDURAL PROTOCOL WITH DOE MODELED, IN MANY ASPECTS, AFTER THE NRC/DOE PROGRAMMATIC AGREEMENT**



REACTIVE OVERSIGHT ACTIVITIES (CONT.)

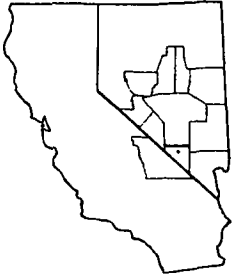
AFFECTED UNITS OF LOCAL GOVERNMENT

- **ALL AULG HAVE REACTIVE GEOTECHNICAL OVERSIGHT AND MONITORING PROGRAMS INCLUDING....**

- REVIEW AND COMMENT ON DOCUMENTS**

- TRACK MAJOR TECHNICAL ISSUES**

- ATTEND AND PARTICIPATE IN TECHNICAL EXCHANGES**



PROACTIVE OVERSIGHT INITIATIVES

AFFECTED UNITS OF LOCAL GOVERNMENT

- **COOPERATIVE REGIONAL HYDROLOGY STUDY PROGRAM**
 - **NYE, INYO, CLARK, AND ESMERALDA COUNTIES**
 - **CHARACTERIZE NATURE AND INTERRELATIONSHIPS OF CARBONATE, TUFF, AND ALLUVIAL AQUIFERS**



PROACTIVE OVERSIGHT INITIATIVES (CONT.)

AFFECTED UNITS OF LOCAL GOVERNMENT

- LITERATURE RESEARCH NEARLY COMPLETE**
- POTENTIAL BORE HOLES OF OPPORTUNITY IDENTIFIED**
- COOPERATIVE WORK PLAN UNDER DEVELOPMENT**



PROACTIVE OVERSIGHT INITIATIVES (CONT.)

AFFECTED UNITS OF LOCAL GOVERNMENT

- **NYE COUNTY INDEPENDENT SCIENTIFIC INVESTIGATIONS PROGRAM**
 - **PROTOCOL WITH DOE SIGNED AND EFFECTIVE**
 - **ANTICIPATED START-UP DATE FOR DRILLING IS 10/15/94**
 - **SCIENTIFIC NOTEBOOK QUALITY ASSURANCE PROGRAM**
 - **COMMERCIALLY AVAILABLE DRILLING TECHNOLOGY AND OFF-THE-SHELF INSTRUMENTATION**



PROACTIVE OVERSIGHT INITIATIVES (CONT.)

AFFECTED UNITS OF LOCAL GOVERNMENT

- FOUR BORE HOLE SITES IDENTIFIED**
 - BASED ON ANTICIPATED INCREASE IN OVERSIGHT FUNDING FROM CONGRESS**
 - STATIC OVERSIGHT FUNDING WILL REQUIRE REDUCED OR STRETCHED OUT PROGRAM**
 - FISCAL YEAR 95-96 DRILLING PROGRAM IS BEING FINALIZED**
 - FUTURE FY DRILLING IS IN THE PLANNING AND DEVELOPMENT STAGE**



PROACTIVE OVERSIGHT INITIATIVES (CONT.)

AFFECTED UNITS OF LOCAL GOVERNMENT

— CONTROLLED SAMPLE MANAGEMENT

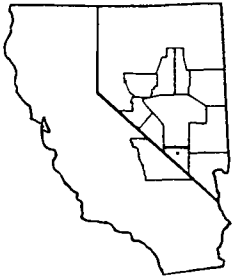
- **COLLECTION AT DRILL HEAD**
- **STORAGE AT THE SAMPLE MANAGEMENT FACILITY**
- **ANALYSIS AT INDEPENDENT SCIENTIFIC LABORATORIES**



COMMENTS ON/CONCERNS WITH DOE PROGRAM

AFFECTED UNITS OF LOCAL GOVERNMENT

- **MAJOR CONCERN AT PRESENT IS DOE'S PROPOSED PROGRAM APPROACH AND ITS IMPACT ON SUITABILITY/ LICENSING**
- **IN PAST HAS BEEN A LICENSING/CONSTRUCTION PROJECT RATHER THAN A SCIENTIFIC CHARACTERIZATION PROGRAM**
- **UNWARRANTED OPTIMISM**



COMMENTS ON/CONCERNS WITH DOE PROGRAM (CONT.)

AFFECTED UNITS OF LOCAL GOVERNMENT

- **LACK OF ADEQUATE COORDINATION OF SCIENTIFIC EFFORT**
 - **EFFECTIVE, AUTHORIZED CHIEF SCIENTIST WOULD IMPROVE PROGRAM**

- **COST AND EMPHASIS ON TBM PROGRESS PRECLUDES SUFFICIENT DATA GATHERING**
 - **PNEUMATIC CONTINUITY**
 - **INSUFFICIENT SURFACE-BASED TESTING EFFORT**



CURRENT MAJOR ISSUES

AFFECTED UNITS OF LOCAL GOVERNMENT

- **PROPOSED PROGRAM APPROACH**
- **NEW EPA STANDARD**
- **RE-EVALUATION OF DOE SITING GUIDELINES
(10 CFR 960)**
- **GROUNDWATER TRAVEL TIME**
 - **SITE SPECIFIC METHODOLOGY**
 - **DEFINITION/IDENTIFICATION OF DISTURBED ZONE**



CURRENT MAJOR ISSUES (CONT.)

AFFECTED UNITS OF LOCAL GOVERNMENT

- **FUTURE CLIMATE**
- **PNEUMATIC PATHWAYS**
- **THERMAL LOAD**
- **ESF DESIGN CONTROL AND QA**
- **ENGINEERED BARRIER SYSTEM PERFORMANCE**



CURRENT MAJOR ISSUES (CONT.)

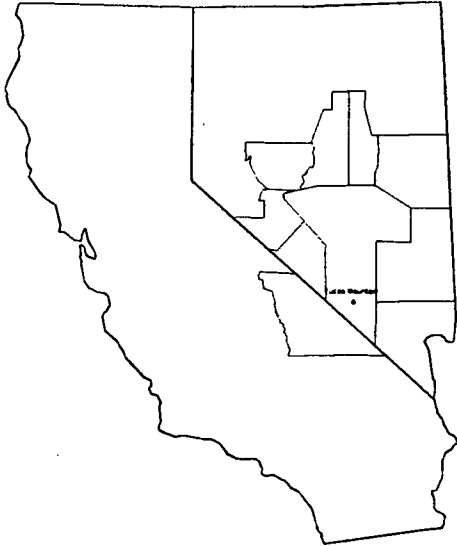
AFFECTED UNITS OF LOCAL GOVERNMENT

- **LIMITED RESOURCES PREVENT MONITORING ALL ISSUES. THE AULG ALSO RELY ON OTHERS SUCH AS NRC STAFF, STATE OF NEVADA, AND NWTRB
EXAMPLES INCLUDE:**

-EROSION

-SEISMIC HAZARDS

-VULCANISM



PRESENTATION TO THE NUCLEAR REGULATORY COMMISSION ON THE PROPOSED PROGRAM APPROACH AND LSS

**MALACHY R. MURPHY, REGULATOR AND LICENSING ADVISOR
NUCLEAR WASTE REPOSITORY PROJECT OFFICE
NYE COUNTY, NEVADA
SEPTEMBER 9, 1994**



PROPOSED PROGRAM APPROACH (PPA)

AFFECTED UNITS OF LOCAL GOVERNMENT

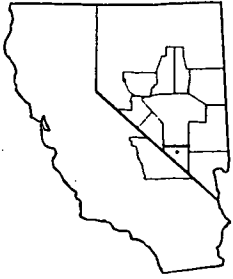
- **PPA IN ITS CURRENT FORM IS NOT ACCEPTABLE**
- **TWO MAJOR CONCERNS ARE:**
 1. **PREMATURE TECHNICAL SITE SUITABILITY DETERMINATION PRIOR TO THE COMPLETION OF CHARACTERIZATION, AND PARTICULARLY WITHOUT THE BENEFIT OF A COMPLETED, COMPREHENSIVE SURFACE-BASED TESTING PROGRAM**



PROPOSED PROGRAM APPROACH (PPA) (Cont)

AFFECTED UNITS OF LOCAL GOVERNMENT

2. **HAS NOT BEEN DEMONSTRATED THAT A LOADED REPOSITORY, MAINTAINED IN A STATE OF READINESS FOR RETRIEVAL, WILL ALLOW MEANINGFUL TESTING OF CRITICAL LONG-TERM WASTE ISOLATION ISSUES (SUCH AS THERMAL LOAD DESIGN, CLIMATE CHANGE, AND GAS PHASE CONTAINMENT)**



PROPOSED PROGRAM APPROACH (PPA) (Cont)

AFFECTED UNITS OF LOCAL GOVERNMENT

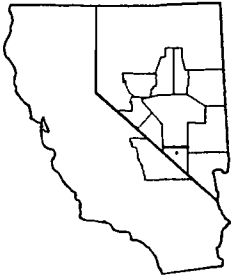
- **SUFFICIENT DATA, AND CAREFUL AND CONSERVATIVE ANALYSES, WILL NOT BE AVAILABLE BY 1998 TO ALLOW SCIENTIFICALLY SOUND CONCLUSIONS**
 - **MANY ESSENTIAL TESTS WILL NOT EVEN HAVE BEGUN**
 - **THE SURFACE-BASED TESTING PROGRAM (SBT) WILL OPTIMISTICALLY BE ONE TO ONE AND A HALF YEARS FROM COMPLETION**
 - **ESF HEATER TESTS WILL NOT HAVE BEGUN**



PROPOSED PROGRAM APPROACH (PPA) (Cont)

AFFECTED UNITS OF LOCAL GOVERNMENT

- **A COMMITMENT TO WASTE RETRIEVAL HAS LOW CREDIBILITY**
 - **THE TECHNICAL PROGRAM FOR DEVELOPMENT OF MONITORING AND RETRIEVING TECHNOLOGY HAS NOT BEEN DESIGNED AND THE COSTS HAVE NOT BEEN BUDGETED**
 - **UNLIKELY THAT THE COUNTRY WILL COMMIT TO THE EXPENSE OF RETRIEVAL TECHNOLOGY, WHICH WILL ONLY BECOME NECESSARY IF THE SITE IS DEEMED UNSUITABLE AFTER LONG-TERM CONFIRMATORY TESTING**



PROPOSED PROGRAM APPROACH (PPA) (Cont)

AFFECTED UNITS OF LOCAL GOVERNMENT

- **DOE MUST STATE, CLEARLY AND CONCISELY, ITS OVERALL SAFETY CASE**
- **DOE MUST ANSWER IN DETAIL, WITH SOUND TECHNICAL SUPPORT, QUESTIONS POSED BY THE NRC STAFF, THE NWTRB, THE STATE, THE AULG, AND OTHERS**



PROPOSED PROGRAM APPROACH (PPA) (Cont)

AFFECTED UNITS OF LOCAL GOVERNMENT

- **DOE MUST DISCLOSE SPECIFICALLY WHAT DATA AND ANALYSES WILL BE RELIED UPON FOR SITE SUITABILITY DETERMINATION AND WHAT TESTS AND/OR ANALYSES WILL BE DEFERRED**
- **LICENSE FIRST AND CHARACTERIZE LATER IS NOT ACCEPTABLE IN VIEW OF APPARENT SITE SENSITIVITY TO WASTE ISOLATION ISSUES THAT ARE LIKELY TO REMAIN UNRESOLVED BECAUSE OF LIMITED DATABASES**



LICENSING SUPPORT SYSTEM

AFFECTED UNITS OF LOCAL GOVERNMENT

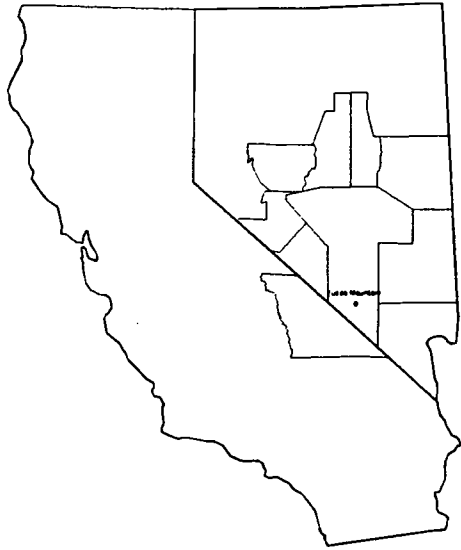
- **THE AULGs FULLY SUPPORT THE LSS**
- **LSS IS MORE CRITICAL TO THE ABILITY OF SMALL OVERSIGHT ENTITIES, SUCH AS THE AULGs, THAN TO DOE OR NRC**
- **AULGs TAKE COMFORT FROM THE REMARKS OF THE MEMBERS OF THE COMMISSION AT 6/6/94 MEETING WITH DOE**
- **MOST CRITICAL ISSUE IS NRC (LSSA) MANAGMENT AND CONTROL OF LSS AFTER ITS DEVELOPMENT AND IMPLEMENTATION**



LICENSING SUPPORT SYSTEM

AFFECTED UNITS OF LOCAL GOVERNMENT

- **WILL NOT WILLINGLY GIVE UP THE BENEFIT OF THE NEGOTIATED BARGAIN**
- **SUPPORT CONSENSUS COMPROMISE ARRIVED AT IN APRIL**
- **INFOSTREAMS CAN BE A USEFUL VEHICLE FOR DEVELOPMENT OF LSS**
- **DEVELOPMENT OF PILOT PROJECT LSS FOR USE IN MPC CERTIFICATION PROCEEDINGS WOULD BE A USEFUL WAY TO TEST AND DEBUG THE SYSTEM**



PRESENTATION TO THE NUCLEAR REGULATORY COMMISSION ON TRANSPORTATION ISSUES

**ABIGAIL C. JOHNSON
NUCLEAR WASTE PROGRAM OFFICE
EUREKA COUNTY, NEVADA
SEPTEMBER 9, 1994**



AULG Transportation Concerns

AFFECTED UNITS OF LOCAL GOVERNMENT

- **Public health and safety**
- **We are at the mouth of the transportation funnel**
- **We are committed to full and public participation with DOE and NRC**



AULG Transportation Activities

AFFECTED UNITS OF LOCAL GOVERNMENT

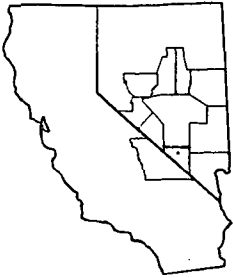
- **Baseline data development**
- **Highway and rural transportation network risks and analysis**
- **Analysis of current and potential new rail corridors.**



MPC Implications for AULGs

AFFECTED UNITS OF LOCAL GOVERNMENT

- **90% reliance on rail, but still 10% on highway; we must plan for both**
- **Need for DOE to involve railroad industry in cask development and transportation planning**
- **Can the nation's rail network infrastructure handle a 125 ton MPC?**



Public Trust and Confidence

AFFECTED UNITS OF LOCAL GOVERNMENT

- **Public trust is a key element to a successful repository program**
- **DOE to rural Nevadans:
"Don't trust us; trust the NRC"**
- **NRC should increase its visibility by holding annual workshops in Nevada**
- **Don't let DOE's schedule drive the MPC certification process rather than safety; public health and safety must be demonstrable**



Transportation and NEPA

AFFECTED UNITS OF LOCAL GOVERNMENT

- **AULGs are committed to full participation with DOE and NRC on all aspects of NEPA**
- **As local governments we have information and expertise**
- **Canisters in Nevada must withstand impact of airplane, bomb and the results of the startle effect**
- **Provide local governments and public with full opportunity to participate in and interact with NRC's NEPA process**



Rigorous Enforcement of NRC's Regulatory Responsibilities

AFFECTED UNITS OF LOCAL GOVERNMENT

- **NRC standards for cask performance and safeguards were developed prior to this high-level waste shipping campaign**
- **Standards should fully contemplate long hauls, rural vulnerability, aging infrastructure, current population density**



Rigorous Enforcement of NRC's Regulatory Responsibilities (Cont.)

AFFECTED UNITS OF LOCAL GOVERNMENT

- **Revisit standards to ensure they are adequate and rigorous**
- **Casks should be inspected immediately before transport as well as at time of loading**



Systems Approach

AFFECTED UNITS OF LOCAL GOVERNMENT

- **DOE lacks a systems approach to high-level waste disposal**
- **For example, the potential certification of the MPC without designated rail access to Yucca Mountain**
- **Result can be costly errors and compromising of public health and safety**
- **In licensing and certification, ask DOE for the big picture**



Conclusions

AFFECTED UNITS OF LOCAL GOVERNMENT

- **AULGs want meaningful involvement in NRC's certification and licensing process, including NEPA**
- **We don't want to spend time getting access; we want to participate to ensure our issues are understood and addressed**
- **NRC should increase its visibility and interaction with the public to improve the public's understanding of NRC's role in relation to Yucca Mountain**



PRESENTATION TO THE NUCLEAR REGULATORY COMMISSION ON SOCIOECONOMIC ISSUES

**DENNIS A. BECHTEL, COORDINATOR
NUCLEAR WASTE DIVISION
CLARK COUNTY, NEVADA
SEPTEMBER 9, 1994**



INTRODUCTION

AFFECTED UNITS OF LOCAL GOVERNMENT

- **THE AFFECTED UNITS OF LOCAL GOVERNMENT (AULG) HAVE SIGNIFICANT CONCERNS ABOUT SOCIOECONOMIC EFFECTS ON THEIR COMMUNITIES FROM ACTIVITIES ASSOCIATED WITH THE YUCCA MOUNTAIN PROGRAM**
- **THE NUCLEAR WASTE POLICY ACT OF 1987 ENABLES AULG TO DETERMINE ANY POTENTIAL ECONOMIC AND SOCIAL EFFECTS TO AN AULG AND ITS RESIDENTS FROM YUCCA MOUNTAIN [SECTION 116(c) (1) (B) (i)]**



INTRODUCTION (CONT.)

AFFECTED UNITS OF LOCAL GOVERNMENT

- **10 CFR 960 (SITING GUIDELINES) TECHNICAL GUIDELINES INCLUDE SOCIOECONOMIC IMPACTS AS ISSUES TO BE CONSIDERED IN SITE EVALUATION**
- **THE BRIEFING WILL ADDRESS THE SOCIOECONOMIC EFFECTS AND ASSESSMENT EFFORTS THAT ARE BEING UNDERTAKEN BY THE AULGs**



MAJOR SOCIOECONOMIC ISSUES

AFFECTED UNITS OF LOCAL GOVERNMENT

- **A MAJOR PROJECT SUCH AS YUCCA MOUNTAIN CREATES SERVICE DEMANDS THAT CAN IMPACT COMMUNITIES, ESPECIALLY SMALLER ONES WITH MINIMAL INFRASTRUCTURE**
- **THE DEPENDENCE OF MANY NEVADA COMMUNITIES ON TOURISM REQUIRES THE AULG TO BE SENSITIVE TO POTENTIAL ADVERSE ECONOMIC AFFECTS**



MAJOR SOCIOECONOMIC ISSUES (CONT.)

AFFECTED UNITS OF LOCAL GOVERNMENT

- **NEVADA'S EXCELLENT QUALITY OF LIFE HAS ATTRACTED RETIREES AND OTHERS TO THE SILVER STATE; THE CONCERN IS THAT YUCCA MOUNTAIN PROGRAM ACTIVITIES COULD REDUCE THE DESIRABILITY OF SOUTHERN NEVADA AS A PLACE OF RESIDENCE**
- **A SIGNIFICANT NEED IS HAVING REGULATORY AGENCIES RECOGNIZE THE IMPORTANCE OF SOCIOECONOMIC ISSUES ON THOSE LOCALES POTENTIALLY GREATLY IMPACTED BY THIS PROGRAM**



WHAT ARE SOCIOECONOMIC EFFECTS?

AFFECTED UNITS OF LOCAL GOVERNMENT

- **"STANDARD EFFECTS"- THE IMPACTS ON SERVICES IN A COMMUNITY CREATED BY THE YUCCA MOUNTAIN PROGRAM**
- **"SPECIAL" OR "STIGMA" EFFECTS- POTENTIAL IMPACTS TO AN ECONOMY, QUALITY OF LIFE, PROPERTY VALUES OR OTHER ISSUES FROM THE PROGRAM**



STANDARD EFFECTS

AFFECTED UNITS OF LOCAL GOVERNMENT

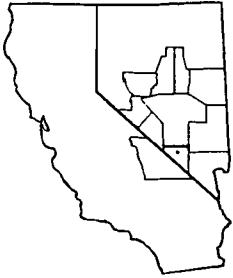
- **IMPACTS ON SERVICE DEMANDS- POLICE, EMERGENCY RESPONSE, SCHOOLS, WATER, TREATMENT FACILITIES**
- **DETERMINATION OF THE COST OF THE EFFECTS**
- **IMPACTS WILL VARY BASED ON THE COMMUNITY AND THE PHASE OF THE PROGRAM**



"SPECIAL" (OR "STIGMA") EFFECTS

AFFECTED UNITS OF LOCAL GOVERNMENT

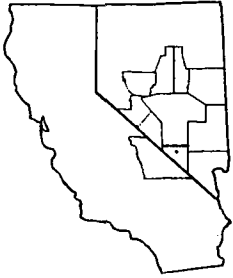
- **THESE RELATE TO POTENTIALLY ADVERSE IMPACTS TO THE ECONOMY OF AN AREA, TO THE QUALITY OF LIFE OF ITS CITIZENS, OR TO OTHER COMMUNITY OR AREA ATTRIBUTES (e.g. PROPERTY VALUES)**
- **EXAMPLES OF ADVERSE SPECIAL EFFECTS**
 - **SANTA FE vs. KOMIS LITIGATION**
 - **GOIANA, GOIAS, BRAZIL**
 - **THREE MILE ISLAND**
- **WHILE OFTEN CONSIDERED AS "PERCEIVED RISKS" SPECIAL EFFECTS MAY WELL BE EMPLOYED IN THE PUBLIC'S DECISION-MAKING**



WHAT IS BEING DONE TO QUANTIFY IMPACTS?

AFFECTED UNITS OF LOCAL GOVERNMENT

- **THE STATE OF NEVADA, NYE AND CLARK COUNTIES ARE COOPERATING IN THE DEVELOPMENT OF A "PROJECT DESCRIPTION SYSTEM" TO ENABLE POTENTIAL DOE PROJECT AFFECTS TO BE ESTIMATED**
- **A ECONOMETRIC MODEL IS BEING REFINED TO EVALUATE "RIPPLE EFFECTS" GIVEN YUCCA MOUNTAIN EMPLOYMENT AND OTHER INPUTS**



WHAT IS BEING DONE TO QUANTIFY IMPACTS? (CONT.)

