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Laund R Mills  
Laund Mills, Esq.

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# ORIGINAL

UNITED STATES DEPARTMENT OF ENERGY

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IN RE:

YUCCA MOUNTAIN SITE CHARACTERIZATION PLAN

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REPORTER'S TRANSCRIPT

OF

PROCEEDINGS

Taken on Monday, March 20, 1989

At two o'clock p.m.

At seven o'clock p.m.

Amargosa Valley Community Center

Amargosa Valley, Nevada

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MAY 24 1989

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Reported by: Anna Maria Ciarrocchi, CSR #188 and

Barbara Shavalier, CSR #84

## 1 APPEARANCES:

2 SCP Hearing Panel:

CARL P. GERTZ, Project  
Manager/Presiding Officer  
U.S. Department of Energy,  
Yucca Mountain Project  
P.O. Box 98518  
Las Vegas, Nevada 89193-8518

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LAMOND R. MILLS, ESQ.  
Moderator  
Mills, Gibson & Waite  
825 Clark Avenue  
Las Vegas, Nevada 89101

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JEAN YOUNKER, Senior Staff  
Geologist  
Science Applications  
International Corporation  
101 Convention Center Drive  
Suite 407  
Las Vegas, Nevada 89109

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1 MR. GERTZ: Good afternoon and welcome.  
2 My name is Carl Gertz, and I am manager of the Yucca  
3 Mountain project office. I will be the Department of  
4 Energy's presiding official for today's hearing on  
5 the Yucca Mountain Site Characterization Plan which  
6 describes the U.S. Department of Energy's plans for  
7 characterizing Yucca Mountain, Nevada to determine  
8 its suitability for a nuclear waste repository.

9 For the record, this hearing is  
10 convened at approximately 2:00 p.m. in the Amargosa  
11 Valley Community Center in the town of Amargosa  
12 Valley, Nevada. The hearing was noticed in the  
13 Federal Register on Friday, December 30th, as well as  
14 being advertised widely in local newspapers. In  
15 addition, notices were sent to our public mailing  
16 lists, and the news media were notified.

17 We are here today to receive your  
18 comments on the Site Characterization Plan. The  
19 Department of Energy has prepared this document as a  
20 plan to guide detailed scientific studies which will  
21 be conducted at Yucca Mountain during the next five  
22 to seven years.

23 The SCP is a living document; it will  
24 be updated and modified as more is learned about the  
25 geologic, hydrologic and climatological conditions at

1 the site. These changes will be compiled into SCP  
2 Progress Reports which will be issued semiannually to  
3 the Nuclear Regulatory Commission, State of Nevada,  
4 and to the public. The first SCP Progress Report is  
5 due to be published this summer.

6 In addition to the comments that you  
7 make this afternoon and tonight, written comments on  
8 DOE's site characterization plans may be made at any  
9 time during the site characterization process, which  
10 is expected to last the next five to seven years.  
11 These comments may be sent to the Yucca Mountain  
12 Project Office, U.S. Department of Energy, Post  
13 Office Box 98518, Las Vegas, Nevada, 89193-8518.

14 Both oral and written comments will  
15 receive the same consideration. At about the same  
16 time the SCP Progress Reports are issued, DOE will  
17 issue comment response packages. These will contain  
18 responses to the comments on the SCP that you make  
19 this afternoon and tonight, and any written SCP  
20 comments that are submitted. This includes comments  
21 made by the public, by the State of Nevada, by the  
22 Nuclear Regulatory Commission and other interested  
23 parties.

24 Originally, April 15th was the deadline  
25 set for the close of the initial SCP comment period.

1 At the request of Governor Miller, that deadline has  
2 now been extended to June 1st. Let me emphasize,  
3 however, that comments on DOE's site characterization  
4 studies or activities received after June 1st will be  
5 considered by DOE and receive responses at a later  
6 date.

7                   Last month DOE held a series of Project  
8 Update Meetings. These meetings were designed to  
9 provide the public information about the Project that  
10 the public told us they wanted to hear. Those  
11 meetings were intended to furnish you with  
12 information. This afternoon and tonight we are  
13 looking for information from you. Notice of both the  
14 Project Update Meetings and the SCP hearings was  
15 widely advertised in local newspapers and printed in  
16 the Federal Register. In addition, as I pointed out  
17 before, public mailing lists and the media were  
18 notified.

19                   In a few moments I will introduce the  
20 moderator of this afternoon's hearing. The moderator  
21 is an individual with experience in chairing public  
22 proceedings and he is not a DOE employee. He will  
23 conduct the hearing, calling on speakers and closely  
24 following the presentations. He will also certify  
25 the record of this meeting.

1           Also here this afternoon is a technical  
2 expert who will listen to the presentations and who,  
3 along with myself, may ask clarifying questions in  
4 order to make sure that the record fully reflects  
5 your comments. All comments made here today are  
6 being recorded by a professional court reporter, and  
7 will be made here today -- excuse me. -- and will be  
8 transcribed. The transcript from the hearings will  
9 be made available in local libraries as soon as  
10 possible after it is prepared. A list of these  
11 libraries is available in the rear of the room. Anyone  
12 wishing to purchase a copy of the transcript can make  
13 arrangements with the hearing reporter during breaks  
14 or after the hearing.

15           Now I would like to introduce the  
16 technical representative on this panel tonight this  
17 afternoon. On my right is Jean Younker, a Yucca  
18 Mountain Project geologist, who had a major role in  
19 development of the SCP. She worked with about 300  
20 scientists and engineers developing the plans to  
21 obtain data, to assess the suitability of Yucca  
22 Mountain for a high-level waste repository. A former  
23 university professor, she has a doctorate degree in  
24 geology.

25           At this point I would like to introduce

1 today's moderator. Lamond Mills on my left is a  
2 former U.S. attorney in Southern Nevada. He is now  
3 in private practice in Las Vegas. He has experience  
4 in conducting public proceedings. As I said earlier,  
5 he is here to conduct the meeting, call on speakers  
6 and follow the presentations. I will now turn the  
7 hearing over to him.

8 MR. MILLS: Thank you, Carl. I'm going  
9 to take just a couple of minutes to explain the  
10 procedures that we're going to be following this  
11 afternoon, and I'll probably do that every so often  
12 so that the new people coming in will have an  
13 opportunity also to understand exactly how we're  
14 going to do it. We've made arrangements, as you know,  
15 that people prior to this hearing could register and  
16 have an opportunity to be heard. We're also  
17 accepting registrations as people come in at the  
18 present time.

19 You will be given ten minutes to speak.  
20 Approximately eight minutes of that time, after eight  
21 minutes I will indicate by raising my hand that you  
22 have used that portion of your time, and I will  
23 notify you at the end of the ten-minute time that  
24 your time is up. We would ask then that you complete  
25 that thought that you're on, and relinquish your time



1 so that everyone can be heard.

2           Some of you may have brought a written  
3 copy of your comments. We encourage that, and if you  
4 have, please leave one at the back table back there  
5 at the registration, as well as with the court  
6 reporter, so that it can become part of the record.  
7 If you only brought one copy, check back at the  
8 registration table, and we've made arrangements to  