AFFECTED UNITS OF LOCAL GOVERNMENT

- **SURVEYS ARE BEING CONDUCTED TO ASSESS PUBLIC ATTITUDES AND RESPONSES TO REPOSITORY-RELATED ISSUES**
- **CLARK COUNTY IS REFINING MODELS BY WHICH TO EVALUATE YUCCA MOUNTAIN PROGRAM SERVICE DEMANDS AND COSTS IN AN INTEGRATED FASHION**



SOCIOECONOMIC ISSUES: A SUMMARY

AFFECTED UNITS OF LOCAL GOVERNMENT

- **IN ADDITION TO THE IMPORTANT ON-SITE AND PUBLIC HEALTH AND SAFETY ISSUES, REGULATORS MUST ALSO BE SENSITIVE TO THE MANY POTENTIAL DISRUPTIONS THAT THIS PROGRAM CAN HAVE ON COMMUNITIES AND PEOPLE**
- **THE AULG AS PART OF THEIR OVERSIGHT RESPONSIBILITIES ARE DEVELOPING THE TOOLS AND CAPABILITIES TO ASSESS COMMUNITY-WIDE IMPACTS;**



SOCIOECONOMIC ISSUES: A SUMMARY (CONT.)

AFFECTED UNITS OF LOCAL GOVERNMENT

- **THE AULG WOULD LIKE THE OPPORTUNITY TO BRIEF NRC STAFF ON SOCIOECONOMIC IMPACT ASSESSMENT METHODOLOGIES AND ISSUES IN AN INTERACTIVE WORKSHOP SETTING**
- **DURING THE NEGOTIATED LSS RULEMAKING, SOCIOECONOMICS WAS INCLUDED IN THE TOPICAL GUIDELINES; IN A VERSION REVIEWED BY THE LSSARP IN OCTOBER, 1993 IT HAS BEEN ELIMINATED WHICH WE FEEL IS INAPPROPRIATE**

**The Department of Energy's
Proposed Program Approach:
Opportunities and Risks**

**Dr. John E. Cantlon
Chairman, Nuclear Waste Technical Review Board**

**Dr. Garry D. Brewer
Member, Nuclear Waste Technical Review Board**

U. S Nuclear Regulatory Commission

*September 9, 1994
Rockville, Maryland*

Good morning, ladies and gentlemen. It is a pleasure to be here today. My name is John Cantlon, and I am Chairman of the U.S. Nuclear Waste Technical Review Board. I am vice president emeritus for research and graduate studies and former dean of the graduate school at Michigan State University. My area of expertise is environmental biology. Accompanying me is Board member Garry Brewer, who will make part of our presentation today. Dr. Brewer is professor of resource policy and management and dean of the School of Natural Resources and Environment at the University of Michigan.

On March 14 of this year, Warner North and I talked to you about the Board and its perspectives on the Department of Energy's (DOE's) program to manage civilian spent fuel and defense high-level waste. Today, Dr. Brewer and I would like to focus more specifically on the so-called "proposed program approach" (PPA) which the DOE is developing to guide its high-level waste program in the years ahead. To begin, I will provide you with an overview of the PPA — as we see it — including our interpretation of the fundamental goals the approach is trying to achieve. Then, Dr. Brewer will summarize the Board's views and concerns regarding the PPA. Finally, we would like to discuss with you some questions about site suitability that the Board will try to answer in its meeting next month. Your regulatory perspectives on these questions would be useful to us in our review.

Overview of the PPA.

Earlier this year, we submitted a number of questions to the DOE about the PPA, and the DOE responded in writing on June 30 and in a presentation at the Board's July meeting. Since we have already shared the written responses with you, I will not spend the time here going over the details of the exchange. Instead, let me try to summarize some of the more important conclusions we have been able to draw at this early stage.

The PPA continues to evolve, and many important decisions have not yet been made. Later this month, some key information should be released in the DOE's FY 1995 technical implementation plan, but it will probably be at least another year before the details, technical justifications, and schedules for testing and other site characterization efforts in 1996 and beyond have been worked out.

The fundamental goals of the PPA appear to be the following:

- Obtain increased funding from Congress.
- Reduce the scope of the scientific investigations to be pursued prior to application for construction authorization to match the funding and schedule constraints within which the DOE feels site characterization must be carried out.
- Establish achievable, near-term intermediate decision points leading to a site-suitability decision. Success in reaching such intermediate decision points will be used to demonstrate both program progress and effective use of funds.

- Defer or delete some of the site-characterization studies called for in the 1988 Site Characterization Plan related to the long-term waste isolation capability of the repository. Use "conservative" or "bounding" assumptions and analyses to demonstrate repository safety in both the DOE's site-suitability determination and its application for authorization to construct the repository. Verify those assumptions and analyses by further testing and analysis *after* repository construction begins, and continue the testing and analysis into the operating period.
- Extend the repository design retrievability period to 100 years.

Another recent change in the program is that the DOE no longer assumes that a monitored retrievable storage facility will necessarily be part of the overall high-level waste management system, although it is not clear to the Board that this change is directly related to the PPA.

Although we have not completed our analysis of the PPA, we have identified some preliminary views and concerns about it, which Dr. Brewer will now summarize for you.

The Board's views and concerns.

Based on what we now know about the PPA, we can say that there appear to be risks as well as opportunities associated with this new approach. Among the risks are the increases in near-term technical and scientific uncertainties that would result from less data and less analysis being provided "up front" in 1998 for the DOE's site-suitability determination and in 2001 for the initial license application to construct a repository. The potential opportunities include the chance to streamline the program, to better focus on the most critical information needs, and to demonstrate progress by achieving clear, near-term goals leading to a site-suitability determination.

We believe the NWTRB can best meet its congressional mandate of assessing the DOE's new approach at this early point by reiterating in somewhat more explicit language some of the fundamental and still relevant technical and scientific recommendations we have made during the past several years.

First, to expedite the determination of site suitability and initiation of long-term underground tests, underground exploration needs to proceed in a more timely fashion. Many of the important structural features of the site, especially faults, are nearly vertical. Consequently, they cannot be adequately explored by a few vertical boreholes drilled from the surface. Getting underground to look at the site's complex geology at the repository level is critical in determining whether the site is suitable for repository development. *The Board remains concerned about continuing delays in the excavation of the exploratory facility.* Start-up of the tunnel boring machine has been delayed as has purchase of supporting higher-capacity muck-removal equipment. Further delays of this type will make it difficult, if not impossible, to complete an adequate amount of underground exploration to support a site-suitability finding in 1998 and the 2001 license

application. These delays will also hold up initiation of the long-term repository-level experiments needed for later repository design and licensing decisions.

At the same time, it is important to continue critical components of the surface-based program. Surface mapping, trenching, and geophysical studies, for example, are important for deciphering the volcanic and seismic potential of the site. Surface-based drilling helps determine vertical variations in site characteristics, while underground exploration provides more information about lateral variability. Taken together, these sources of information will contribute to a 3-dimensional picture of the site and its geologic history.

Second, look at the management of high-level radioactive waste as a system and set priorities accordingly. A program plan should be developed from a sound analysis of the system, including a total system performance assessment. The plan should also be based on a coherent waste isolation strategy, i.e., a determination of the barriers the DOE will rely on for waste isolation and the degree of reliance to be placed on each. Such a plan will provide a basis for prioritizing activities and will help avoid wasteful expenditures or errors that may require costly and time-consuming remediation. Sound planning and prioritization of activities, based on an overall systems analysis, are essential if the PPA is to succeed.

Third, we recommended that the DOE set realistic schedules for achieving important intermediate milestones such as getting underground and determining site suitability. While interim milestones have now been identified, the Board remains very concerned about the schedules. We agree that schedules are vital to maintain program momentum and measure progress, but important technical and scientific requirements cannot be truncated or eliminated simply to meet arbitrary deadlines. Doing so would risk later delays in repository development or serious uncertainties concerning the suitability of the site. We believe that *unrealistic* schedule deadlines serve only to increase frustration and erode confidence when they are missed.

A long-standing problem has been the need to derive and prioritize realistic plans and schedules for exploration and testing based on the decisions that will have to be made. Ideally, the critical decisions that need to be made should be identified first. Then, the information needed to make those decisions and the extent of exploration and testing required to produce the information should be determined. Finally, schedules can be developed based on the required scope of exploration and testing. It is not evident that the planning process associated with the PPA is working in this manner. On the contrary, the DOE may view the target dates for its site suitability decision and for submittal of a license application so rigidly that attempting to meet those dates will constrain the amount of technical information to be collected.

Fourth, we recommended that the DOE increase the resources available for research and development of a robust, long-lived waste package. The use of engineered barriers, including a robust, long-lived waste package, may help reduce uncertainties in overall repository performance and enhance the safety of the repository system for thousands of

years. It appears the OCRWM plans to increase funding for waste package development, including long-term corrosion research. We strongly endorse this decision.

Fifth, we recommended that the DOE allocate program funds so that more money goes to scientific and technical work and less to indirect overhead and infrastructure costs. The DOE should provide a coherent organizational structure to enhance the effectiveness of the people and organizations involved with the program. Dr. Dreyfus already has completed a reorganization of federal personnel at OCRWM headquarters and at the Yucca Mountain Site Characterization Office, and he has indicated that in the future a greater share of available funds will be going to scientific and technical work than to overhead and related costs. The Board hopes the changes that have been initiated will have the intended results, but we are concerned that a number of high-level program managers are retiring. We hope that these vacancies can be filled promptly with experienced professionals to ensure continued leadership of the program.

The Board's biggest concern about the PPA is whether the reduced scope of exploration and testing will provide adequate information to support a defensible DOE site-suitability determination and a fully adequate application for construction authorization. Until the DOE identifies the technical activities it plans to curtail, defer, or delete, and the basis for the changes, the Board cannot fully judge the risks posed by the PPA. It is clear, however, that there is not enough calendar time remaining between excavation of the ESF at the repository level and the 1998 site-suitability decision and the 2001 date for application for construction authorization to complete long-term heater tests, corrosion studies, and other activities that may require several years to produce adequate information. A key feature of the PPA is the DOE's plan to substitute conservative assumptions and analyses for data that are not available when needed. It is currently unclear how much this strategy will increase the risk of later delays in repository development or serious uncertainties concerning the suitability of the site.

The Board retains its concern about the "schedule-driven" nature of the program, even as modified by the PPA. There appears to be no "slack" in the schedule to accommodate problems very likely to be encountered during exploration and testing.

And now, Dr. Cantlon will discuss the Board's upcoming meeting on the DOE's plans for evaluating site suitability and the implications of the PPA for that evaluation.

Review of site suitability.

The DOE recently announced its proposed process for evaluating the suitability of the Yucca Mountain site. This process includes development and analysis of technical information by the DOE, external review of that information (possibly by the National Academy of Sciences), evaluation by the DOE of compliance with its siting guidelines, and a series of decisions by the DOE regarding the suitability of the site.

The following are some further questions the Board will address in its review of site suitability issues at its meeting next month in Las Vegas. The Board will explore

these issues from its technical perspective. However, we recognize that the NRC also has a large role to play in determining the adequacy of answers to these questions. For example, the Nuclear Waste Policy Act calls for the NRC to make preliminary comments on the sufficiency of the DOE's site-characterization analysis at the time the DOE recommends, to the President, development of the site as a repository. Hearing your regulatory perspective on these questions, including the experience of licensing boards in reviewing similar issues, would be very useful to the Board.

First, what technical information is needed to evaluate the suitability of the Yucca Mountain site? As Dr. Brewer noted, the Board's biggest concern about the PPA is whether the proposed scope and schedule of exploration and testing will provide adequate information to support a defensible DOE site-suitability determination and an adequate application for construction authorization. Only after the technical information needs and the DOE's plans to meet them are identified can we judge whether the PPA can fulfill those needs.

Second, when are "conservative" or "bounding" assumptions and analyses defensible? Under the PPA, the DOE plans to rely on "conservative" or "bounding" assumptions and analyses to substitute for data that cannot be acquired before the 1998 site-suitability or 2001 license application dates. In general, such an approach may prove very useful. However, it is necessary to collect enough data to show that the assumptions are truly conservative, that the importance of each assumption in the overall evaluation of repository performance is understood and, for the more critical assumptions, that the degree of conservatism can be estimated.

Third, can post-1998 data be used during licensing? The DOE has told the Board that it views the end of 1998 as the last practical date for development of data to be included in its 2001 application for construction authorization. The DOE estimates that approximately three years will be needed for documentation, analysis, and peer review of data, and incorporation of the data into the license application. This means that the PPA would produce only four more years of data for use in supporting a license application. Prospects for success of the PPA would be enhanced if the DOE could continue important testing after 1998 and could have in place an agreed-upon mechanism for amending or supplementing the license application to incorporate post-1998 data. This is especially critical for studies not yet initiated.

Summary

In closing, it appears to us that the PPA is an attempt by the DOE to make the best of what has been a bad situation. For reasons that need not be repeated here, too much time has elapsed in which too little work has been satisfactorily completed in this program. The DOE seems to believe that the PPA is a *politically* more acceptable way to proceed with its high-level waste program, and the Board sees no reason to disagree with that judgment. However, from a technical and scientific perspective, there are real and substantial risks associated with the PPA. If the PPA is to succeed, it must produce a large amount of information in a short time. Careful planning and prioritization of

exploration and testing activities will be important, and schedule flexibility will be essential. The ultimate objective of the program must be the development of the necessary technical information, *not* meeting the scheduled decision points of the PPA.

We will be happy to try to respond to any questions you might have.

STATEMENT OF
ROBERT R. LOUX, EXECUTIVE DIRECTOR
NEVADA AGENCY FOR NUCLEAR PROJECTS
NUCLEAR WASTE PROJECT OFFICE
TO THE
UNITED STATES NUCLEAR REGULATORY COMMISSION
ROCKVILLE, MARYLAND
SEPTEMBER 9, 1994

We appreciate the opportunity to update the Commission regarding our views on some aspects of the national high-level nuclear waste management and disposal program as they relate to the Commission's pre-licensing and regulatory responsibilities. This meeting is timely in that the Office of Civilian Radioactive Waste Management (OCRWM) is in the process of developing significant changes in its waste program strategy that it plans to begin fully implementing in FY 1995, although much of the strategy has already been incorporated into its program planning. The planned changes may require revision of the NRC's waste management program approach, additional direction from the Commission to the staff, and some of the changes also may require regulatory response.

Today, I will be discussing a number of topics associated with the OCRWM's Proposed Program Approach, which was described to you in general terms by Department of Energy (DOE) representatives on June 6, 1994, and which was the subject of a July 1, 1994, staff memo to the Commission on the staff's initial review of the Proposed Program Approach. As part of the discussion, I also will be suggesting some actions for the Commission's consideration regarding elements of the Proposed Program Approach.

Multi-Purpose Container (MPC):

In the course of the past year, the MPC concept has become the most urgent and pervasive single element of the DOE's program. It has changed thinking about waste handling, acceptance, storage, transportation, criticality, waste package and repository design, waste emplacement, repository thermal loading, repository sealing and closure, and even site characterization itself. All of these are elements to which the NRC must react in some manner.

DOE has imposed urgency on the MPC development, NRC certification, and deployment process in an effort to begin delivery of MPCs to reactors for on-site storage by 1998, thus demonstrating progress toward waste acceptance by that date. This would be more than three years prior to DOE's planned late 2001 submittal of a repository license application to the NRC.

DOE intends to submit the MPC application to NRC for a 10 CFR Part 72 Certificate of Compliance in March, 1996, and expects to receive the certification and begin MPC deployment for spent fuel storage by January, 1998. This schedule is considered critical to the program in order to satisfy DOE's belief that it has an obligation to begin accepting spent fuel by 1998. DOE also intends to submit the MPC application, in March, 1996, for a 10 CFR Part 71 Certificate of Compliance for use in transport of spent fuel. But, it expects that this certificate will be granted by NRC within about 15 months, and prior to the Part 72 certificate. According to the DOE strategy, use of the MPC for disposal will be considered in a repository license application.

Discussions have already begun between DOE and NRC staff on the MPC certifications, and according to SECY-93-265, September 22, 1993, Issues in the Review of a Dual-Purpose Cask for Transportation and Dry Storage of Spent Fuel, "the staff believes the current regulatory scheme is adequate to address dual purpose cask initiatives." However, according to the staff, "The review criteria for the disposal portion related to the multi-purpose canister must await further development of the repository design by DOE."

A major issue in the certification process is DOE's desire to increase MPC capacity by NRC's allowance of burn-up credit for spent fuel. In both SECY-93-265 and meetings with DOE, NRC staff has pointed out the difficulty of accurately calculating specific burn-up characteristics, the need for benchmark experiments, and the need for validated technology to verify the specific burn-up characteristics of individual spent fuel assemblies.

While NRC rules do not preclude burn-up credit, we believe that extreme conservatism must be employed in any consideration of burn-up credit and criticality safety since water ingress must be assumed in both transportation and disposal, and on a case-by-case basis for storage. Also, it is unlikely that the major uncertainties and research and development needs identified by the staff can be resolved acceptably in the short period of time which DOE has allocated for MPC development, certification and deployment. Furthermore, it should be kept in mind that utilities are tending toward higher fuel enrichment and higher fuel burn-up in reactors, which will affect burn-up credit, shielding, weight, and capacity considerations for the MPC in ways that can not be fully known at present because more than 2/3 of the fuel expected

to be used in existing reactors has yet to be fabricated.

The increased capacity provided by burn-up credit for the larger design, 125 ton MPC may afford some cost and operational benefit, however, the payload is only reduced by about 20 percent if burn-up credit is not applied. This capacity advantage from burn-up credit should not be permitted if it results in any increased uncertainty in MPC safety or risk to the public from the waste management and disposal system. The smaller design, 75 ton MPC does not rely on burn-up credit to achieve optimum capacity.

The MPC concept already has become embedded in Yucca Mountain site characterization and repository considerations. For example, in-drift emplacement of the large MPC waste package has replaced vertical emplacement of smaller capacity packages in the drift floor, or possibly horizontal emplacement in drift walls, as the functional planning basis for site characterization evaluations and repository design. This, in turn, has driven decisions such as the ramp grade in the Exploratory Studies Facility (ESF), since the ESF access ramps are intended for use in a repository. It has also constrained evaluations of repository thermal loading and thermal load distribution options, effects of coupled processes on waste isolation, human intrusion scenarios, backfill and repository sealing options, retrieval options, and numerous other site characterization considerations that are important to repository safety.

Overall, DOE's early initiative to deploy the MPC for spent fuel storage at reactors, which may not be authorized by the Nuclear Waste Policy Act, has constrained ESF and repository design options and ongoing revisions of planned site investigation activities to the extent that some alternative repository safety considerations are being foreclosed.

On the other hand, DOE argues that no final decision has been made to deploy the MPC (however, the decision will have been made prior to repository license application). The DOE is aware that it is proceeding at risk with site characterization and repository planning, and maintains that if the MPC is not acceptable for repository use, the waste can be repackaged into an acceptable form at the repository, albeit at considerable additional expense and increased worker exposure and public risk. But, this rationale does not account for irreversible ESF construction, and the imposition of the assumption of an MPC waste package in site characterization investigation planning and performance allocations and assessments.

From our point of view, it is important, at the current stage of DOE planning, that the Commission evaluate the broad safety and regulatory compliance implications of the early deployment of the MPC and its conceptual incorporation, as the waste package, into site characterization and repository planning and design.

Site Characterization and Licensing Approach:

In an attempt to meet its projected 2010 date to begin waste emplacement in a repository, DOE has modified its approach to site characterization, licensing, and repository operation and closure.

In general, relative to NRC licensing, the Proposed Program Approach involves DOE submitting a license application for a construction authorization in June, 2001; receipt of a construction authorization in September, 2004; an updated license application to receive and possess the waste in September, 2008; a license amendment to receive and possess waste, and initial waste emplacement operation in September, 2010. In place of a waste retrieval period of up to fifty years after first emplacement, the DOE is now speaking in terms of a performance confirmation period of up to 100 years prior to seeking a license amendment for repository closure.

In a June 30, 1994 letter, and a July 12 presentation, DOE clarified some aspects of its Proposed Program Approach in response to earlier questions from the Nuclear Waste Technical Review Board (attachment 1 and attachment 2).

On page 18 (attachment 2) of its July 12 handout, DOE summarized its licensing approach as follows:

- "For initial license application for construction authorization
 - Primary focus on operational safety and waste package containment
 - Lower priority given to tests that support demonstration of long-term performance
- Further testing deferred to performance confirmation program"

Pages 7 and 8 (attachment 2) of the July 12 handout further summarize the information planned by DOE to be available at the time of the license application and application to receive and possess waste.

In regard to site investigations (page 8), only the three dimensional geologic description of the site is intended to be final at the time of submittal of a license application for construction authorization. Conditions of climate, postclosure tectonics, saturated and unsaturated zone geochemistry and hydrology are intended to be bounded. And, according to page 26 (attachment 2), the range(s) of thermal loading(s) will be bounded.

With submission of an application to receive and possess waste, in 2008, an initial thermal loading decision will have been made (page 26), subject to revision during performance confirmation. All necessary remaining descriptions of site conditions are planned to be in "subfinal" form for the

Commission's review at that time.

The intended status of performance assessment, which is key to demonstration of "reasonable assurance" of regulatory compliance is summarized on page 7. The waste package (presumably the MPC) subsystem performance assessment is expected to be in final form with submission of the license application for construction authorization. The groundwater travel time subsystem performance assessment will be subfinal, and the assessment for the engineered barrier system will be bounded. With the application to receive and possess waste, DOE plans to have final subsystem performance assessments for groundwater travel time and the engineered barrier system.

For total system performance assessment, the plan is to present an assessment with the application for a construction authorization, and follow with continued revisions presumably through the extended performance confirmation period.

The proposed status of performance assessment at the two stages of NRC license review is troubling in that it is difficult to reconcile DOE's intention to provide advanced or final subsystem performance assessments and a credible total system performance assessment with its intention that critical and fundamental site characterization information will only be "bounded" or in "subfinal" form. The implication of this is that, even though the site characterization information is admittedly incomplete, DOE believes the associated uncertainties in the performance assessments should be acceptable to the Commission, and thus, a less-than-expected standard of "reasonable assurance" of compliance with the regulations should be applied in granting both a construction authorization and license to receive and possess waste.

This should be of particular concern to the Commission because 1) the applicant (DOE) is intending to thwart the Commission's authority and dictate its compromised standard of "reasonable assurance" to the Commission; and 2) the intended unavailability of complete required site characterization information to support its license application is a sole and direct result of DOE's self-imposed schedule to begin waste emplacement operations at a repository in 2010.

Waste Confidence Considerations:

The Commission has repeatedly reminded DOE waste program managers that in order to review a repository license application in the 3 years mandated by the Nuclear Waste Policy Act, the DOE's license application must be complete and of high quality. The Commission's Waste Confidence Decision states the following:

"The NRC does not believe that it is likely that NRC's emphasis on completeness and quality of the license application will contribute to substantial delays in submitting the license application and in the licensing proceeding that would delay repository availability much beyond 2010 at the Yucca Mountain site.

"In any case, the Commission remains convinced that the benefits to the repository program of submitting a high-quality license application would outweigh the cost of delay in preparing the application. NRC has always placed great emphasis on early resolution of potential licensing issues in the interest of expeditious review of the license application and timely repository availability. It is in the same spirit of timely repository operation that the Commission is urging greater attention to quality than to meeting the schedule for submittal of the license application. NRC believes that a complete and high-quality license application offers the best available assurance that timely repository licensing and operation can be achieved.

"In addition to expediting the review of the application, a high-quality license application and site characterization program should enhance overall confidence that any site granted a construction authorization will prove to be reliable during the period of performance confirmation. It will also increase public confidence that the program is being carried out in a thorough and technically sound manner." 55 FR No. 181, September 18, 1990, p. 38505.

Even in its current general conception, the DOE's Proposed Program Approach is clearly in conflict with this stated position of the Commission. Although reference was not made to the Commission's Waste Confidence Decision, the NRC staff recently has noted its concern to the Commission regarding license application sufficiency relative to DOE's Proposed Program Approach. The staff stated:

"Although DOE considers this proposed reduction in testing and resulting information to be appropriate for the license application, the staff believes that such an application would contain greater uncertainty. Therefore, such reductions would need to be very carefully examined in the staff's prelicensing reviews and consultations with DOE. An application with greater uncertainty might make the staff's license application review and the Commission's safety finding with reasonable assurance more difficult and controversial." Staff Memo to the Commission, July 1, 1994, Initial Review of U.S. Department of Energy's Proposed Program Approach.

In a July 26, 1994 DOE/NRC Management Meeting, DOE responded

to the NRC staff concerns regarding license application sufficiency (attachment 3). The limited response asserts the "level of detail proposed for initial LA [license application]...should provide adequate basis for NRC review...[and] this level of detail is appropriate for NRC reasonable assurance finding to authorize construction. Prior to granting of the license to receive and possess waste, additional information would be available."

The proposed level of detail for the license application is said to consist of "high confidence in operational safety and in waste package containment for at least 1000 years" and "bounding analyses for long-term performance." This is consistent with the information presented to the Nuclear Waste Technical Review Board that was discussed above, yet in no way, from our point of view, can it be reconciled with the Commission's stated position regarding the need for a "complete" license application.

Given DOE's intent to submit a less-than-complete repository license application, and the attendant risk to timely license application review and repository availability, the Commission should undertake a systematic review of its Waste Confidence Decision to determine the impact of such an occurrence, should it arise.

The Commission should also initiate a formal review of its Waste Confidence Decision for a much more fundamental reason: if, as is implicit in the Proposed Program Approach, the DOE intends to rely on an extended (up to 100 years) performance confirmation period to provide reasonable assurance of acceptable long-term repository waste isolation performance, the Commission's Waste Confidence Finding 2 is no longer valid. Finding 2 states:

"The Commission finds reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and that sufficient repository capacity will be available within 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of any reactor to dispose of the commercial high-level radioactive waste and spent fuel originating from such reactor and generated up to that time."

In reality, under DOE's Proposed Program Approach, the licensed mined geologic repository will function as an underground spent fuel storage facility for up to 100 years, and only then will a decision be made regarding whether disposal has been accomplished. This decision point is far distant in time from the first quarter of the twenty-first century, by which time the Commission has projected the availability of a repository for disposal of spent fuel and highly radioactive wastes. Also, with the Yucca Mountain site, notwithstanding the repository capacity limitation of the Nuclear Waste Policy Act, a disposal decision is dependent on a capacity decision, because the amount and

distribution of the waste in a Yucca Mountain repository affects the repository post-closure performance. Thus, even with a change in the Act to permit more than 70,000 metric tons of waste to be disposed at Yucca Mountain, there would be no assurance until long after 30 years beyond the licensed lifetime of current reactors that waste disposal was available.

The intent of 10 CFR Part 60 is that a disposal decision be made before repository operations begin, and this is consistent with the Nuclear Waste Policy Act. Only if performance confirmation indicates significant and unmitigatable variance from the information used to make the disposal decision would retrieval be invoked, which would signal that disposal had not been accomplished as intended. The Proposed Program Approach ignores this intent and, in reality, reserves a disposal decision until some time many years after licensing when DOE believes sufficient information is available to give reasonable assurance that the long-term performance of the repository will be acceptable. The license amendment for repository closure, in fact, would become the NRC's decision to permit disposal, which not only violates the regulatory scheme of 10 CFR Part 60, but also removes the basis for the Commission's Waste Confidence Decision regarding the time of availability of spent fuel and highly radioactive waste disposal.

"Disposal," according to 10 CFR Part 60, "means the isolation of radioactive wastes from the accessible environment." The Commission's geologic repository licensing rule, 10 CFR Part 60, provides the basis for the Commission's decision to permit disposal. The DOE, in the Proposed Program Approach, inappropriately has chosen the vehicle of "performance confirmation" as a means to complete site characterization, as well as meet the performance confirmation requirement of 10 CFR Part 60. The Commission's regulatory intent in requiring a performance confirmation program is to "evaluate the accuracy and adequacy" of the information used to support the disposal decision, not to generate new and necessary information to support such a decision, as DOE is proposing.

It also would not be appropriate to consider the retrieval period as a time in which new and necessary information to support a disposal decision can be made, since, according to 10 CFR Part 60, "retrieval means the act of intentionally removing radioactive waste from the underground location at which the waste had been previously emplaced for disposal."

National Environmental Policy Act Considerations:

With the Proposed Program Approach, DOE has set its strategy for compliance with the National Environmental Policy Act (NEPA)

and established a schedule for its implementation. This appears on the Key Milestones handout referenced above (attachment 2) relative to performance assessment and site investigations status and schedules.

Three Environmental Impact Statements (EIS) are planned for major elements of the waste management and disposal system. DOE intends to issue a final EIS for the decision to fabricate and deploy the Multi-Purpose Container (MPC) late in 1996, during the period that the NRC is reviewing the Part 72 and 71 applications for certificates of compliance for MPC use in spent fuel storage and transport.

The Final EIS for the repository is planned for September, 2000, and the final EIS for a rail spur to permit MPC rail access to Yucca Mountain is planned for issuance in December, 2005, one year after DOE expects to receive a construction authorization for a repository from the Commission.

In a June 3, 1994, letter to OCRWM Director Daniel Dreyfus, the State of Nevada informed DOE of its position regarding waste program NEPA Compliance:

"For compliance with the spirit and letter of the National Environmental Policy Act, the Office of Civilian Radioactive Waste Management should prepare a single, comprehensive waste management system Environmental Impact Statement to accompany the Secretary's repository site recommendation decision to the President that a site is suitable for development of a geologic repository for spent nuclear fuel and high-level radioactive waste, pursuant to the Nuclear Waste Policy Act, as amended.

"However, since it has proposed to deploy the Multi-Purpose Canister, a major federal action, prior to the time that the Secretary's repository site recommendation can be made, OCRWM should prepare a comprehensive waste management system Programmatic Environmental Impact Statement, for which a Notice of Intent should be issued as soon as possible, and subsequently "tier" EIS's for major program decisions from that EIS, pursuant to National Environmental Policy Act Regulations and Department of Energy National Environmental Policy Act Implementation Regulations.

"The Office of Civilian Radioactive Waste Management Proposed Program Approach, with its plan to develop three separate Environmental Impact Statements, first for a decision regarding fabrication and deployment of the Multi-Purpose Canister, then for the Secretary's recommendation of a site for development of a geologic repository, and finally for the decision to construct a rail access spur to Yucca Mountain, should Yucca Mountain be found suitable for development as a

repository, is not supportable pursuant to the intent and requirements of the National Environmental Policy Act of 1969."

The rationale for this position was attached to the letter. To date, we have received no formal response to this position statement from OCRWM.

The Commission also must support its decisions regarding MPC certificates of compliance for spent fuel storage and transport casks, and a repository license with NEPA documentation.

Regarding the MPC, DOE has stated that it intends to provide a detailed MPC Environmental Assessment for the Commission's use in meeting its NEPA requirements. However, it is for the Commission to decide whether an Environmental Assessment is sufficient to support its certification decisions, or whether, because DOE intends the MPC to dominate the spent fuel storage and transportation field for the foreseeable future, an EIS is necessary. According to DOE's schedule, a Final EIS for DOE's decision to fabricate and deploy the MPC will be issued prior to the NRC's Part 71 and 72 certification decisions. In the case of either an Environmental Assessment or an EIS, there will be considerable public interest in the NRC's MPC certification decisions because they will follow closely in time the issuance of what is expected to be a highly controversial Final EIS for DOE's decision to deploy the MPC.

Whether or not the DOE accepts our position regarding the need for a single repository and waste management system EIS, or an early Programmatic EIS from which other EIS's can be tiered, the Commission must decide what the NRC staff role should be in the DOE's NEPA compliance process, in terms of participation in the EIS scoping process and commenting on the Draft EIS's. According to DOE's schedule, scoping for the MPC EIS will begin within the next few months, and the NRC staff should be provided direction regarding its participation in this DOE activity, if it takes place as planned.

The DOE's Proposed Program Approach adds a new dimension to the Commission's responsibilities regarding a repository EIS as well, and the Commission's direction to the staff is also needed in this regard, since the DOE schedule sets scoping for the Yucca Mountain repository to begin in mid-1995. The Nuclear Waste Policy Act provides some direction to the Commission regarding its NEPA compliance in the issuance of a repository construction authorization:

"(4) Any environmental impact statement prepared in connection with a repository proposed to be constructed by the Secretary under this subtitle shall, to the extent practicable, be adopted by the Commission in connection with the issuance by the Commission of a construction authorization and license for

such repository. To the extent such statement is adopted by the Commission, such adoption shall be deemed to also satisfy the responsibilities of the Commission under the National Environmental Policy Act of 1969 [42 U.S.C. 432 et seq.] and no further consideration shall be required, except that nothing in this subsection shall affect any independent responsibilities of the Commission to protect the public health and safety under the Atomic Energy Act of 1954 [42 U.S.C. 2011 et seq.].

"(6) In any such statement prepared with respect to the repository to be constructed under this subtitle, the Nuclear Regulatory Commission need not consider the need for a repository, the time of initial availability of a repository, alternate sites to the Yucca Mountain site, or nongeologic alternatives to such site." 42 U.S.C. 10134.

In Nevada's August 1, 1988, comments on the NRC's Proposed Rule, NEPA Review Procedures for Geologic Repositories for High-Level Waste, (53 FR No. 87, May 5, 1988), we discussed, among other topics, the NRC's independent NEPA responsibilities and concluded that nothing in the above statements from the Nuclear Waste Policy Act excuses or precludes NRC from full compliance with NEPA requirements, independent of whatever limitations are exercised in the DOE's repository EIS.

Now, with the DOE's Proposed Program Approach, which includes the deployment of the Multi-Purpose Container, a less than complete license application in terms of predicted long-term repository safety and performance, and an extended period of time in which waste will, in reality, be in retrievable storage in a repository rather than considered disposed, the scopes of the DOE's and NRC's independent EIS's can be expected to differ greatly. As we pointed out in our August 1, 1988, comments:

"The Commission staff wrongly perceives that "[w]hile the action being taken by DOE is the recommendation to the President of a site for repository development and the action being taken by the Commission is issuance of a construction authorization for a repository, the relevant considerations in the two situations are identical." 53 FR 16139, col. 3."

In reviewing the OCRWM's Proposed Program Approach, the Commission should consider the impacts on the NRC's independent NEPA responsibilities, as well as develop direction for the staff regarding whether, and, if it does, to what extent the staff should participate in the DOE's NEPA processes. It also may be timely for the Commission staff to prepare a new draft Proposed Rule for public review and comment on NRC's NEPA review procedures for a high-level waste repository that anticipates the differing scopes of DOE's and NRC's evaluation responsibilities in their respective EIS's.

DOE's Preliminary Site Suitability Decisions and Technical Site Suitability Decision:

Under the DOE's Proposed Program Approach, eight separate preliminary topical site suitability decisions, using the siting guidelines in 10 CFR Part 960, will be made between 1995 and 1998, with a site-wide technical site suitability decision planned for 1998. A final site suitability determination will be made in 2000 for inclusion in the Secretary's site recommendation report to the President.

The 10 CFR Part 960 guidelines were promulgated by DOE, pursuant to the Nuclear Waste Policy Act, and as required they first received the concurrence of the Commission. Because the Commission has no statutory role in the application of the DOE's siting guidelines and its site suitability decision, the Commission's criteria for concurrence were related to its separate regulatory responsibilities. The criteria were simple:

1. The siting guidelines must not be in conflict with 10 CFR Part 60.
2. The siting guidelines must not contain provisions that might lead the DOE to select sites that would not be reasonable alternatives for an environmental impact statement.
3. The siting guidelines should not contain provisions that are in conflict with the [Nuclear Waste Policy] Act.

The Commission also required that the guidelines recognize NRC's jurisdiction for the resolution of differences between the guidelines and 10 CFR Part 60, and that the Commission's concurrence must be secured for any amendment of the guidelines by DOE.

The Commission's only statutory duty regarding the DOE's site recommendation, other than concurrence in the guidelines used to determine site suitability, is stated in Section 114(a)(1) of the Nuclear Waste Policy Act:

"Together with any recommendation of a site under this paragraph, the Secretary shall make available to the public, and submit to the President, a comprehensive statement of the basis of such recommendation, including the following: ...
(E) preliminary comments of the Commission concerning the extent to which the at-depth site characterization analysis and the waste form proposal for such site seem to be sufficient for inclusion in any application to be submitted by the Secretary for licensing of such site as a repository."

For current purposes of its preliminary site suitability determinations under the Proposed Program Approach, DOE has decided that the guidelines will be applied as written, without amendment, therefore, NRC's only current role in DOE's site suitability / site recommendation process derives from Section E, above, and NRC's duties regarding site characterization under 10 CFR 60.

It appears from the July 1, 1994, staff memo to the Commission on its initial review of the Proposed Program Approach that the staff intends to review DOE's preliminary site suitability decisions. The memo states:

"To be prepared adequately for reviewing DOE's preliminary site suitability decisions, the staff would need to develop those individual review plans, in the License Application Review Plan, that are relevant to each site suitability decision. These review plans would need to be completed as soon before each decision as practical. The staff could then use them in providing guidance to DOE for collecting and analyzing data needed for each decision."

While the staff has certain pre-licensing duties to perform regarding site characterization pursuant to 10 CFR 60, it has no basis or authority to review DOE's site suitability decisions for any reason other than as part of its ongoing review and technical interaction with DOE over sufficiency of data and analyses for a license application. Neither the sufficiency of data and analyses for DOE's separate site suitability decisions, nor the decisions arising from DOE's application of the guidelines are within the purview of the NRC.

If the NRC associates itself with DOE's site suitability decisions, it will have the effect of inserting prejudgment into the licensing process, if the site becomes the subject of a repository license application. The reason for this lies in DOE's siting guidelines. The Qualifying Condition of the Postclosure System Guideline (10 CFR Part 960.4-1) requires a finding by DOE that the site meets the requirements of 10 CFR 60, and the Qualifying Condition of the Preclosure System Guideline (10 CFR Part 960.5-1) requires a finding by DOE that the site meets the requirements of both 10 CFR Part 60 and 10 CFR Part 20. Any association by NRC with these findings, or DOE decisions that contribute to these findings has the effect of the NRC announcing a licensing conclusion prior to a DOE license application and license proceeding.

For this reason, it is important, now, that the Commission make clear to the staff that the NRC has no role in DOE's site suitability decisions other than that for which it derives its authority from 10 CFR Part 60 regarding site characterization.

Conclusion:

The effect of the OCRWM's Proposed Program Approach is that it represents a significant high-level nuclear waste policy change. This is the reason that it is in conflict with the Commission's Waste Confidence Decision and repository licensing regulations, as well as the Nuclear Waste Policy Act.

The policy change is masked by use of the familiar language of the Commission's licensing regulation, 10 CFR Part 60, in a manner different from that intended by the regulation. A repository license from the Commission is intended to be a license for waste disposal. In practice, under the Proposed Program Approach, a repository license is intended by DOE to be a license to operate an underground spent fuel storage facility while site characterization is continued. It does not appear that DOE intends to fully comply with the Commission's expectations for a license application for waste disposal. Nevertheless, it expects the Commission to grant a repository license, while deferring the requisite basis for the license regarding waste disposal until after a long period of performance confirmation.

The DOE's use of an extended performance confirmation period as a means to continue site characterization is at odds with the Commission's intent in requiring a performance confirmation program to begin during site characterization and continue until some time after characterization is completed and a license is issued. It is this misapplication of performance confirmation by DOE that puts a decision many years into the future regarding whether disposal, in the meaning of the regulation, has been accomplished.

The policy shift induced by the OCRWM Proposed Program Approach also complicates the Commission's fulfilling its independent National Environmental Policy Act responsibilities. DOE's current NEPA strategy is driven by its intent for early deployment of the Multi-Purpose Container, before a Yucca Mountain site suitability determination is made and a license application is submitted. Because the MPC is the conceptual link that ties the waste management and disposal system together, the certification and deployment of the MPC are actions related to the selection and licensing of a repository site. Despite the intent to seek certification of the MPC only for spent fuel storage and transport, the MPC has become integral to repository site characterization and design. This likely will necessitate some consideration of the expected disposal system when the Commission is evaluating alternatives to the MPC and its design in its NEPA process associated with MPC certification for storage and transport.

The Commission stated in its 1990 Waste Confidence Decision:

"The Commission anticipates that such events as a major shift in national policy, a major unexpected institutional

development, and / or new technical information might cause the Commission to consider reevaluating its Waste Confidence Findings sooner than the scheduled ten-year review." 55 FR No. 181, September 18, 1990, p. 38475.

With the DOE's implementation of the Proposed Program Approach in its FY 1995 Nuclear Waste Policy Act program, there will have been, in effect, a major policy change, whether, or not, it has been understood or adopted by Congress. As we have described, the change invalidates the Commission's Waste Confidence Decision, and causes the need for the Commission to reconsider its Waste Confidence Decision at this time, as the OCRWM Proposed Program Approach is becoming the basis of a new national high-level nuclear waste policy.

The Proposed Program Approach also impacts the Commission's repository licensing basis to the extent that the original meaning and purpose of a repository license, as intended in the Commission's regulations and the Nuclear Waste Policy Act, will be significantly distorted unless there are adjustments either in the Proposed Program Approach, or in existing nuclear waste laws and regulations.



Department of Energy

Washington, DC 20585

June 30, 1994

RECEIVED
JUN 30 1994
NUCLEAR WASTE T.R.B.

Dr. John E. Cantlon
Chairman
Nuclear Waste Technical Review Board
1100 Wilson Boulevard
Arlington, Virginia 22209

Dear Dr. Cantlon:

Enclosed is the Department of Energy's response to the questions contained in the Nuclear Waste Technical Review Board's letter dated May 17, 1994. To comply with your request for a timely response, we have attempted to capture the current state of the development of the Proposed Program Approach (previously referred to as Scenario A), which is still undergoing review and revision based upon further analysis and external comment.

One of the foremost strategic goals of the Department is to resolve the disconnect between the program's expectations and its ability to achieve them. As these expectations have evolved over the years, the program has lost its ability to meet the original intent of the Nuclear Waste Policy Act of 1982, as amended. Therefore, the Proposed Program Approach is an attempt to realign the program closer to the original intent of the legislative and regulatory framework, and to develop a set of goals and a schedule that has a reasonable probability of success and is consistent with the resources that can be allocated to it.

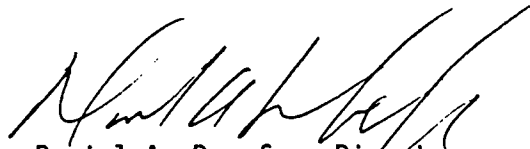
The Proposed Program Approach incorporates many of the Board's past recommendations and is also consistent with the recommendations made by the National Academy of Sciences in its 1990 report, *"Rethinking High-Level Waste."* That report stressed that it is not practical to assume that all information would be available prior to constructing a repository. The Proposed Program Approach lays out a stepwise approach to repository development through a series of decisions based on an increasing knowledge base that is fully consistent with the existing regulatory framework. The approach also addresses the realities of near-term storage of spent fuel.

As we continue to develop the Proposed Program Approach, we welcome the Board's specific comments and recommendations regarding our technical program.



We also intend to continue to inform the Board as we further refine the proposal in response to external comments and more detailed analysis. Please contact me at (202) 586-6842, if you wish to discuss the current status of the proposal further.

Sincerely,

A handwritten signature in black ink, appearing to read 'Daniel A. Dreyfus', is written over the typed name.

Daniel A. Dreyfus, Director
Office of Civilian Radioactive
Waste Management

Enclosure

Department of Energy
Responses to Questions Contained
Nuclear Waste Technical Review Board's Letter
Dated May 17, 1994

In a letter to Daniel A. Dreyfus, the Director of the Office of Civilian Radioactive Waste Management (OCRWM) dated May 17, 1994, the Nuclear Waste Technical Review Board posed ten questions regarding Scenario A, currently referred to as the Proposed Program Approach. The Department of Energy's (DOE) response to these questions is provided below.

Question 1:

(a) What are the specific technical bases for the decisions that led to the development of Scenario A? (b) Will the *Site Characterization Plan* be modified to reflect the new program design? (c) If so, what process will be used to modify it? (d) If not, what will be the status of the existing *Site Characterization Plan* in structuring the technical investigations at Yucca Mountain?

Response:

The basis for the decisions that led to development of the Proposed Program Approach (the successor to "Scenario A") was the recognition by DOE that the expectations for the program could not be achieved given the historical funding levels. Specifically, the realities of the near-term, at reactor, storage of spent commercial fuel must be addressed, and a technical approach to the determination of the suitability of the candidate Yucca Mountain site for a geologic repository must be articulated. This approach must include the production of the requisite environmental and regulatory documents required to support decision making within both budget and schedule constraints. Additionally, DOE recognized that science could not meet unrealistic expectations regarding the level of knowledge and the uncertainty associated with the predictions of long-term repository performance required for licensing.

DOE believes that the Nuclear Waste Policy Act of 1982, as amended (NWSA), intended that site characterization would provide sufficient information for decision making with an implicit understanding that significant uncertainties associated with the prediction of long-term performance of a repository system would remain. The NWSA authorizes the development of geologic repositories through a process that includes a series of decisions which reflect an increasing base of knowledge. The Proposed Program Approach is a strategy to realign the program's direction with the original intent of the legislative/regulatory framework.

The Site Characterization Plan (SCP), issued in 1988, contained an extensive testing, design, and performance assessment program to acquire the data for decision making. The SCP was neither intended nor required to be revised, but, there was explicit recognition of the need to make specific revisions to the program as data is obtained. Implementation of the Proposed Program

Approach will not alter this premise. Changes to the site characterization program are reported semi-annually in the Site Characterization Progress Reports. Changes to the program are controlled through revisions to the Site Characterization Program Baseline and the Site Design and Test Requirements Document, as well as the supporting study plans. When the details of the Proposed Program Approach are further developed, resulting changes to the program will be documented in these and other documents using the program's baseline change control procedures. These changes will be identified over the next several months.

Question 2:

At the January 1994 Board meeting, you said that "institutionalizing stakeholder interaction" was one of the OCRWM program's important short-term goals. (a) How does the DOE decide which decisions are "key decisions," requiring stakeholder input? (b) How and to what extent did the DOE obtain stakeholder and public input prior to formulating Scenario A? (c) Which stakeholders were involved? (d) What specific mechanisms is the DOE using to obtain stakeholder and public input?

Response:

DOE's draft public participation policy recognizes public involvement as a fundamental component of program operations and directs program managers to identify "key decisions" (those where predecisional public input should be solicited) in consultation with their stakeholders. OCRWM is reviewing its plans to ensure they are consistent with the Department's proposed public involvement policy. DOE would welcome any suggestions the Board may have with respect to criteria that could be applied in determining the need for expanded stakeholder involvement.

To meet the time constraints of the Congressional budget cycle, DOE made a number of initial assumptions with regard to the framework of the Proposed Program Approach, which was supported by the Administration's Fiscal Year 1995 Budget Request. In making these assumptions, DOE considered the positions that its many stakeholders had communicated on a continuing basis to program officials. As the proposed strategy was being refined, DOE managers, both in Washington and in Las Vegas, interacted frequently with program stakeholders and Congressional staff. These interactions provided valuable input to the formulation of the Proposed Program Approach.

Specifically, DOE managers met with representatives from State, Tribal and local governments, industry groups and trade associations, regulatory agencies, professional societies, environmental organizations, and labor organizations. These meetings included discussions about development of the scenarios used in the planning process. In addition, the program hosted several stakeholder meetings to discuss aspects of the Proposed Program Approach. In February, meetings were held in Washington and in Las Vegas to discuss the Administration's Fiscal Year 1995 Budget Request, which included a broad description of the program's proposed direction. In May, the program sponsored a major stakeholder meeting in Las Vegas to discuss with the

Director the overall program direction, the Proposed Program Approach, and the site suitability evaluation process. Representatives of the OCRWM program also routinely participated in a variety of industry, governmental, and professional society meetings that provided opportunities to receive input and feedback regarding the program's plans and activities.

Once the program completed analysis of the strategic scenarios, a preferred approach was selected to propose to program stakeholders, the Congress, the Board, the Nuclear Regulatory Commission (NRC), and the public in the appropriate forums.

The identification of a preferred alternative does not predispose a decision to proceed. As the Board is aware, implementation of the Proposed Program Approach is predicated upon adequate funding. Securing this funding requires significant lead time and timely actions on the part of DOE. This will involve both Administration-wide and Congressional approval. The Congressional appropriation process is an open, public, and representative process, and the program's proposed approach in broad terms, was aired completely in that process in support of the funding request. Despite the preceding actions, DOE will continue to evaluate and refine elements of the Proposed Program Approach, based, in part, upon the input from its stakeholders and, of course, dependent upon the results of Congressional direction.

Question 3:

Scenario A calls for increased budgets, a decreased scope of near-term site characterization activities (e.g., potentially less tunneling), and a demanding schedule. (a) What specific studies previously planned under the SCP and in the study plans (i) will be completed before application for a license to begin repository construction, (ii) will be deferred until after repository construction, (iii) will be deferred until after repository operation begins, and (iv) will be deleted? (b) What criteria were used to assign particular studies to one of the four categories?

Response:

The detailed plans that identify which site characterization studies will be conducted, deferred, or eliminated are being developed and will be provided to the Board along with a description of the criteria used to make those determinations when they are available later this year. In general, however, such decisions will be consistent with the strategy articulated in the Proposed Program Approach, which recognizes the existing incremental process for repository licensing beginning with the submittal of the initial license application for construction authorization (10 CFR 60.24(a) and 60.31), followed by an updated application for authorization to receive and possess spent fuel and high-level waste (10 CFR 60.24(b) and 60.41), and a final application for an amendment to close the repository (10 CFR 60.51).

This strategy focuses near-term activities on the information required for determining the suitability of the candidate Yucca Mountain site, and if

suitable, the requirements for obtaining a repository construction authorization, including ensuring the safety of repository operations and providing an adequate basis for confidence in waste package containment. A lower priority will be given initially to those tests that support demonstration of compliance with requirements related to longer term radionuclide transport and release. Sufficient testing and modelling will be conducted in this latter category to develop bounding analyses for the license application. Further testing would be deferred and conducted as part of the performance confirmation program required by 10 CFR Part 60.

Question 4:

The OCRWM has asked for increased program funding because it believes that the scientific work has been under funded. (a) If Congress provides the requested funding for Scenario A, specifically how much will allocations to underground excavation, waste package and materials research, and other site-suitability activities be increased? (b) How much will be allocated to overhead and infrastructure? (c) Will these allocation priorities change if funding to the program is not increased to the level requested?

Response:

The details of the testing program that would support the Proposed Program Approach are being developed. Consequently, the allocation of budgets among the various elements of the repository program are not available at this time. The re-baselined budget information should be available in early Fiscal Year 1995 and will be provided to the Board at that time. The program has, however, stated that the proposed increase will predominately be allocated to work at Yucca Mountain. Compliance and management costs will be constrained.

The funding allocation will also reflect the program management improvements achieved in the reorganization of the Yucca Mountain Site Characterization Office, and the re-alignment of headquarters elements along with any recommendations or other actions resulting from the ongoing independent financial and management review of the Yucca Mountain Site Characterization Office. In any case, the funding allocation will be based on the program's priorities and will support only the minimum infrastructure and overhead required for achieving interim milestones and completing the program's mission.

As DOE reported to Congress, if the funding level in the Administration's Fiscal Year 1995 Budget Request is not obtained, and the prognosis for future budgets were to indicate that DOE will receive a level of funding consistent with past years, the entire OCRWM program will be re-evaluated. The resultant funding priorities for such a program would clearly be dependent on the nature of that program. Under such funding constraints, it is probable that a full program, carrying all licensing activities forward, would not be continued.

Question 5:

Scenario A calls for the completion of a five-mile main loop with additional drifting *only if necessary*. (a) What is the technical basis that supports this change from the current program design? (b) What technical criteria will the DOE use to decide whether the five-mile loop is sufficient for a decision on site suitability? (c) If a five-mile loop is insufficient, how will the DOE decide how much additional underground excavation will be needed?

Response:

The technical basis for reducing the amount of underground excavation to be conducted is an extension of underlying bases of the Proposed Program Approach, which was discussed in the response to Question 1. Our current thinking is that the site characterization program will be refocused to obtain the information that is critical to support DOE and NRC decisions pertaining to site suitability and licensing. In the Proposed Program Approach, the goal of the underground excavation program is not the completion of the five-mile (7.8 km) loop. Rather, emphasis is being placed on completing sufficient excavation to support two critical activities: (1) constructing at least two exploratory drifts off the main drift in the Topopah Spring Level to obtain information on the water content and age in the Ghost Dance Fault and (2) starting the Exploratory Studies Facility (ESF) heater tests in the North Ramp Extension as soon as possible. Depending on what is found in the Ghost Dance Fault, a decision will be made about the appropriate exploration of the Calico Hills unit. Such a decision would obviously impact the timing for the completion of the 7.8 km loop.

Further details on the proposed drifting sequence follow, keeping in mind that this is our current thinking subject to discussion with the Board and other stakeholders:

According to the strategy in the Proposed Program Approach, ESF excavation will begin in August 1994 in the North Ramp using the 7.6 meter tunnel-boring machine (TBM #1). Acquisition will be made of a second, smaller diameter TBM (TBM #2) during Fiscal Year 1995, concurrent with North Ramp excavation. Once TBM #1 has completed the North Ramp and "turned the corner" into the Topopah Spring Level main drift, TBM #2 will be erected, and the North Ramp Extension will be excavated. This will be concurrent with Topopah Spring Level main drift excavation by TBM #1.

TBM #1 will proceed south along the Topopah Spring Level main drift until it passes the northernmost of the two Ghost Dance Fault exploratory drifts. This drift will then be driven, approximately 120 to 150 meters, through the Ghost Dance Fault. TBM #1 will proceed south in the Topopah Spring Level main drift past the southernmost Ghost Dance Fault drift. Once again, TBM operations will be halted long enough to start the second Ghost Dance Fault exploratory drift. After completion of the second Ghost Dance Fault exploratory drift, TBM #1 will proceed with completion of the 7.8 km loop. The rate of advance will be dependent on resources needed for other ESF excavation activities. TBM #2 will finish the North Ramp Extension shortly after the time period that

the Ghost Dance Fault drifts are excavated. After completion of the North Ramp Extension, several parallel drifts will be driven to the north off the North Ramp Extension to house heater tests.

A decision on excavation into the Calico Hills unit will be made once information is available from the Ghost Dance Fault drifting described above. If Calico Hills drifting is needed, it will likely be driven using TBM #2. The point of access and ultimate configuration of Calico Hills drifting is the subject of a study to be performed in early Fiscal Year 1995.

The adequacy of the information obtained through an integrated exploration and testing program will be determined through suitability evaluations, design development, and in the preparation of the initial license application. If the geologic data is deemed insufficient to support decision making, additional excavation and testing will ensue. The criteria used to determine the adequacy of data are under development and will be provided to the Board when they are available.

Question 6:

Thermal-loading is a key parameter associated with various waste isolation strategies and repository/waste package designs. (a) Under Scenario A, when will a preliminary decision about thermal-loading be made? (b) When will a final decision be made? (c) What specific information does the DOE believe will be required to make sound technical decisions on (i) repository design and (ii) a waste package design that is compatible with the MPC? (d) How will the timing of the DOE's application to the NRC for a construction license affect the DOE's thermal-loading decision?

Response:

Under the Proposed Program Approach, the range or ranges of thermal-loadings will initially be bounded in 1998. As further information becomes available, the bounding evaluations will be reviewed and updated, and will be included in the license application to construct the repository, scheduled to be submitted in 2001.

The Proposed Program Approach calls for making the thermal-loading decision prior to the completion of the updated license application for receiving and possessing waste. This updated license application is scheduled to be submitted in 2008. Thermal-loading will be confirmed as a result of data collected during the performance confirmation program.

An understanding of the mechanisms which influence the coupled Thermal-Mechanical-Hydrologic-Chemical performance of the natural barriers is required to make sound technical decisions relative to thermal-loading for repository and waste package design. The development of a variety of sub-models and a testing of their validity is included in the program's scientific and engineering programs. These models will provide the basis for thermal loading decisions.

- (i) For repository design, the following are examples, and not necessarily a complete list, of the information being developed:

A description of thermal mechanisms for heat transfer, including the fraction of heat transferred by each mechanism (conduction, convection, and radiation).

A hydrologic model that will bound the hydrologic performance of the natural barriers. This model will incorporate information gathered on bulk permeabilities, saturation, fluid and vapor flow, and fracture/matrix coupling.

A model of the thermal-mechanical response of the host rock. This model will include data collected on rock compressive and tensile strength, thermal expansion coefficients, moduli (elastic, deformation, etc.), Poisson's ratio, and joint frequency and orientation.

A geochemical model of the response of the natural barriers will include information on reaction rates, water chemistry (Eh, pH) and the change with temperature, sorption coefficients, retardation rates, colloid formation, and dispersivity.

- (ii) For waste package design, these and other models will be used to address:

Hydrologic and geochemical responses of the potential site as they impact the waste package environment.

Geomechanical response of the near-field environment and the potential for rock falls within the emplacement openings.

Metallurgical, mechanical, and corrosion behavior of containment barriers in response to temperature.

Thermal stability of each waste package/engineered barrier system component during its proposed lifetime.

DOE's license application to construct the repository is scheduled for submittal to NRC in 2001. Prior to this submittal, the impacts of a range of thermal-loadings will be analyzed and the results of those analyses reported with the initial license application. The analyses will support the use of particular bounds for thermal-loading to justify reasonable assurance of meeting the performance objectives of 10 CFR Part 60.

Question 7:

Under Scenario A, the waste will "remain retrievable" for 100 years. (a) What contingency plans for retrieving the waste will be developed before deciding whether to adopt Scenario A? (b) When will retrieval plans be developed? (c)

How will these plans affect the total system life cycle cost (TSLCC) and the adequacy of the 1-mil-per-kilowatt-hour fee?

Response:

The criteria for retrievability of emplaced waste are under development. As part of the development process, different retrieval time periods and normal and abnormal retrieval conditions will be evaluated. To date, the program has developed a draft Concept of Retrieval Operations and revised the DOE Position on Retrievability and Retrieval for a Geologic Repository. That position was originally an appendix of the "Generic Requirements for a Mined Geologic Disposal System" (DOE OGR-B2) document produced in the mid- to late 1980s. The Concept of Operations addresses both normal and abnormal retrieval conditions.

To further examine this subject of extended retrievability, DOE has directed a study of the advantages and disadvantages of extended retrievability periods. The "Retrievability Period System Study" is scheduled to be completed by September 30, 1994, and will evaluate 50-, 100-, and 200-year retrieval periods, to focus the advanced conceptual design effort.

To maintain the option to retrieve for 100 years would mean extending the caretaker period by approximately 50 years. As used in the last published TSLCC analysis (DOE/RW-0236, May 1989), the caretaker period is the interval of time from the last waste package emplacement until the end of the retrieval period. Using the same cost model and assumptions as used in the May 1989 TSLCC analysis, the increased cost due to a 50-year extension of the caretaker period would be \$1224 million (in 1993 dollars). As with the May 1989 TSLCC analysis, this does not include retrieval costs, but does include costs for removing a small number of waste packages for performance confirmation testing. The Proposed Program Approach affects multiple aspects of the program scope (and costs) and hence the May 1989 TSLCC analysis and the December 1990 Addendum (DOE/RW-0295P) are out of date with respect to the Proposed Program Approach. An adequate revision to the TSLCC cannot be done until sufficient engineering design is completed in early Fiscal Year 1995. It is estimated that the next revision to the TSLCC will be completed by the end of Fiscal Year 1995. Upon completion of that effort, the fee adequacy issue can be addressed.

Question 8:

Descriptions of Scenario A refer to a "site suitability evaluation," "technical site suitability," and a "site recommendation report." (a) When and how will the DOE identify the specific tests and data necessary to support these site-suitability determinations? (b) Does the DOE believe the siting guidelines of 10 CFR Part 960 are adequate for determining site suitability under Scenario A? (c) If not, what amendments are envisioned and what process will be used to adopt them?

Response:

DOE is preparing Fiscal Year 1995 and out year planning guidance for project participants that will incorporate the concepts from the Proposed Program Approach, including proposed milestones for the suitability decision schedule. This guidance will start the process of identifying the specific tests and data necessary to support the site suitability determinations that were proposed in the Proposed Program Approach. The results of this planning will be documented in a Technical Implementation Plan for site investigations for Fiscal Year 1995 and in the long-range plan for the out years. The Fiscal Year 1995 Technical Implementation Plans will be finalized in September 1994. The Long-Range Plan should be finalized in mid-1995.

DOE believes that the siting guidelines are adequate for determining site suitability under the Proposed Program Approach. The Proposed Program Approach simply provides a phased schedule for a site suitability decision. This schedule allows DOE to evaluate specific guidelines or groups of guidelines when sufficient data and analyses are available for the evaluation. Using this phased approach, DOE has an opportunity to make earlier decisions on specific guidelines as the data become available, rather than waiting until 1998 or later to produce an overall evaluation of all guidelines.

Although DOE is not adapting the siting guidelines for the Proposed Program Approach, DOE has elected to re-examine the siting guidelines in light of past statutory and regulatory changes. The purpose of this initiative is to determine if sections of the guidelines might require formal clarification, or even revision, before suitability evaluations begin. DOE has requested input to this decision from program stakeholders in an April 25, 1994, Federal Register Notice of Inquiry, and at the May 21, 1994, stakeholders meeting. Once the public comment period has closed, DOE will review these comments and decide what process, if any, will be used to clarify or revise the siting guidelines.

Question 9:

The NRC's regulation (10 CFR Part 60) requires the DOE to demonstrate, prior to repository construction, that there is "reasonable assurance" that the facility will perform safely. The SCP outlines a testing plan that implies an agreement between the NRC and the DOE about how "reasonable assurance" will be demonstrated. Under Scenario A, some of the tests will be postponed until after repository operation begins. (a) How will the DOE demonstrate the level of assurance in the performance of the repository that would have been obtained under the SCP? (b) Will it be necessary to reinterpret or change the level of assurance? (c) If so, how will it change?

Response:

The extensive site characterization program originally outlined in the SCP, including subsequent changes, reflects the expectations of data and analyses required to predict long-term repository performance and go beyond what is actually needed to comply with the regulatory requirements. Our current

thinking is that the amount of information needed to support the decisions embodied in the Proposed Program Approach will provide a sufficient basis for a "reasonable assurance" finding. In developing the underlying rationale for the Proposed Program Approach, we evaluated both the letter and intent of 10 CFR Part 60 to ensure that the Proposed Program Approach was consistent with the flexibility already inherent in the existing regulation. For example, at the time of submittal of the license application, 10 CFR 60.24(a) requires that: *"The application shall be as complete as possible in the light of information that is reasonably available at the time of docketing."* Furthermore, DOE believes that NRC expects that the "reasonable assurance" finding will be based on limited information. 10 CFR 60.102 states:

While these performance objectives and criteria are generally stated in unqualified terms, it is not expected that complete assurance that they will be met can be presented....Proof of the future performance...over time periods of many hundreds of many thousands of years is not to be had in the ordinary sense of the word. For such long-term objectives and criteria, what is required is reasonable assurance, making allowance for the time period, hazards, and uncertainties involved, that the outcome will be in conformance with those objectives and criteria.

Question 10

According to presentations made at the panel meeting on March 22, 1994, by representatives of the Council on Environmental Quality and the DOE's General Counsel Office, the Yucca Mountain Environmental Impact Statement should include a discussion of various repository and waste package design alternatives. (a) Under Scenario A, what alternatives will be sufficiently well understood to be evaluated? (b) Will separate impact statements be prepared for MPC procurement, repository development, and transportation? (c) How will the interdependencies among those activities be analyzed?

Response

In response to the Secretary of Energy's June 1994 Policy on the National Environmental Policy Act (NEPA), and the suggestions made by interested parties in the past year, OCRWM is reviewing its NEPA strategy. This review will include an evaluation of alternative approaches for implementing the NEPA requirements for the various program activities and the proposed methodology to address the interdependencies among those activities. The issues raised by the Board will also be addressed in scoping activities that will be associated with implementation of NEPA requirements.

**U.S. DEPARTMENT OF ENERGY
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT**

**NUCLEAR WASTE TECHNICAL REVIEW BOARD
FULL BOARD MEETING**

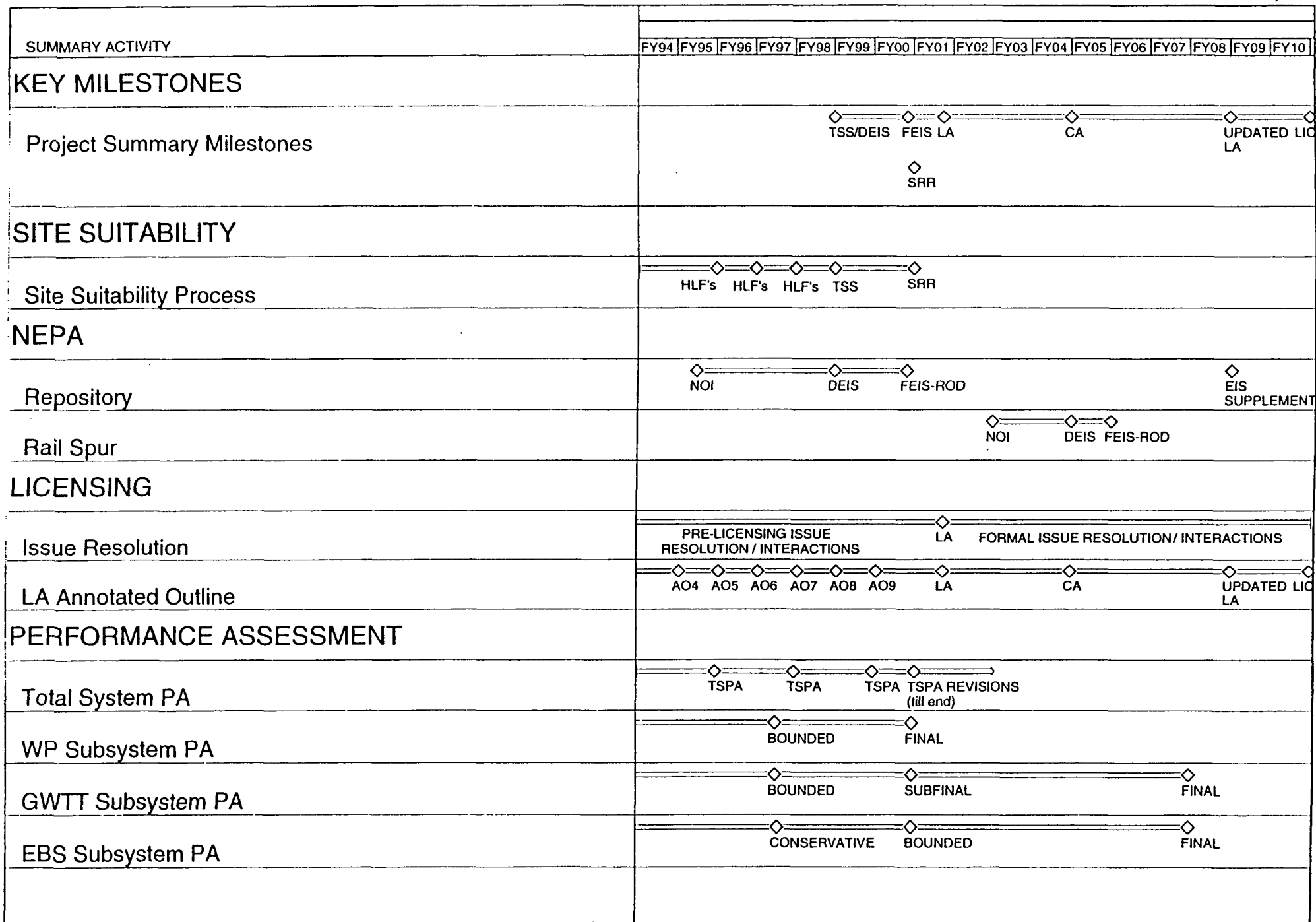
**SUBJECT: PROPOSED PROGRAM
 APPROACH**

PRESENTER: STEPHAN J. BROCOUM

**PRESENTER'S TITLE
AND ORGANIZATION: ASSISTANT MANAGER FOR SUITABILITY AND LICENSING
 YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE**

**PRESENTER'S
TELEPHONE NUMBER: (702) 794-7971**

**JULY 12-13, 1994
DENVER, COLORADO**



Plot Date 16MAY94
 Data Date 1OCT93
 Project Start 1OCT93
 Project Finish 20OCT10

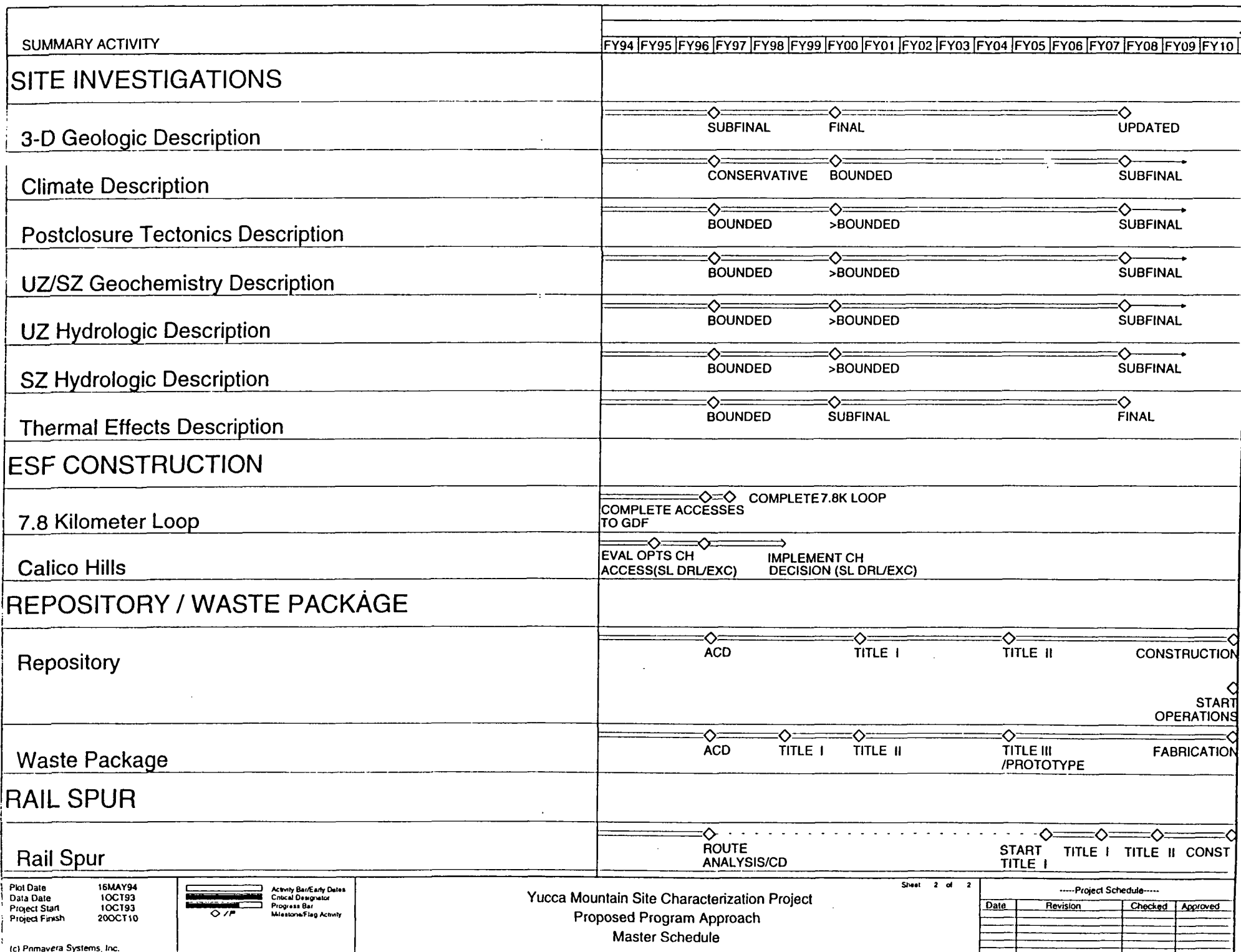
Activity Bar/Early Dates
 Critical Designator
 Progress Bar
 Milestone/Flag Activity

Yucca Mountain Site Characterization Project
 Proposed Program Approach
 Master Schedule

Sheet 1 of 2

-----Project Schedule-----

| Date | Revision | Checked | Approved |
|------|----------|---------|----------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |



NWTRB Question 3

Scenario A calls for increased budgets, a decreased scope of near-term site characterization activities (e.g., potentially less tunneling), and a demanding schedule. (a) What specific studies previously planned under the SCP and in the study plans (i) will be completed before application for a license to begin repository construction, (ii) will be deferred until after repository construction, (iii) will be deferred until after repository operation begins, and (iv) will be deleted? (b) What criteria were used to assign particular studies to one of the four categories?

DOE Response to Question 3

- **Decisions regarding timing of activities will be consistent with PPA strategy**
 - **Early focus on studies needed to determine site suitability**
 - **For initial license application for construction authorization**
 - **Primary focus on operational safety and waste package containment**
 - **Lower priority given to tests that support demonstration of long-term performance**
 - **Further testing deferred to performance confirmation program**

NWTRB Question 6

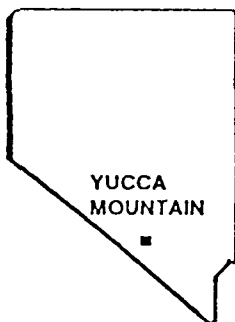
Thermal-loading is a key parameter associated with various waste isolation strategies and repository/waste package designs. (a) Under Scenario A, when will a preliminary decision about thermal-loading be made? (b) When will a final decision be made? (c) What specific information does the DOE believe will be required to make sound technical decisions on (i) repository design and (ii) a waste package design that is compatible with the MPC? (d) How will the timing of the DOE's application to the NRC for a construction license affect the DOE's thermal-loading decision?

DOE Response to Question 6

- **The range or ranges of thermal loadings will be initially bounded in 1998**
- **These ranges will be further evaluated prior to submittal of the initial license application in 2001**
- **An initial thermal loading decision will be made prior to submittal of the updated license application (2008) for the license to receive and possess waste**
- **The thermal loading will be confirmed using data obtained during performance confirmation**
- **Thermal loading systems study to be conducted in FY95**

U.S. DEPARTMENT OF ENERGY

DOE
M



YUCCA MOUNTAIN

SITE CHARACTERIZATION

PROJECT

PROPOSED PROGRAM APPROACH

PRESENTED TO:

DOE-NRC MANAGEMENT MEETING

PRESENTED BY:

STEPHAN J. BROCOUM

ASSISTANT MANAGER FOR SUITABILITY AND LICENSING



JULY 26, 1994
ROCKVILLE, MD

ATTACHMENT 3

ATTACHMENT 3

License Application Sufficiency

DOE Feedback

- Doe agrees that there will be some uncertainties in the initial LA
- Level of detail proposed for initial LA reflects overall PPA compliance strategy and should provide adequate basis for NRC review
 - High confidence in operational safety and in waste package containment for at least 1,000 years
 - Bounding analyses for long-term performance
- This level of detail is appropriate for NRC reasonable assurance finding to authorize construction
- Prior to granting of the license to receive and possess waste, additional information would be available
- This stepwise increase in knowledge is consistent with the regulatory framework
- NRC will have ample opportunity to review evolving information through pre-licensing interactions

NEVADA INDIAN ENVIRONMENTAL COALITION

1280 Terminal Way #22

Reno, NV 89502

702-323-6432

September 8, 1994

Mr. Robert Nelson, Project Manager
Office of Civilian Radioactive Waste Management
Office of Geologic Disposal
Yucca Mountain Site Characterization Project Office
P.O. Box 98608
Las Vegas, NV 89193-8608

Dear Mr. Nelson,

This letter is being written on behalf of the 24 Nevada Indian Tribes to secure the funding which DOE Secretary Hazel O'Leary referred to in letters to the Tribal Chairmen of Nevada Indian Tribes on July 7, 1994. (See enclosed copy of Reno/Sparks Chairman's letter.) This letter will also be presented during a meeting with the Nuclear Regulatory Commission in Washington, D.C., on Friday, September 9.

Secretary O'Leary stated that OCRWM is working through your office to identify an appropriate funding mechanism for this purpose." She also stated that we would be hearing from you in the near future. Department of Interior Assistant Secretary, Indian Affairs, Ada Deer also referred to Secretary O'Leary's commitment of funding from your office in her letter received in our office on August 20, 1994, stating that this funding would "allow the tribes to have an independent role in the meetings being held" in regards to the Yucca Mountain Site Characterization. (See enclosed copy.)

I have met in DOE Headquarters today with Linda Desell, Vicki Thorton Ben Easterling, Richard Arnold, and Joe Chirieleison to discuss funding opportunities for Nevada Tribes. (See enclosed copy of letter to Ada Deer.) While the group was supportive of funding, the funds being discussed are FY95 funds. Planning for the future is very important, but meanwhile Nevada Tribes are not financially able to participate in vitally important events such as DOE YMP Update meetings, Affected Units of Government meetings, and public participation meetings. Tribal attendance is critical to allow Native Americans to fully participate in site characterization as well as to allow DOE to fulfill its commitment to complete participation from all entities involved. However, Tribal funds simply do not allow for travel to these meetings. There must be interim funding to meet the Tribal need to address issues that are presently causing serious impacts on Indian people and lands.

We would also request that the Consolidated Group of Tribes and Organizations, working with Mr. Richard Arnold, be funded at the same level. This organization is comprised of many out-of-state Tribes and organizations that are not included in this funding request. Their lands and people will, however, be impacted by the Yucca Mountain Project. These Tribes must also be included in site characterization to insure that the DOE has made the utmost effort to include all Indian Tribes that are impacted by transportation as well as scientific studies.

During the meeting today in Washington, D.C., there was discussion of \$3 million in FY94 money originally earmarked for the state that has not been obligated due to an inability to come to an agreement. We believe that the funding we are requesting can come from that money or any other unobligated funding for FY94.

We request funds to cover travel to any pertinent meetings where the Yucca Mountain Site Characterization is discussed, on issues including but limited to the areas of transportation, seismic, hydrologic, geologic and socioeconomic impacts. We are also requesting funding to allow complete participation for the nine tribes located within the boundaries of the nine Nevada counties currently receiving YMPO money: Moapa and Las Vegas (Clark County), Duckwater and Yomba (Nye County, "host county" for YMP), Ely and Goshute (White Pine County), Battle Mountain (Lander County), Fallon (Churchill County), and Walker River (Mineral County).

We are also requesting funding in the amount of \$8,500. to cover telephone, printing and mailing costs.

The following is a breakdown for each tribe (multiple funds times nine for totals) for interim funding that will go directly to these nine tribes to establish an office that will be responsible for working with YMPO:

| | |
|--------------------------------|-----------|
| Salary and fringe: | \$38,000. |
| Travel | 15,000. |
| Equipment | 3,000. |
| Supplies | 1,500. |
| Telephone, fax, duplication | 1,500. |
| Rent | 1,000. |

Total \$60,000. for each of nine tribes, for a Subtotal of \$540,000.

Additionally, we are seeking funding to enable the remaining 15 Chairpersons or their appointed designees and NIEC staff to attend the many important meetings that occur on a monthly basis. Also included in travel funding is attendance at any workshops, seminars, public hearings, or coordination meetings which may be held throughout the United States.

Note: Many reservations are inherently located in areas of extreme isolation. Some tribal members must travel approximately 50 miles on unimproved roads one way to arrive at small communities where the very basic forms of personal services are available. Additionally, there are numerous

tribes located 100 to 200 or more miles from larger communities that have hotel, commercial airport, or car rental services. Two tribes must travel 500 miles one way to attend meetings in Western Nevada.

In-State

| | |
|------------------------|------------------|
| Transportation | \$ 23,931. |
| Per diem | 32,895. |
| Meals | \$14,835. |
| Lodging | \$18,060. |
| Travel Subtotal | \$56,826. |

In-State transportation is figured at seven (9) months, October, 1994, through June, 1995. One trip per month is estimated for one-two persons from each of 15 Tribes (average of 20), plus 1-2 NIEC staff persons (average of 1.5). Mileage based on .27 cents per mile. Air travel may be substituted when suitable. Travel is based 15 tribes traveling to the major metropolitan centers of Nevada (Reno and Las Vegas) with an average of 458 miles per tribe per trip. Lodging and per diem is figured for four (4) months of one-night trips and five (5) months of two-night trips. Per diem is based on Federal Per Diem rates, with an average of \$60 per night lodging and \$30 per day meals and incidentals.

Out-of-State travel figured at four, three day meetings attended by 15 persons. Travel based on average air-fare of \$400 and per diem of \$100 per day.

Telephone, printing and mailing costs Subtotal: \$8,500.

Total Interim Request for Nevada Tribal Participation: \$605,326.

The funding to the nine (9) Tribes as stated above will go directly to those Tribes. Travel funds will be dispersed by NIEC to Tribal Chairmen or designees on as needed basis, with travel to be advanced, not reimbursed.

We take this opportunity to thank you in advance for assisting us in the manner put forth by the Secretary O'Leary and backed by Assistant Secretary Deer. We would also request a meeting with you as soon as possible to discuss how this directive from the Secretary will be put into action. We expect to have a meeting date scheduled within ten (10) days from the date of this letter. If we do not have a meeting date scheduled within this time, we will take this action as a final action on your part to deny Nevada Tribes funding to participate in the Yucca Mountain Project Site Characterization.

Sincerely, 
(original signed by Mr. Lowery)

Elwood Lowery, President NIEC

/cf

cc: NIEC Board members, Nevada Tribes
Nuclear Regulatory Commission

**President B. Clinton
Vice-President A. Gore
Department of Interior, B. Babbitt
Department of Energy
Federal Emergency Management Agency
Department of Transportation
Environmental Protection Agency
White House Office of Environmental Policy
White House Office of Environmental Equity
Office of Public Accountability
National Congress of American Indians
Nevada Legal Services**

NEVADA INDIAN ENVIRONMENTAL COALITION

1280 Terminal Way #22

Reno, NV 89502

702-323-6432

The following proposal and budget were submitted on March 9, 1994, to Mr. Robert Nelson, Acting Project Manager, Yucca Mountain, DOE, Nevada. The package was presented to Mr. Nelson in his office by Mr. Calvin Meyers, Vice-Chairman Moapa Tribe and Ms. Catherine Felty, NIEC coordinator.

***Nevada Indian Environmental Coalition
Proposed Activities
for
Yucca Mountain Project***

NEVADA TRIBAL AFFECTED UNITS OF GOVERNMENTS
(TAUGs)
DEPARTMENT OF COMPREHENSIVE PLANNING OF
NUCLEAR WASTE

TAUGs NUCLEAR WASTE REPOSITORY PROGRAM

TECHNICAL/ ENVIRONMENTAL WORK PLAN

TRIBAL GROUNDWATER EVALUATION

PURPOSE AND INVESTIGATION:

- * Define base case water chemistry condition
- * Define base case water users and use
- * Evaluate water supply capacities and growth requirements
- * Qualitatively assess impacts on water supplies that could result

ACTIVITIES TO BE CONDUCTED:

- * Water supply Sampling
- * Laboratory Analysis of the following: Major ion's
Metals
Radionclides
Isotopes
Nitrates
Coliform
Fluride
Total Dissolved Solids
Uranium
- * Data Systhesis
- * Reporting

TECHNICAL INTERACTIONS:

Nevada Indian Tribal Affected unit's of Governments will work with the following ,NRC,DOE, County AUG's for the Technical exchange.

- * Audits and Site visits
- * OCRWM program reviews
- * Design reviews meetings
- * National Symposia
- * Other conferences as appropriate

TRIBAL PUBLIC SAFETY COMPONET

Nevada Indian Environmental Coalition and committee as Advisory Group

PURPOSE:

To establish Tribal Affected Units the purpose of integrating Public Safety elements and issues with Clark County Nuclear Waste studies as well as State/ other Countys.

Comprise key officals acrossspectrum of public Safety with suppo from State/Tribe/ Federal and Private sectors officals.

STATEMENT OF WORK TRIBAL SAFETY

- * Responce procedures and Capabilities**
- * Transportation**
- * Training**
- * Information Management**
- * Emergency Medical**
- * Emergency Communication**
- * Public Information**
- * Mutual Aid**
- * Tribes to study elements in review of systems in place; Illinois, Pennsylvinia, Ohio, New Mexico, California, Oregon Washington, as well as others.**
- * The inportance of Internal Jurisdictional and Inter-disciplinary cooperation.**
- * The uknown factors of siting and routing decisions on Command, Menagement, and control decisions, time lines, Backgrounds of growing sence of urgency.**
- * Hire Necessary technical and support staff to support ongoing responsibilities for the above tasks**
- * Provide Technical/financial reports to Tribal Governments, The United States Congress and OMB.**

**DEVELOPMENT OF A TRIBAL TRANSPORTATION PROGRAM
FY 1994- 1995 FOR TAUG's**

OBJECTIVES

- * Oversight of DOE plans and program
- * Infrastructure and tribal input for the CCNWD systems
- * Operation of all State, Tribal County infrastructure

PROGRAM

- * Comprehensive system for evaluating impacts
- * Credible oversight of YMPO- related programs
- * Coordination with all Transportation organizations

FUNCTIONS

THE NEVADA INDIAN ENVIRONMENTAL COALITION AND A TRIBAL TRANSPORTATION SUB-COMMITTEE WILL BE INVOLVED IN THE FOLLOWING SCOPE OF WORK:

- * Nevada tribes to provide background on their current and planned transportation activities, and answer all questions
- * NIEC/ Sub-Committee will identify areas of practical cooperation as follows:
 - A. Review of Draft Reports (and Commenting)
 - B. Monitoring DOE Transportation activities (attending meetings).
 - C. Review all Components of the Electronic Bulletin Board of, transportation components, Maximize Tribal impact at Local and National meetings such as TEC, 180(c), and WIEB.
 - D. Emergency Management follow-up, coordination with all Tribal/ State EM committee.

GOALS

Interface with affected county's and other Transportation Sub-committee to be a forum on Nevada Nuclear Waste Transportation issues.

NIEC/TRIBAL SUB-COMMITTEE STATEMENT OF WORK

- * Involvement as a committee in 180(c) and WIED
- * Be a Active member of DOE committee (TEG, TCG).
- * TAUG's to become more involved in YMPO transportation issues (TRIBE, NDOT, DIV. of Emergency MGMT.)
- * Workshops on Transportation/based EM using the Pahrump Model jointly with other sub-committee, State Agencies, and National Agencies.
- * Information Exchange-DOE oversight-Documents and review.
- * Identify issues and development Strategy to push Tribal Affect. Governments point of views.
- * Foster Federal, State, Tribal Agency Communication and cooperation

COMMITTEE MEETINGS

Tribal Group will meet every two month and will meet every two month via conference calls as needed. based on agenda items provided by Tribal Chirmans, or the Nevada Indian Tribal Environmental Coalition. to the chairman of the Committee.

INTERNAL REPORTS

- * Transportation program
- * Review Regional Transportation Planning Model
- * Year end Transportation summary

EXTERNAL REPORTS

- * Transportation Data
- * Risk Assessment factors
- * Tribal Affected Units of Government have in-put to Model Route Characterzation.

TRIBAL SOCIOECONOMIC RESEARCH PROGRAM

YUCCA MOUNTAIN PROJECT IMPACTS ON TRIBES:

- * Standard impacts associated with the the repository
 1. Direct impacts (number of employee per tribe)
 2. Indirect impacts
 3. Induced impacts (purchases by employees and dependents)
- * Systems impacts
 1. Transportation issues (infrastructure)
 2. Public Safety issues (training and equipment)
- * Sociocultural risks perception
 1. Impacts on tribal indian reservation
 2. Quality of life concerns and the tribal retirement commun
 3. Ripple effect throughout the tribes and state.
- * Economic/Demographic
 1. Determine demographic relationships state/tribe/countys
 2. Define Key tribal economic factors
 3. Compare with nation norms
 4. Monitor population changes and directions on each reservat
- * Develop a directory of databases for tribes

Primary Activities

- A. Enterprise-wide tribal GIS Resource Development
- B. Data Acquisition and Dissemination
 - * Administration Data Manager
 - * Quality Assurance QA Supervisor
 - * Communications Network
 - * Contract Administration
 - * Technical support (ISD P/A Systems Pmgr)
 - * Production Lab (contract or GIS Analyst and GIS Technicans)
- C. Tribal Specific Tasks Data Capture
 - * Geology
 - * Demographics
 - * Land use
 - * Transportation Infrastructure
 - * Land Value
 - * Administrative Boundaries
 - * provide Technical support

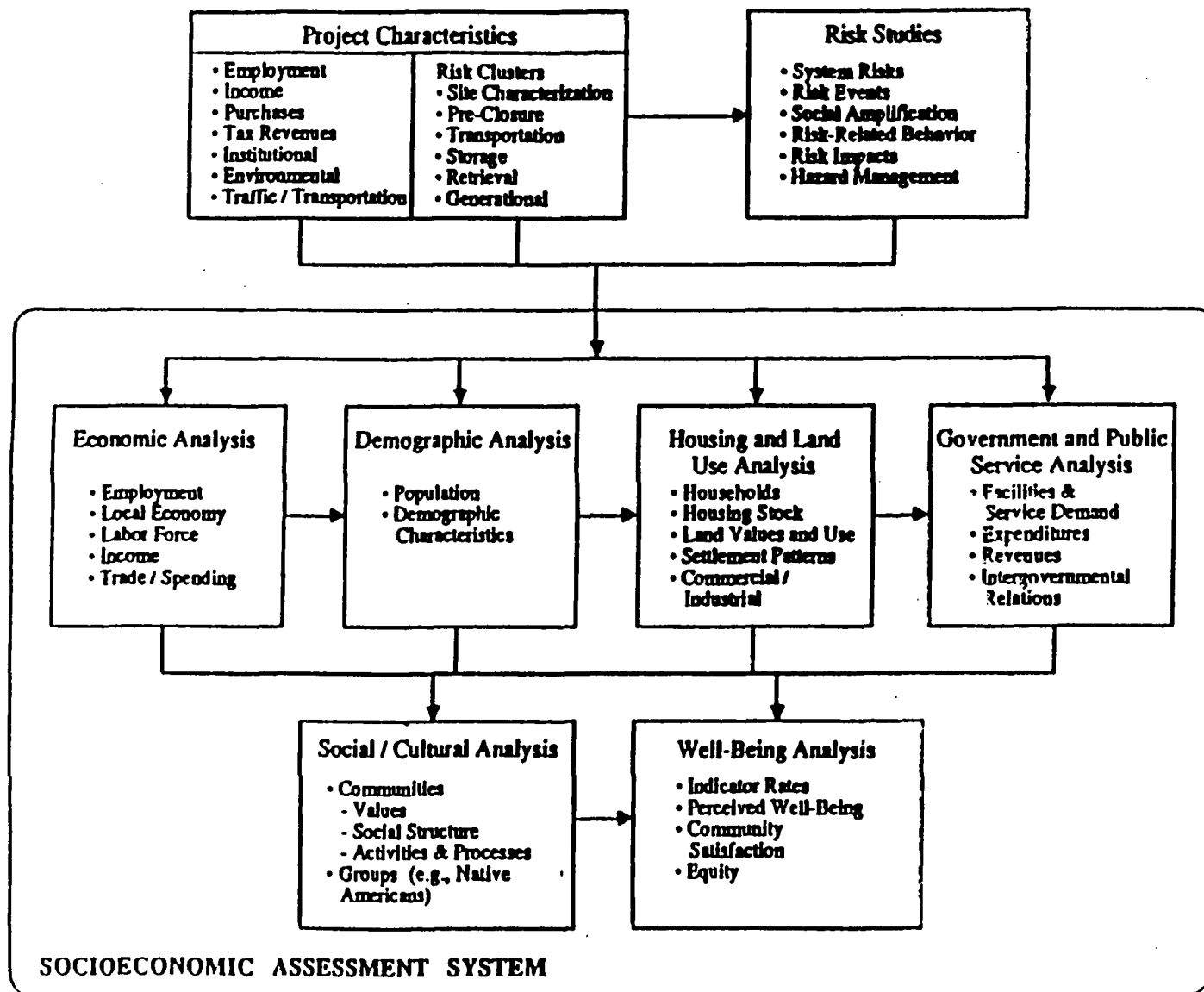
- * Other High-Level Data Base Tribal Infrastructure support

ECONOMIC STREAM
Development Banking
Economic
Enterprises
land and Minerals
Physical Infrastructure
Governance

SOCIO- CULTURAL STREAM
Elder Care
Education
Health
Culture
Social Services
Legal/Justice
Governance

DRAFT

**TRIBAL AFFECTED UNITS OF GOVERNMENTS
CONCEPTUAL FRAMEWORK FOR THE YUCCA MOUNTAIN
SOCIOECONOMIC STUDIES**



INTER-TRIBAL COUNCIL OF NEVADA, INC.
NEVADA INDIAN ENVIRONMENTAL COALITION

806 HOLMAN WAY • SPARKS, NEVADA 89431 • P.O. BOX 7440 • RENO, NEVADA 89510
PHONE (702) 355-0600 FAX (702) 355-0648

Nevada Indian Environmental Coalition
Proposed Budget for
Department of Energy Administrative Activities

Personnel

| | |
|-------------------------------------|-----------|
| NIEC Coordinator (30% time) | \$10,500. |
| Environmental Protection Specialist | 32,000. |
| Secretary | 15,000. |
| Fringe | 11,000. |

Equipment

| | |
|---------------|--------|
| Computers | 6,000. |
| Printers | 1,500. |
| Software | 800. |
| Desks | 800. |
| Chairs | 400. |
| File cabinets | 300. |

Travel

| | |
|-------------------|---------|
| Staff | 25,000. |
| Coalition members | 15,000. |

Rent

7,500.

Office supplies

6,000.

Telephone, fax, postage, copies

10,000.

Insurance

1,200.

Contractual

35,000.

Meeting, educational expenses

18,000.

TOTAL

\$200,000.

**Nevada Indian Environmental Coalition
Proposed Budget for
Department of Energy
Assistance to Each of Nine Tribes
(as determined by Affected Counties in Nevada)**

| | | |
|-------------------------------------|--|-----------|
| Salary | | |
| Environmental Protection Specialist | | \$32,000. |
| Fringe | | 6,000. |
| Travel | | 15,000. |
| Equipment | | 3,000. |
| Supplies | | 1,500. |
| Telephone, Fax, Duplication | | 1,500. |
| Rent | | 1,000. |

| | |
|--------------|------------------|
| Total | \$60,000. |
|--------------|------------------|

| | |
|--|-------------------|
| Total for 9 tribes located in Affected Counties | \$540,000. |
|--|-------------------|

Justification

Personnel

Provides for one environmental protection specialist dedicated to the Yucca Mountain Project and one secretary. Fringe benefits include health insurance, SIIS, FICA, FUTA.

Equipment

Provides for a computer for the specialist and secretary, printers, and necessary software.

Travel

Provides for staff travel within and out of state, to travel to on-site educational activities, workshops, meetings. Coalition member travel provides for tribal travel to meetings, workshops. Travel for nine tribes receiving funding will be paid for by tribes, NIEC will pay for travel for remaining members.

Rent

Provides for space rent for one year.

Office supplies

Provides for expendable office supplies.

Telephone, fax, postage, copies

Provides for services to program.

Insurance

Provides for insurance for office property, liability.

Contractual

Provides for consultant fees for any legal, scientific assistance.

Meeting, education expenses

Provides for expenses of holding meetings for Coalition members, tribal members, including meeting rooms, materials.

September 6, 1994

This packet contains correspondence between Nevada Indian Tribes, the Nevada Indian Environmental Coalition, and federal agencies from January, 1994, through the present. This documentation represents the efforts of the Nevada Indian Tribes to receive funding to participate in the Yucca Mountain Site Characterization.

NEVADA INDIAN ENVIRONMENTAL COALITION

1280 Terminal Way #22

Reno, NV 89502

702-323-6432

September 6, 1994

Honorable Ada Deer, Assistant Secretary Indian Affairs
Indian Affairs, Department of Interior
1849 C Street, NW
Washington, DC

Dear Ms. Secretary,

The Nevada Indian Environmental Coalition on behalf of 24 Indian Tribes in Nevada hereby request funding from your agency in order for these Tribes to participate in the Yucca Mountain Site Characterization. The state of Nevada, nine Nevada counties, and one California county are currently receiving funding from the Department of Energy to conduct a variety of studies. Tribes located within the boundaries of these counties have received no funding from the Department of Energy to conduct studies relating to socioeconomics, safety, transportation or environmental issues. Although Nevada Tribes have been working with both the Department of Energy and the Department of Interior, funding has been denied. Even though Tribes have been denied "Affected Status," we believe we are still entitled to funding.

The fact that the Nuclear Waste Policy act has been interpreted by a federal agency, but not a court, as authorizing the agency to assist only tribes in Nevada that have attained "affected status" is not the end of the search for a solution for the federal government to meet its legal obligation to tribes. Under its responsibility to tribes, the federal government is not only obligated to provide the funds necessary for the tribes to participate in the Yucca Mountain Site Characterization but is also obligated to diligently search for alternative sources of funds. Clearly there are other sources of funds outside of the Department of Energy and the Yucca Mountain Project office that are available.

For example, 42 U.S.C. 5131 authorizes grants for the "development of plans, programs, and capabilities for disaster preparedness and prevention." Although states but not tribes are specifically included as recipients under this statute, the federal government can interpret this statute to include tribes. In doing so, tribes could receive funds under 42 U.S.C. 5131.

While the U.S. Supreme Court holds that a federal agency does not have the authority to diminish tribal rights unless Congress has specifically given such authorization, the Ninth Circuit Court of Appeals has allowed the U.S. Environmental Protection Agency (EPA) to interpret statutes which provided a beneficial role for states and local government units as providing a beneficial role for tribes. This is true even though the statutes at issue did not specifically include tribes. Therefore, any federal statute that provided assistance to states could be interpreted as providing similar assistance to states.

The EPA has interpreted 42 U.S.C. 11001, the Emergency Planning and Community Right-To-Know Act of 1986, as providing such a beneficial role to tribes. (See 55 Fed. Reg. 30641, July 26, 1990.) Because this statute specifically authorizes grants to support programs of state and local governments, grants to tribes for emergency planning are also authorized under EPA's interpretation. Thus, tribes could receive funds under 42 U.S.C. 11001.

Another source of authorization for funds for tribes is the Executive Order No. 12856 which require federal agencies to "improve local emergency planning, response and accident notification" wherever local communities may be adversely affected by a release of extremely hazardous substances generated by a federal facility. This Order can be interpreted as authorizing funding to tribal communities.

Another source of authorization for funds for tribes is 49 U.S.C. 1802, Hazardous Materials Transportation Uniform Safety Act. This statute specifically authorizes grants "for developing, improving and implementing emergency plans under the Emergency Planning and Community Right-To-Know Act." In addition, grants are authorized for determining the need "for regional hazardous materials emergency response teams" and for training emergency response personnel. Furthermore, this statute specially includes Indian Tribes. Thus, tribes could be funded under 49 U.S.C. 1802.

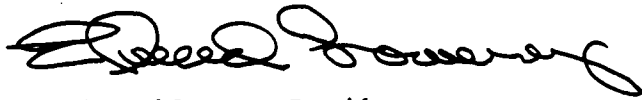
Another source of authorization for funds for tribes is 42 U.S.C. 9660a. This statute authorizes grants for the "training and education" of emergency response workers. Thus, tribes could receive funds under 42 U.S.C. 9660a.

While Nevada Tribes have received limited benefits under some of these funding sources either directly or through NIEC, the funding levels are not sufficient to deal with a project of this magnitude. We believe that the federal government is obligated to assist tribes in Nevada not only in funding but also in diligently searching for sources of funding so that affected Tribes can participated in the Yucca Mountain Site Characterization. Although we intend to continue to pursue our affected status applications for Nuclear Waste Policy Act funds, as we discussed above, the Nuclear Waste Policy Act is not the only funding mechanism that could be used to assist Tribes. It is your agency's obligation to diligently search and find alternate funds. We have given you several examples, and there are undoubtedly more.

On behalf of the 24 Nevada reservations and colonies, we expect to receive a letter from you within ten days indicating that the Department of Interior and Bureau of Indian Affairs will be actively assisting Nevada tribes in securing immediate funding for this issue. If there is no reply from DOI within ten days, we will take this action as a final agency action to deny Nevada

Tribes funding to participate in the Yucca Mountain Project Site Characterization Nevada Tribes are prepared to take legal action to see that the federal government upholds its trust responsibility to Tribes within the state of Nevada.

Sincerely,

A handwritten signature in black ink, appearing to read 'Elwood Lowery', with a stylized, flowing script.

Mr. Elwood Lowery, President
NIEC

cc: NIEC Board members, Nevada Tribes
President B. Clinton
Vice-President A. Gore
Department of Interior, B. Babbitt
Department of Energy
Nuclear Regulatory Commission
Federal Emergency Management Agency
Department of Transportation
Environmental Protection Agency
White House Office of Environmental Policy
White House Office of Environmental Equity
Office of Public Accountability
Nevada State Office on Nuclear Projects
National Congress of American Indians



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240



AUG 11 1994

REC-77
AUG 20 1994

Mr. Elwood Lowery
President
Nevada Indian Environmental Coalition
1280 Terminal Way #22
Reno, Nevada 89502

Dear Mr. Lowery:

Thank you for your letter dated July 15, 1994, in which you request immediate assistance in bringing to a satisfactory conclusion your request to gain "affected status" in regards to the high level radioactive waste repository proposed for Yucca Mountain.

As you probably know, there is no provision under Public Law 97-425, The Nuclear Waste Policy Act of 1982, or any of its amendments that would allow the Secretary to recognize the tribes in your coalition as eligible for "affected status". The Secretary of the Department of Energy has offered to assist the Department of the Interior and Bureau of Indian Affairs in preparing a proposal for legislative change that might enable the tribes in question to attain affected status. However, this solution could take a great deal of time and there is no guarantee that the legislative initiative would ever reach a successful conclusion.

It was suggested in Secretary O'Leary's letter to you that financial assistance might be forthcoming to the tribes through the Yucca Mountain Site Characterization Office to allow the tribes to have an independent role in the meeting being held on these issues. At this time, this may be the quickest and best way to meet your immediate needs. However, if your coalition prefers to work for a change in the present law, please let us know.

Sincerely,

Ada E. Deer
Assistant Secretary - Indian Affairs



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240

AUG 8 1991

Mr. Elwood Lowery
President
Nevada Indian Environmental Coalition
1280 Terminal Way #22
Reno, Nevada 89502

Dear Mr. Lowery:

Thank you for your letter requesting to speak with Secretary Babbitt.

Unfortunately, the Secretary's schedule is such that we are unable to make any additional commitments at this time. As you can appreciate, the pace of his schedule often excludes his participation in many worthwhile meetings.

Again, thank you for your letter.

Sincerely,

Laura Daniel-Davis
Acting Director of Scheduling

NEVADA INDIAN ENVIRONMENTAL COALITION

1280 Terminal Way #22

Reno, NV 89502

702-323-6432

July 15, 1994

Honorable Bruce Babbitt, Secretary
United States Department of Interior
1849 C Street, NW
Washington, D.C.

Dear Mr. Secretary,

Enclosed you will find a copy of a letter of July 7, 1994, received by the Reno/Sparks Tribal Council from Department of Energy Secretary Hazel O'Leary regarding "affected status" for the tribe under the proposed DOE Yucca Mountain Nuclear Waste storage project. Other Nevada tribes have also received a similar letter, which gives the Department of the Interior the responsibility to confer "affected status" to Nevada tribes.

In February of this year, I and other members of the Nevada Indian Environmental Coalition met with Assistant Secretary Ada Deer to discuss this matter. At that time, ASIA Deer gave her total support for Nevada tribes to receive "affected status" under the Yucca Mountain Project. In a letter of April 18, 1994, she assured me that DOI was "taking action" on the request of the Nevada tribes and that the DOI environmental personnel were working with DOE and had, in a letter, requested Sec. O'Leary to review the situation and formulate a solution that "would be mutually acceptable to all concerned."

Now the DOE Secretary has passed the matter to the Department of Interior. I am writing to request an immediate telephone call from you to discuss this matter and what steps we can now take to bring about a swift and satisfactory conclusion to this issue. I may be reached at the above number Monday through Friday, 8 a.m. to 3 p.m. Pacific Daylight Time. Thank you very much for your time, and I look forward to hearing from you.

Sincerely,



Mr. Elwood Lowery, President
Nevada Indian Environmental Coalition

cc: NIEC tribes
B. Clinton

H. O'Leary
A. Deer
Nevada Legal Services
B. Nelson



The Secretary of Energy
Washington, DC 20585

July 7, 1994

Mr. Arlan Melendez, Chairman
Reno Sparks Tribal Council
P.O. Box 7440
Reno, Nevada 89510

Dear Mr. Melendez:

Thank you and the members of the Nevada Indian Environmental Coalition for your letters, dated January 19 and May 20, 1994, regarding "affected status" and funding for participation in the Yucca Mountain Site Characterization Office. We understand that formal recognition and participation in the Yucca Mountain repository studies has been of interest to the American Indian community for some time. The Department of Energy and this Administration understand your expressed concerns and look forward to working with you to address these issues.

The Department of Energy does not have authority under the Nuclear Waste Policy Act of 1982, as amended, to confer "affected status" to the members of the Nevada Indian Environmental Coalition. This responsibility lies with the Secretary of the Interior. I will consult with Secretary of the Interior Bruce Babbitt and urge him to consider "affected status" for the members of the Nevada Indian Environmental Coalition. We will cooperate with the Department of the Interior on any changes in policy that might be required.

With respect to the provision of financial assistance, the Office of Civilian Radioactive Waste Management is working through our Yucca Mountain Site Characterization Office to identify an appropriate funding mechanism for this purpose. Mr. Robert M. Nelson, Acting Project Manager for the Yucca Mountain Site Characterization Office, advised me that he met with representatives of your organization to discuss your immediate funding needs, to seek your assistance in establishing eligibility criteria, and to identify an appropriate Tribal organization(s) to administer such financial assistance. You will be hearing more from him in the near future.

With regard to your concern about being excluded in the past from regular update meetings, we agree that Tribal representatives have an independent role in these meetings. If there is any misunderstanding on this point, we will be pleased to clarify our position.

Sincerely,

A handwritten signature in cursive script, reading "Hazel R. O'Leary". The signature is written in dark ink and is positioned above the printed name.

Hazel R. O'Leary

NEVADA INDIAN ENVIRONMENTAL COALITION

1575 Delucchi Lane, #128 Reno, Nevada 89502
702-476-0361

May 20, 1994

Hazel O'Leary, Secretary
Department of Energy
Forrestal Building
1000 Independence Avenue, SW
Washington, DC 20585

Re: Affected Status Letter of Jan. 19, 1994

Dear Secretary O'Leary,

The Nevada tribes represented by the Nevada Indian Environmental Coalition, the same tribes requesting Affected Status under the proposed high level nuclear waste facility at Yucca Mountain, Nevada, hereby request your department to make a decision regarding the application submitted as described in the above reference.

We request that you make this decision and notify us of this decision within 30 days from the date of this letter. If we receive no word from you, we will take that as your final decision to deny the application.

As you are aware, President Bill Clinton very recently met with American Indian tribes and reaffirmed the government-to-government relationship which exists between the United States federal government and tribal governments. To carry out the President's commitment to this type of relationship between the federal government and Indian tribes, the Department of Energy must create an atmosphere of trust and responsibility to the Indian people in Nevada. To date, this has not occurred.

There is no government-to-government relationship between DOE and the 25 Nevada tribes, which represent a tribal population of more than 20,000 persons. Only through the granting of Affected Status and a commitment to funding that is equal to or greater than that which the counties receive can the Department of Energy begin to bridge the chasm that has been created

through negligence on the part of DOE to carry out President Clinton's message of a government-to-government relationship.

Sincerely,

A handwritten signature in black ink, appearing to read 'Elwood Lowery', written over a horizontal line.

Mr. Elwood Lowery, President, NIEC

cc: Nevada Tribal Chairmen/NIEC members
President B. Clinton
Secretary W. Christopher
Secretary B. Babbitt
Assistant Secretary A. Deer
Senator H. Reid
Senator R. Bryan
Congresswoman B. Vucanovich
D. Dreyfus, DOE
R. Holden, NCAI
B. Easterling, DOE
B. Nelson, YMPO
B. Loux, Nevada Agency for Nuclear Projects
C. Yeatman, Nevada Legal Services

Honorable William Jefferson Clinton
President of the United States
White House
Washington, D.C. 20585

We recently met with members of the Assistant Secretary-Indian Affairs Ada Deer, Department of Energy Dr. Dan Dreyfus, United States Senate Harry Reid, The new project Director at Yucca Mountain Bob Nelson Las Vegas Nevada Most of the meetings had been in the month of February, it is now 4 month later.

The 25 Nevada based tribes is applying for "Affected Status" in seeking participation in Site Characterization, and tribe that reside within the counties have not been designated or funded. Under the Federal Indian Policy Trust responsibility and Equity is based on a Government-Government relationship with Indian tribes, This is the present position of the Assistant Secretary-Indian Affairs it is unclear the position of the Department of Energy.

The Nevada Indian Environmental Coalition Would like to thank you for your Remarks to re-affirm the government-government relationship with American Tribal Governments., as well as "Policy Concerning Distribution of Eagle Feathers for Native American Religious Purposes" The Nevada Indian Environmental Coalition Is a Non profit Corporation in the state of Nevada and has Board membership made up of 23 Tribal Chairmans who represent their Tribal Governments, in the area of Environmental issues for Lands, Health, Solidwaste, Emergency Planning, Safe Drinking Water, Federal Facilities the high-level nuclear (proposed) at Yucca Mountain in Nevada.

Also in your remarks the second principle which is or will guide us we ask you to dramatically improve the relationship between the Nevada Tribal Governments and the Department of Energy, and become full partners, and remove all barriers.

To Date, no environmental and health baseline have been conducted on these lands where nuclear research and development occurred, other issues may need funds for protocol and changes. All tribal stakeholders in the clean-up process have not been Identified But as you know Mr. Clinton Multi-Faceted Federal Agency programs are proceeding if tribes are not Included this could reflect on the Department of Energy credibility. It has been the Tribes position that Inadequate recognition by Federal Agencies and Department of Contractors of Tribal Authority to Regulate Spent Nuclear Fuel and Radioactive Waste Shipment across Indian Lands. We feel DOE do not fully understand Tribal Treaty, We believe that the Tribes located in Nevada are not responsible for ensuring that federal environmental standards are met on tribal lands.

We also believe that even if Tribal lands were within the jurisdiction of federal environmental statutes, the statutes do not contain a congressional waiver of Tribal sovereign immunity and therefor agencies of the federal government, rather than individual Tribes, are responsible to ensure that the federal standards are met. This responsibility is created pursuant to the trust obligation, statutes and case law. We believe agency compliance could be accomplished either by DOE's or DOI's delegation of federal environmental authority to Tribes along with providing the funds and technical assistances to those Tribes that choose to develop their own environmental protection.

Again the Nevada Tribal Environmental Coalition who represents a total of 20,000 Native Americans in the state of Nevada would like to thank you on the efforts to make this Country run we are all stewards and caretakers and I hope it keeps us great.

We look towards the statement made by you at the closing remark " As we look back on the American journey the test is ahead is whether we are moving in the same direction for more tolerance, wider justice and greater opportunity for all of us.

It is the hope of the Nevada Indian Tribes impacted by the nuclear age that the next chapter of the nuclear age will be better than the last.

Correcting past mistakes can be achieved by this administration and the Interaction of Nevada Tribal Leaders and the Department of Energy Honorable Hazel O'Leary. In the Indian world we are told to pray for and think about our action and the effects on the next seven generations. I hope our interactions here in Nevada's Indian Country will be a step further along the trail towards a better understanding of who we are, where we have been and what is the next step.



Elwood Lowery

President of Nevada Indian Environmental
Coalition
2635 Sutcliff Highway
Sutcliff, Nevada 89510

CC:

D.A. DREYFUS, HQ (RW-1)FORS
L.H. BARRETT, HQ (RW-2)FORS
Catherine Felty, NEV IND. ENVIRONMENTAL COALITION
R.I. Holden, National Congress of American Indians
Washington D.C.
Nevada Coalition Members Nevada
A.E. Deer Assistant Secretary
Ind. Affairs, Washington D.C.
D.K. Inouye U.S. Senate Committee on
Indian Affairs Washington D.C.
Bob Nelson, Acting Director
Yucca Mountain Project Office
Las Vegas, Nevada 89101

Honorable Hazel O' Leary
Secretary of Energy
Forrestal Building, Washington D.C.

Bruce Babbitt, Secretary
Department of the Interior
Washington D.C.

C. Yatemene Nevada Legal Services
Indian-Rural Office
Carson City, Nevada 89703



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240



APR 18 1994

Mr. Elwood Lowery
President
Nevada Indian Environmental Coalition
P.O. Box 7440
Reno, Nevada 89510

Dear Mr. Lowery:

Thank you for your letter dated March 30, 1994, in which you expressed concern that no progress has occurred relative to securing "affected status" for the tribes represented by your coalition.

Let me reassure you that we are taking action on your request. My environmental personnel have talked to their contacts at the Department of Energy that oversee the Yucca Mountain project in order to get a thorough insight into the problems that exist in granting the tribes affected status. Having done this, we have recently written a letter to Secretary O'Leary requesting that your situation be reviewed and a solution be formulated that would be mutually acceptable to all concerned.

We assure you that your concerns are important to us and we have taken action to alleviate them.

Sincerely,

Ada E. Deer
Assistant Secretary - Indian Affairs

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL

of pages 1

| | |
|-------------------------|---------------------------|
| To Mr. Robert Holden | From Fred Hawman |
| Dept./Agency NCAI | Phone # (202) 208-4791 |
| Fax # (202) 546-3741 | Fax # |

NSN 7540-01-317-7288

5010-101

GENERAL SERVICES ADMINISTRATION

Honorable Hazel O'Leary
Secretary of Energy
1000 Independence Ave., SW
Forrestal Building
Washington, D.C. 20585

APR 18 1994.

Dear Madam Secretary:

We recently met with members of the Nevada Indian Environmental Coalition that represents more than 20,000 tribal members that live in Nevada. The concerns of these people centered around the high level radioactive waste repository proposed for Yucca Mountain in Ney County, Nevada and the omission of these tribes as having "affected status."

The members of the Coalition indicated the 10 counties that are contiguous to Ney County have all been granted affected status and have been given funds that enable them to participate in the meetings being held to discuss issues impacting on the population as a whole. The 16 Indian tribes that reside in these counties have not been so designated or funded.

We believe that strict adherence to the law in its present form denies these tribes "affected status." We also believe that the Federal Indian Policy that is based on a government-to-government relationship with Indian tribes could allow these tribes to be recognized as having the "affected status," similar to that given to the counties, as they request. This decision is one that must be made by the Department of Energy.

In addressing an issue of the magnitude of the Yucca Mountain project and its impact on all of the residents of the State of Nevada, we believe that these Indian tribes are raising legitimate concerns that could be best addressed by our agencies working together. We would be willing to work with your office to formulate a decision that could satisfy all parties concerned.

Sincerely,

/S/ Ada E. Deer

Ada E. Deer

Assistant Secretary - Indian Affairs

SectySurname:SectyRF(2):101A:BureauRF:

204Surname:200Chron:Chron:Pending:



DEPARTMENT OF ENERGY

Office of Civilian Radioactive Waste Management
Office of Geologic Disposal
Yucca Mountain Site Characterization Project Office
P.O. Box 98608
Las Vegas, NV 89193-8608

WBS 1.2.13.4.9
QA: N/A 11:16

APR 15 1994

A. Brian Wallace, Vice-Chairman
Inter-Tribal Council of Nevada
P.O. Box 7440
Reno, NV 89510

Dear Mr. Wallace:

In response to your letter to me dated April 8, 1994, I want to take this opportunity to let you know that I have received confirmation that Mr. Calvin Meyers has received a personal letter from Mr. Greg Fasano. We here at the Yucca Mountain Site Characterization Office (YMSCO) feel that it was most unfortunate that the incident between Mr. Meyers and Mr. Fasano ever occurred. We sincerely hope that the U.S. Department of Energy (DOE) and the Inter-Tribal Council of Nevada can put this issue behind us and concentrate our efforts on future endeavors that will continue to foster a professional working relationship.

As you may be aware, the YMSCO has recently undergone a major reorganization. As part of this reorganization I have directed that more emphasis be placed on the Native American Program. Since the unfortunate incident in question occurred, the project has employed a DOE person to administer the program. This individual, Mr. Joe Chirieleison, has had extensive experience in dealing with tribal issues both for DOE and also as Chief of the Engineering Section for the Albuquerque Area Bureau of Indian Affairs. As a result of this internal change, Mr. Fasano will not be taking as active a role in Native American efforts as in the past.

On March 9, 1994, I had asked Mr. Meyers what it would take to put the incident behind us. His response was for Mr. Fasano to apologize. I am optimistic that the reorganizational changes and the letter from Mr. Fasano meet Mr. Meyers' request.

A. Brian Wallace

-2-

APR 15 1994

I want to add my personal apology to you and to all of the Native American community who may have taken offense at what one of my staff members may have done, no matter what his intentions were. I am very concerned that as both civil servants and as Nevadans we maintain our credibility and professionalism at all times. I hope that this issue is now behind us.


Robert M. Nelson, Jr.
Acting Project Manager

AMESH:JPC-3068

cc:

D. A. Dreyfus, HQ (RW-1) FORS
L. H. Barrett, HQ (RW-2) FORS
Catherine Felty, Inter-Tribal Council
of Nevada, Reno, NV
gaiashkibos, National Congress of
American Indians, Washington, DC
R. I. Holden, National Congress of
American Indians, Washington, DC
Elwood Lowery, Inter-Tribal Council
of Nevada, Reno, NV
Calvin Meyers, Moapa Paiute Tribe,
Moapa, NV

INTER-TRIBAL COUNCIL OF NEVADA, INC.

806 HOLMAN WAY • SPARKS, NEVADA 89431 • P.O. BOX 7440 • RENO, NEVADA 89510
PHONE (702) 355-0600 FAX (702) 355-0648

BATTLE MOUNTAIN
BAND COUNCIL

CARSON COLONY
COMMUNITY COUNCIL

DRESSLERVILLE
COMMUNITY COUNCIL

DUCK VALLEY
SHOSHONE-PAIUTE
BUSINESS COUNCIL

DUCKWATER
SHOSHONE
TRIBAL COUNCIL

ELKO BAND
COUNCIL

ELY SHOSHONE
COUNCIL

FALLON BUSINESS
COUNCIL

FT. MCDERMITT
PAIUTE-SHOSHONE
TRIBES

GOSHUTE BAND
COUNCIL

LAS VEGAS PAIUTE
TRIBAL COUNCIL

LOVELOCK TRIBAL
COUNCIL

MOAPA BUSINESS
COUNCIL

PYRAMID LAKE
TRIBAL COUNCIL

RENO/SPARKS
TRIBAL COUNCIL

SOUTH FORK
BAND COUNCIL

STEWART COMMUNITY
COUNCIL

SUMMIT LAKE
PAIUTE COUNCIL

TE-MOAK TRIBAL
COUNCIL

WALKER RIVER
PAIUTE TRIBAL
COUNCIL

WASHOE TRIBAL
COUNCIL

WELLS BAND
COUNCIL

WINNEMUCCA
COLONY COUNCIL

WOODFORDS
COMMUNITY
COUNCIL

YERINGTON PAIUTE
TRIBAL COUNCIL

YOMBA TRIBAL
COUNCIL

April 8, 1994

Bob Nelson, Acting Director
Yucca Mountain Project Office
101 Convention Center Drive
Las Vegas, NV 89109

Dear Mr. Nelson,

This letter is being written in support of Moapa Vice-Chairman Calvin Meyers and his activities relating to the Department of Energy.

It has come to the attention of the 25 Nevada tribes that Vice-Chairman Meyers is being singled out apparently by DOE personnel who are labeling him as a "radical" who is "instigating" tribal DOE activities in the state of Nevada. We have received word that these rumors have spread to DOE in Washington, D.C.

Vice-Chairman Meyers has been working on behalf of his tribe for a number of years in DOE-related activities. He is very knowledgeable about these activities and his opinion is valued by all Nevada tribes in these issues. He is not, however, an "instigator" in tribal DOE activities. He is a vital part of a collective and organized effort by the Nevada tribes to be officially recognized by the United States government as having the need to protect their people and lands.

All Nevada tribes have a great interest in both the Nevada Test Site and the Yucca Mountain Project and have made their own decisions regarding tribal involvement in the state. We are aware that Nevada tribes have been blatantly neglected by the Department of Energy in affairs relating to oversight activities for the Yucca Mountain Project. While Vice-Chairman Meyers has a great deal of experience in the area of working with DOE, we know from first hand experience that we have been left out of the YMP and DOE funding loop.

In another item of concern, we also ask at this time that a formal apology immediately be written by DOE employee Greg Fasano to Vice-Chairman Meyers regarding a scene which took place during a National Congress of American Indians meeting one year ago in Las Vegas. This incident was witnessed by a number of people, and the treatment that Vice-Chairman Meyers received from Mr. Fasano was disrespectful and rude.

Vice-Chairman Meyers is a well-respected member of the Nevada tribal community, and we will not tolerate the rumors which have reached DOE headquarters regarding him, nor will Nevada tribes accept one their elected officials receiving such disrespectful treatment from an employee of a federal agency.

We ask that you request Mr. Fasano to apologize to Vice-Chairman Meyers and that any rumors being circulated about him immediately cease. We also ask that this letter be forwarded to Yucca Mountain Project personnel, particularly those assigned to work with tribes. Thank you for your prompt attention to this matter.

Please contact Daryl Crawford, executive director of the Inter-Tribal Council of Nevada, if you have any questions regarding our concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "A. Brian Wallace". The signature is fluid and cursive, with the first name "A." being particularly prominent.

Mr. A. Brian Wallace, Vice-Chairman
Inter-Tribal Council of Nevada

cc: C. Meyers
E. Lowery
H. O'Leary
R. Holden

March 29,1994

Daniel K. Inouye, Chairman
U.S. Senate Committee on Indian Affairs
838 Hart Office Building
Washington DC

Dear Senator Inouye,

On behalf of the 23 members of the Nevada Indian Environmental Coalition, are requesting your assistance on the issues dealing with the proposed high-level nuclear waste storage facility at Yucca Mountain.

The more than 20,000 tribal members represented by the Nevada Indian Environmental Coalition are requesting your support in the areas:

1. securing interim funds in the amount of \$ 200,000.00 for Administrative oversight activities at the Yucca Mountain site.
2. securing interim funding in the amount of \$ 250,000.00 for tribal cultural resource management program.
3. securing finding for assistance to each of 9 Nevada tribes as determined by affected counties in Nevada Amount as follows
\$ 60,000 per 9 tribes= \$ 540.000.00.


We are requesting you send letters to support to Dr.Dan Dreyfus, Director of the Office of Civilian Radioactive Waste Management.

We have been working patiently with Mr.Robert Nelson Acting Director of the Yucca Mountain Project Office and as of today we feel we are not making any progress.

Again, Senator Inouye, the Nevada tribes call upon your assistance to see that DOE lives up to it's own Indian Policy and the trust responsibility instilled in every federal agency in this country.

On behalf of the 20,000 tribal members and 23 tribal chairmans who are members of the coalation,we would like to thank you for your time.

Sincerely,


Elwood Lowery, President
Nevada Indian Environmental Coalition

CC: Environmental Coalition members

INTER-TRIBAL COUNCIL OF NEVADA, INC. NEVADA INDIAN ENVIRONMENTAL COALITION

806 HOLMAN WAY • SPARKS, NEVADA 89431 • P.O. BOX 7440 • RENO, NEVADA 89510
PHONE (702) 355-0600 FAX (702) 355-0648

March 22, 1994

Harry Reid
United States Senate
324 Hart Senate Building
Washington, DC

Dear Senator Reid,

On behalf of the 23 members of the Nevada Indian Environmental Coalition, I am once again requesting your assistance in on issues dealing with the proposed high-level nuclear waste storage facility at Yucca Mountain.

The more than 20,000 tribal members represented by the Nevada Indian Environmental Coalition are requesting your support in four areas: 1) securing interim funding for oversight activities at Yucca Mountain; 2) securing interim funding for cultural resource management activities at the Yucca Mountain site; 3) achieving "affected status" for the Yucca Mountain Project; and 4) receiving funding equal to or greater than the minimums allocated to Nevada counties receiving funding for oversight activities.

We are requesting you to send letters of support to Dr. Dan Dreyfus, Director of the Office of Civilian Radioactive Waste Management, Mr. Robert Nelson, Acting Director of the Yucca Mountain Project, Secretary of Energy Hazel O'Leary and Secretary of Interior Bruce Babbitt

We have been working patiently with the Office of Civilian Radioactive Waste Management as well as the Yucca Mountain Project Office, but we feel we are not making much progress. The idea of "16 Culturally Affected Tribes" keeps getting in our way when we believe we are making advancements on the issue. While we realize that cultural protection plays an extremely important role in the lives of Nevada Indians, we also know that tribes are not being included in any site characterization studies being conducted on any county, state, or federal level.

Nine reservations lie within the boundaries of the nine affected counties in the state of Nevada. There is no funding for these tribes to study hydrological, geological, or seismic activities, pneumatic pathways, economic development or transportation issues. We know there will not be a lead bubble pop up around an Indian reservation should a nuclear waste "incident" occur, but this is the impression we are being given by DOE. **The message has been that tribes should study cultural issues, not scientific issues.** The Nevada Indian Environmental Coalition sees this at best as a side-stepping of the real issues in an effort to avoid tribal involvement, or at worst, a paternalistic attitude that **will not be tolerated** by Nevada tribes.

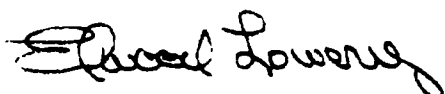
The Nevada tribes have waited long enough to be included in funding for studies, and time is quickly passing by. At the March 10 Affected Units of Government meeting, hosted by Inyo County in Death Valley, DOE made it clear that it was looking at **speeding up site** characterization activities that would lead directly to licensing of the repository. Furthermore, on March 14, DOE made the announcement that the Nevada Test Site was being added to the list of possible interim storage sites for high-level waste, prior to permanent storage. **This announcement indicates that all Nevadans, Indian tribes included, must be looking at transportation routing activities much sooner than the DOE projected date of 2008.**

In a 1990 study conducted by the Nevada Nuclear Waste Project Office, findings indicated that counties do not work with tribes on Yucca Mountain issues. In fact, counties are not obligated to work with tribes -- DOE is obligated to work with tribes, according to their own Indian Policy, which states that tribes are responsible for the health and welfare of their people and lands, and that DOE will work with tribes on a government to government basis.

Again, Senator Reid, the Nevada tribes are requesting your assistance to see that DOE lives up to its own Indian Policy and the trust responsibility instilled in every federal agency in this country. Several counties had to secure their own affected status through a law suit, and they are now considered to be more than "culturally affected." Nevada tribes are asking only for the same consideration: for DOE to realize there will be no protective lead bubble that will magically appear around reservations, and *that tribes must be included now in the site characterization studies.*

On behalf of the 20,000 Nevada Native Americans in the Environmental Coalition, I want to thank you for your time, and we await your next move. Our next move will be going to the media to let the public know what we are dealing with on Yucca Mountain issues

Sincerely,



Mr. Elwood Lowery, President
Nevada Indian Environmental Coalition

cc: Environmental Coalition members
Dr. D. Dreyfus, DOE
Mr. R. Nelson, DOE
Secretary Hazel O'Leary, DOE
Carol Yeatman, Nevada Legal Services

**INTER-TRIBAL COUNCIL OF NEVADA, INC.
NEVADA INDIAN ENVIRONMENTAL COALITION**

806 HOLMAN WAY • SPARKS, NEVADA 89431 • P.O. BOX 7440 • RENO, NEVADA 89510
PHONE (702) 355-0600 FAX (702) 355-0648

March 31, 1994

Secretary Hazel O'Leary
Department of Energy
Forrestal Building
1000 Independence Ave., SW
Washington, D.C. 20585

Dear Secretary O'Leary,

Enclosed you will find a copy of a letter from Wendy R. Dixon, Assistant Manager for Environment, Safety, and Health for the Yucca Mountain Project Office. The letter was distributed to the tribes and organizations that were determined to be culturally affected by the YMP, according to the Richard Stoffle cultural resource study on Yucca Mountain.

In this letter, Ms. Dixon states that "...DOE is willing to provide some funding to single Native American entity which must represent, at a minimum, the 16 involved Native American tribes and organizations."

This is the same type of funding that Dr. Dan Dreyfus and Mr. Bob Nelson of DOE instructed the Nevada Indian Environmental Coalition (NIEC) to submit a proposal for to the Yucca Mountain Project Office. Mr. Easterling suggested that NIEC could contract for these services to be provided directly to the Nevada tribes during the National Congress of American Indians Nuclear Waste Indian Policy Committee meeting in Washington, Feb. 14-16, 1994.

This proposal, in the amount of \$250,000, was submitted to Mr. Bob Nelson, Acting Project Director, YMPO, by Calvin Meyers, Vice-Chairman of the Moapa Band of Paiutes, and Catherine Felty, coordinator, NIEC.

At this time a second proposal, in the amount of \$740,000, was also presented to Mr. Nelson. This proposal is for tribal oversight activities for the YMP. This amount is interim funding, prior to the Nevada tribes receiving affected status granted under DOE and the Department of Interior. These are two separate proposals, for completely different activities.

The tribes represented under the oversight activities proposal are the nine tribes located within the boundaries of seven of the nine Nevada counties currently receiving oversight funding.

These tribes are not receiving funds to conduct any oversight activities, and are being left out of Nevada's "nuclear loop" in an action that appears to be environmental racism. There will not be a lead bubble pop up around reservation lands to protect tribal people.

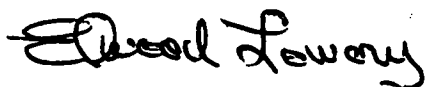
Each time NIEC and the Nevada tribal leaders have attempted to bring up oversight activities, the representatives of Yucca Mountain Project DOE state that NIEC must work with the '16 culturally affected tribes.' (We have corrected the YMPO that one of the 'tribes' is an Indian organization and that one tribe is not federally recognized. Ms. Dixon's letter now reflects that fact.) While we realize that protection of cultural resources is an important and vital aspect of the trust responsibility that DOE has to Indian people, we also realize that the same trust responsibility must extend to oversight activities so that Nevada Indian leaders can protect their people and lands.

Ms. Dixon's statement in the letter that the "16 involved Native American tribes and organizations" must all work with a "single Native American entity" which must represent them.

Ms. Dixon obviously does not realize that there is **no** federal agency, including DOE, that can dictate to sovereign tribal governments whom they will work with and choose to represent them. Tribes are sovereign nations that can decide for themselves who will represent them. DOE's own Indian Policy states that tribal leaders are to make their own decisions regarding the health, safety, and environments of their people and lands.

We are looking to you for assistance in alleviating the situation that has developed. If not, the time has come for Nevada tribes to look to Congress and the State Department for intervention. We cannot continue receiving different directions from Headquarters and YMPO. While we still believe there are some sincere people working for DOE in both offices, we believe they are being steered in different directions by persons attempting to divide and conquer Nevada tribes, an old tactic that may have been successful in the past, but will not work today.

Sincerely,



Mr. Elwood Lowery, President
Nevada Indian Environmental Coalition

cc: NIEC members
Sen. H. Reid
Sen. R. Bryan
Rep. B. Vucanovich
Gov. B. Miller
Sec. B. Babbitt
Dr. D. Dreyfus
Assistant Sec. A. Deer
R. Holden

March 30,1994

Ada E. Deer
Assistant Secretary
U.S. Department of the Interior
1849-C Street, NW
Washington DC

Dear Deer,

On behalf of the 23 members of the Nevada Indian Environmental Coalition,I am once again requesting your assistance on the issues dealing with the proposed high-level nuclear waste storage facility at Yucca Mountain.

The more then 20,000 tribal members represented by the Nevada Indian Environmental Coalition sent the staff and two tribal officals to meet with you in the first week of February to this day we have not received any position papers on the interiors support to Hazel O'Leary Secretary of Energy.

We have been working patiently with the Yucca Mountain Project Office,We are begining to feel that Washington is a place where sincere but ill-informed non-indians make policies and laws that are affecting nevada tribes daily lives. your imput and involvement is minimal at this point,and we feel that there is a great demand upon the protection of our resources.

The more then 20,000 tribal members are requesting your support in 4 areas:

1. Securing interim oversight funds in the amount of \$200K.
- 2.Securing interim funds for cultural resources \$ 250K
- 3.Achieving Affected Status for the Yucca Mountain Project.
- 4.Receiving equal funding or greater then Nevada Counties.

On behalf of the Nevada tribes we call upon you and your assistance to see that the Department of Energy live up to it's Indian Policy and trust to tribal members.
And we thank you for the time and efforts.

Sincerely,


Elwood Lowery, President

Nevada Indian Environmental Coalition

CC: Coalition Members
Carol Yatemmen,Nevada Legal Services

BOB MILLER
Governor

STATE OF NEVADA

ROBERT J. HALSTEAD
Executive Director



**AGENCY FOR NUCLEAR PROJECTS
NUCLEAR WASTE PROJECT OFFICE**

Capitol Complex
Carson City, Nevada 89710
Telephone: (702) 687-3744
Fax: (702) 687-5277

January 31, 1994

To: Catherine Felty, Environmental Protection Coordinator,
Inter-Tribal Council of Nevada/Nevada Indian Environmental
Coalition

From: Robert J. Halstead, Transportation Advisor, Agency for
Nuclear Projects/Nuclear Waste Project Office

Subject: Native American Lands Likely To Be Affected By Nuclear
Waste Transportation To The Proposed Repository Site At
Yucca Mountain, Nevada

RESERVATION LANDS LIKELY TO BE AFFECTED BY TRUCK SHIPMENTS

Under U.S. Department of Transportation regulations (HM-164) the preferred routes for truck shipments to Yucca Mountain are I15 and US95. The Nevada Department of Transportation is considering designation of alternative routes, including US93 and US6 in White Pine County.

The Moapa Indian Reservation would be traversed by shipments on I15.

The Las Vegas Indian Reservation would be traversed by shipments on US95.

The Ely Indian Colony and the Duckwater Indian Reservation would likely be affected by shipments on US93 and US6.

RESERVATION LANDS LIKELY TO BE AFFECTED BY RAIL SHIPMENTS

Yucca Mountain currently lacks rail access. In 1990, the U.S. Department of Energy(DOE) identified 10 potential rail access routes. While three routes were prioritized for feasibility study, all 10 are still potentially under consideration. Five routes would link Yucca Mountain to the Union Pacific mainline in southern Nevada. Three routes would connect Yucca Mountain to the Southern Pacific and Union Pacific mainlines in northern Nevada.

The Moapa Indian Reservation would be traversed by rail shipments on the Union Pacific southern mainline.

Halstead to Felty, 1/31/94, page 2

The Walker River Indian Reservation would be traversed by rail shipments on the Southern Pacific branchline to Mina.

The Pyramid Lake Indian Reservation; and the Reno-Sparks, Lovelock, Winnemucca, Battle Mountain, Elko and Wells Indian Colonies, would be traversed or affected by rail shipments on the Southern Pacific and Union Pacific northern mainlines.

POTENTIAL IMPACT OF RAIL ACCESS CONSTRUCTION ON WESTERN SHOSHONE LAND CLAIMS AND CULTURAL RESOURCES

All three DOE priority rail access corridors to Yucca Mountain cross lands claimed by the Western Shoshone according to the Ruby Valley Treaty of 1863. The Carlin route (about 360 miles long) is located entirely upon lands claimed by the Western Shoshone. About three-quarters of the Caliente route (about 360 miles long) and about one-half of the Jean route (120 miles long) are also located on these lands.

To date, there have been no serious studies of the potential impacts of rail construction and nuclear waste transportation on Western Shoshone interests in these lands, nor have there been any studies of the potential implications of the Western Shoshone land claims for rail construction and operation. Preliminary analysis by our office has identified several issues for further study: implications of the Western Shoshone land claims for DOE right-of-way acquisition; location of burial sites, ceremonial sites, and other site-specific cultural resources within the rail access corridors, with necessary protection of such sites during and after decontamination under arrangements acceptable to the Western Shoshone; "standard" (non-radiological) socio-economic impact assessment of rail construction and operation; and the potential for "special" (nuclear-related) social, cultural, and economic impacts.

So far, DOE has studied only one route - Caliente - in detail. DOE's consultants, Science Applications International Corporation and De Leuw, Cather and Company, had the following to say about "Possible Native American Concerns":

The Nevada Test Site and Yucca Mountain are located on land claimed to be Western Shoshone aboriginal territory. At this stage of the project, no contacts have been made with Native American groups. Consequently, their specific concerns cannot be identified at this time. It is known however, that Native Americans have cultural and religious interests regarding the project area. It is recommended that direct contacts be made to the individual tribal groups in the project area, should the Caliente Alternative be selected for detailed study under an EIS. These tribal groups could then be consulted as to the cultural, historical and religious significance of places, crossed by the potential railroad right-of-way.

[Final Yucca Mountain Rail Access Study, Caliente Route, Conceptual Design Report, June, 1992, p.7-9]

JAN-31-94 MON 12:10 ITCH
Wayne Cameron
John A. Chachas
Julio C. Castello
Brent Eldridge
Claude Rose

7023550648

021-3/94/12

COMM. P.O.
953 Compton St.
Ely, Nevada 89301
(702) 289-8841
Fax: (702) 289-8841

White Pine County
Board of County Commissioners

To whom it may concern:

The White Pine County Nuclear Waste Office is in full support of Indian Tribes seeking Affected Status. Indian Tribes in Nevada have been very concerned and involved in issues regarding Yucca Mountain and other issues regarding High Level Nuclear Waste. Representatives from Indian Tribes have always been present at meetings of the Affected Units of Local Governments in Nevada.

Nevada Indian Tribes have a right of participation, afforded them under section 116 (a) of the Nuclear Waste Policy Act of 1982. It is my belief that this right of participation should carry with it a designation of Affected Status as defined under Subtitle A - Nuclear Waste Amendments Section 5002 (31) Definitions.

Your consideration of this matter is appreciated.

SINCERELY,



Florindo Mariani
Coordinator



Wayne Cameron
County Commissioner

January 20, 1994

Mr. Elwood Lowery, President
Nevada Indian Environmental Coalition
P.O. Box 7440
Reno, NV 89510

Dear Mr. Lowery:

I wanted to reiterate to you my position, as I discussed in the recent Affected Units of Government meeting with the Department of Energy last month, that the participation and involvement in evaluating and monitoring the Yucca Mountain project should be as broad and as encompassing as possible.

To that end, I am supportive of the inclusion of Nevada Tribal organizations and entities as having formally recognized "affected" states as described in the Nuclear Waste Policy Act.

Please contact me if I can be of any assistance in furthering this recognition.

Sincerely,



Robert R. Loux
Executive Director

RRL:jj

INTER-TRIBAL COUNCIL OF NEVADA, INC.
NEVADA INDIAN ENVIRONMENTAL COALITION

806 HOLMAN WAY • SPARKS, NEVADA 89431 • P.O. BOX 7440 • RENO, NEVADA 89510
PHONE (702) 355-0600 FAX (702) 355-0648

Jan. 19, 1994

Hazel O'Leary, Secretary
Department of Energy
Forrestal Building
1000 Independence Avenue, SW
Washington, DC 20585

Dear Secretary O'Leary,

We the undersigned members of the Nevada Indian Environmental Coalition hereby apply on behalf of our respective tribes for "Affected Status" for the Yucca Mountain Repository Project.

We also ask that the National Congress of American Indians, through their agreement with your department to provide education to Native Americans through the Nuclear Waste Program , assist us in providing technical assistance in compiling the necessary supporting documentation for the application.

The Nevada tribes realize that the formal process for receiving Affected Status is to apply through the Department of the Interior, and we are notifying Secretary Bruce Babbitt of our application. We are directing our application to your department, however, in hopes that you will see the inequity that is occurring within the DOE funding process in Nevada and California.

The Nuclear Waste Policy Act and its amendments provide for Affected Parties to have an active voice and specifically provides for tribal participation. However, tribes located within the boundaries of the state of Nevada and the counties have received no funding to conduct studies. Conversely, the state of Nevada and the repository host county of Nye as well as nine other contiguous counties have received and are continuing to receiving several million dollars each year to conduct their own studies.

Two tribes, the Moapa Band of Paiutes and the Duckwater Shoshone Tribe, submitted applications for Affected Status in the past. The Moapa Band was turned down in 1984, and the Duckwater Tribe withdrew its application after allowing the Department of Interior one year to act upon it, during which time no action was taken by Interior.

The sixteen tribes which have been designated as being culturally affected by the proposed repository have been involved in cultural resource protection activities. There have been no efforts, however, for those who have the closest ties to the land to conduct any of their own hydrological, geological, or economical studies similar to those being conducted by the state and

counties. Although the state of Nevada has been as monetarily supportive as it can afford for the Moapa Band of Paiutes and the Duckwater Western Shoshone, the state cannot afford to support prolonged and extensive activities for the tribes, nor is the responsibility of the state to do so, according to the Department of Energy's American Indian Policy.

The DOE American Indian Policy states that the " Department recognizes and commits to a government-to-government relationship with American Indian Tribal Governments." It further states that the Department will view Tribal governments as the "appropriate non-Federal parties for making decisions affecting Indian country, its energy resource sand environments, and the health and welfare of its populace." The Department will also "encourage tribal governments and their members to participate fully in the national and regional dialogues concerning departmental programs and issues."

So far, there has been no government-to-government relationship with tribes regarding the Yucca Mountain Project in relationship to hydrological, geological, or economical issues. Yet counties, whom the federal government and its agencies have no trust responsibility towards, have received and are continuing to receive funding for such studies. Although the DOE American Indian Policy recognizes this trust responsibility that the federal government has with the tribes, the department thus far has been negligent in its fulfillment of its responsibilities.

While counties have allowed tribes and their representatives to "sit in" on meetings, there has been an underlying push from the Yucca Mountain Project Office in the past to exclude tribes from its regular update meetings for the counties and state. Historically, counties have not provided Indian tribes with services, and a 1991 survey and report by the Nevada Nuclear Projects Office substantiates this historical fact. While tribes are willing to work in an atmosphere of cooperation with both the counties and the state on studies, tribes, according to the DOE Indian Policy are to be dealt with directly on a "government-to-government" basis since DOE recognizes that tribal governments are the appropriate parties to make decisions "affecting Indian Country...environments, and the health and welfare of its populace." Tribal governments cannot and will not be represented by counties or states on issues dealing with the agencies and departments of the federal government.

Furthermore, if DOE keeps with its stated policy of transporting nuclear waste through sparsely populated areas, a minimum of fifteen Nevada Indian tribes will be affected by transportation to Yucca Mountain. If the Department of Energy truly wishes to "encourage" full Native American participation in "national and regional dialogues" on all departmental activities that affect Native Americans in Nevada, then the Department must provide equitable funding for tribal participation, equal to the participation of counties and the state of Nevada.

The previous Republican administrations were not receptive to tribal needs and left Nevada tribes totally ignored in the realm of funding for participation in the Yucca Mountain Project studies. As representatives of the Nevada tribes and as the governing board of the Nevada Indian Environmental Coalition which represents more than 20,000 Nevadan Native Americans, we hope that the new administration recognizes the funding discrimination which has been practiced by the previous administration. Furthermore, we have trust and confidence that the

Department of Energy under the Clinton Administration will seize this opportunity to provide Nevada tribes with the funding that is so greatly needed.

To rectify the wrong that has been perpetrated by the previous administrations, we ask that you do not pass this application along to the Department of the Interior, but instead choose to directly and immediately grant the applications to the Nevada tribes under the auspices of your own American Indian Policy, recognizing that tribal governments have the duty to protect their own people and lands. Only through a true government-to-government relationship between our governments and your office can we at last be granted the status that we deserve and must acquire so that we may receive funding to fulfill our duties as chairmen and chairwomen to protect our people. Only through a true government-to-government relationship between our offices and yours may we at last be granted the necessary funding so that, as tribal leaders, we may fulfill our duties of protection to our people and our lands.

Sincerely,

The Undersigned Chairpersons of the
Member Tribes of the Nevada Indian Environmental Coalition

cc: B. Clinton
B. Babbitt
H. Reid
R. Bryan
B. Vucanovich
D. Dreyfus
R. Holden
B. Easterling
B. Nelson
B. Loux

**INTER-TRIBAL COUNCIL OF NEVADA, INC.
NEVADA INDIAN ENVIRONMENTAL COALITION**

806 HOLMAN WAY • SPARKS, NEVADA 89431 • P.O. BOX 7440 • RENO, NEVADA 89510
PHONE (702) 355-0600 FAX (702) 355-0648

Jan. 19, 1994

Bruce Babbitt, Secretary
Department of Interior
Washington, DC

Dear Secretary Babbitt,

We the undersigned members of the Nevada Indian Environmental Coalition hereby apply on behalf of our respective tribes for "Affected Status" for the Yucca Mountain Repository Project. We are submitting a letter of application directly to Department of Energy Secretary Hazel O'Leary as we submit this letter to the Department of Interior.

We also ask that the National Congress of American Indians, through their agreement with the Department of Energy to provide education to Native Americans through the Nuclear Waste Program, assist us in providing technical assistance in compiling the necessary supporting documentation for the application.

The Nevada tribes realize that the formal process for receiving Affected Status is to apply directly to the Department of the Interior. However, we have directed an statement of application to Secretary O'Leary in hopes that DOE will see the inequity that is occurring within that department's funding process in Nevada and California.

The Nuclear Waste Policy Act and its amendments provide for Affected Parties to have an active voice and specifically provides for tribal participation. However, tribes located within the boundaries of the state of Nevada and the counties have received no funding to conduct their own studies. Conversely, the state of Nevada and the repository host county of Nye, as well as nine other contiguous counties, have received and continue to receive several million dollars each year to conduct their own studies.

Two tribes, the Moapa Band of Paiutes and the Duckwater Shoshone Tribe, submitted application for Affected Status in the past. The Moapa Band was turned down in 1984, and the Duckwater Tribe withdrew its application after allowing the Department of Interior one year to act upon it, during which time no action was taken by Interior.

The sixteen tribes which have been designated as being culturally affected by the proposed repository have been somewhat involved in cultural resource protection activities. There have

been no efforts, however, for those who have the closest ties to the land to conduct any of their own hydrological, geological, or economical studies similar to those being conducted by the state and counties. Although the state of Nevada has been monetarily supportive as it can afford for the Moapa Band of Paiutes and the Duckwater Western Shoshone, the state cannot afford to support prolonged and extensive activities for the tribes, nor is it the responsibility of the state to do so, according to the Department of Energy American Indian Policy.

The DOE American Indian Policy states that the "Department recognizes and commits to a government-to-government relationship with American Indian Tribal Government." It further states that the Department will view Tribal governments as the "appropriate non-Federal parties for making decisions affecting Indian Country, its energy resource and environments, and the health and welfare of its populace." The Department will also "encourage tribal governments and their members to participate fully in the national and regional dialogues concerning departmental programs and issues."

So far, there has been no government-to-government relationship with the tribes regarding the Yucca Mountain Project in relationship to hydrological, geological, or economical issues. Yet counties, whom the federal government and its agencies have no trust responsibility towards, have received and are continuing to receive funding for such studies. Although the DOE American Indian Policy recognizes this trust responsibility that the federal government has with the tribes, the department thus far has been negligent in its fulfillment of its responsibilities.

While counties have allowed tribes and their representatives to "sit in" on meetings, there has been an underlying push from the Yucca Mountain Project Office in the past to exclude tribes from its regular update meetings for the counties and state. Historically, counties have not provided Indian Tribes with services, and a 1991 survey and report by the Nevada Nuclear Projects Office substantiates this historical fact. While tribes are willing to work in an atmosphere of cooperation with both the counties and the state on studies, tribes, according to the DOE American Indian Policy are to be dealt with directly on a "government-to-government" basis since DOE recognizes that tribal governments are the appropriate parties to make decisions "affecting Indian Country...environments, and the health and welfare of its populace." Tribal governments cannot and will not be represented by counties or states on issues dealing with the agencies and departments of the federal government.

Furthermore, if DOE keeps with its stated policy of transporting nuclear waste through sparsely populated areas, a minimum of fifteen Nevada Indian tribes will be affected by transportation to Yucca Mountain, according to transportation studies conducted by both the state and DOE. If the Department of Energy truly wishes to "encourage" full participation by Native Americans in "national and regional dialogues" on all departmental activities that affect Native Americans in Nevada, then the Department must provide equitable funding for tribal participation, equal to the participation of the counties and state of Nevada.

The previous Republican administrations were not receptive to tribal needs and left Nevada Tribes totally ignored in the realm of funding for participation in the Yucca Mountain Project studies. As representatives of the Nevada tribes and the governing board of the Nevada Indian Environmental Coalition which represents more than 20,000 Nevadan Native Americans, we

hope the new administration recognizes the funding discrimination which has been practiced by the previous administration.

The Department of Energy has the capabilities of funding tribes directly under the Nuclear Waste Policy Act Amendments of 1987, through the same mechanism that counties are funded. Tribes may be termed "Affected Units of Government" under this amendment and may therefore receive money for studies. Although the Department of Interior has in past ruled upon this issues, we are asking that the Department of Energy seize this opportunity to provide tribes with the funding that is so greatly needed.

We would also ask that the Department of Interior give its total support to DOE, allowing tribes to receive funding as quickly as possible. We have faith in the new administration that this will immediately occur within Interior and DOE, thus providing both the funding mechanism for tribes as well as the trust responsibility which all federal agencies have has towards American Indian Tribes.

Only through true government-to-government relationships with Indian Tribes, DOE and Interior can tribes at last be granted the status and funding that we deserve and must acquire to fulfill our duties as chairmen and chairwomen to protect our people. Only through a true government-to-government relationship between our offices and yours may we at last be granted the necessary funding so that, as tribal leaders, we may fulfill our duties of protection to our people and our lands.

Sincerely,

The Undersigned Chairpersons
of the Member Tribes of the Nevada Indian Environmental Coalition

cc: B. Clinton
H. O'Leary
H. Reid
R. Bryan
B. Vucanovich
D. Dreyfus
R. Holden
B. Easterling
B. Nelson
B. Loux

**INTER-TRIBAL COUNCIL OF NEVADA, INC.
NEVADA INDIAN ENVIRONMENTAL COALITION**

806 HOLMAN WAY • SPARKS, NEVADA 89431 • P.O. BOX 7440 • RENO, NEVADA 89510
PHONE (702) 355-0600 FAX (702) 355-0648

Jan. 19, 1994

Harry Reid
United States Senate
324 Hart Senate Building
Washington, DC

Dear Senator Reid,

On behalf of the 21 member tribes of the Nevada Indian Environmental Coalition, I am coming to you to discuss two issues, the position of Nevada Tribes regarding Yucca Mountain studies and EPA funding for the support of the Coalition activities.

I am asking for your assistance in helping tribes obtain the position of "Affected Status" for the Yucca Mountain Repository. I also ask that you assist the tribes in receiving funding for the "Affected Status" positions.

The Nuclear Waste Policy Act and its amendments provide an active voice for Affected Parties and specifically provides for tribal participation. The state of Nevada and 10 affected counties in Nevada and California receive a total of several millions of dollars annually to conduct studies related to the Yucca Mountain Project, but tribes have received nothing to conduct their own studies on the repository.

Two tribes, the Moapa Band of Paiutes and the Duckwater Shoshone Tribe, submitted applications for Affected Status in the past. The Moapa Band was turned down in 1984, and the Duckwater Tribe withdrew its application after allowing the Department of Interior one year to act upon it, during which time no action was taken by Interior.

Sixteen tribes have been designated as being culturally affected by the proposed repository and have limited participation in culturally resource protection. However, there has been no funding for tribes to conduct hydrological, geological, or economical studies similar to those being conducted by the state and counties. Tribal members who live on reservations located within the boundaries of the affected counties are not considered affected, while just across the reservation border, counties receive funding for studies to protect their citizens.

The Department of Energy American Indian Policy Act calls for direct "government-to-government" relationships between DOE and tribes, yet there has been an underlying push by DOE in the past to exclude tribes from meetings hosted for the state and counties. Still, there is support from both counties and the state of Nevada Nuclear Waste

Projects Office for tribes to receive funding. The new project director at Yucca Mountain, Mr. Bob Nelson, has also publicly voiced support for the tribes during a Dec. 12 DOE meeting in Las Vegas.

Although we realize that the formal avenues that tribes should follow to become Affected Parties includes the Department of Interior's approval, DOE has the mechanism to provide status and funding under the Nuclear Waste Policy Act Amendment of 1987, the same funding mechanism by which the counties receive funding. Counties did not have to pass the Interior's muster; they are neither "treaty" counties or "federally recognized" counties, yet they currently receive funding for studies while tribes must sit in the back of rooms during DOE Affected Units of Government meetings.

The Nevada Indian Environmental Coalition board members passed a resolution (94-01) on January 7, 1994, requesting the Coalition to pursue these activities and secure status and funding for the Yucca Mountain Project. The Coalition members furthermore, have been verbally polled to decide how funding could be managed, and they have agreed to use the Coalition as a lead agency in pursuing the funding. The Coalition will act as lead agency in this matter, with funding being passed through to tribes. The Coalition agrees to handle financial, quarterly and annual reporting to Congress, as well as coordinating state-wide activities and educational workshops for tribal members on reservations.

The Nevada Indian Environmental Coalition is funded through a Multi-Media Grant (soon to be General Assistance Program), with FY94 funding at \$80,000, which was for a partial year due to the change to GAP. Previous years' funding levels were at \$140,000 and \$100,000 for FY92 and FY93, respectively.

Our funding levels are terribly insufficient. For example, in solid waste management for tribes, our funding levels were approximately \$2,000 each for five tribes requiring assistance in dump closures. Conversely, Inter-Tribal Council of Arizona last year received \$1.5 million to work with nine tribes in Arizona on the same issue. This year, they did not receive the same funding, but it is my understanding EPA Region 9 will be approaching Congress for part of a \$2.5 million Congressional add-on.

The Coalition wishes to acquire part of this Congressional add-on, and I am asking for your help in increasing our funding levels. We work with 21 tribes in the state of Nevada, and we see the addition of three more tribes in the near future. Because Nevada is such a large state, much of our budget is taken up with travel expenses. We need more staff people, a larger office space, and additional computer equipment to give the Coalition members the services they request and need. We seem to be left out of the funding "click" at the EPA Region 9 offices, so we are asking for your help. The 20,000 people represented by the Coalition members need your assistance to bring their environmental programs to levels required by law.

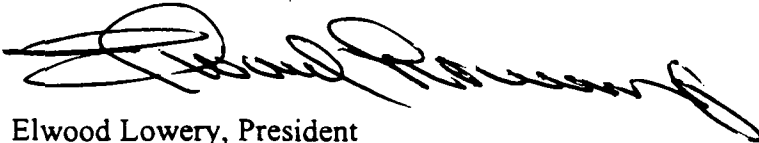
In conclusion, the Nevada Tribes are turning to you for help. We have been ignored completely by the Department of Energy, derelict in their duties spelled out in their own American Indian Policy. We receive rave verbal reviews from EPA Region 9 for our work on environmental

issues with tribes within the state, but we see no funding increases to further develop our work with Coalition members. We have come to a stand still and need your assistance.

On behalf of the 21 member tribes of the Coalition, I thank you in advance for your time and assistance in this very important matter.

Please contact me or Catherine Felty at 702-355-0600 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Elwood Lowery", written in a cursive style.

Elwood Lowery, President
Nevada Indian Environmental Coalition

cc: B. Clinton
H. O'Leary
B. Babbitt
R. Holden
Coalition Board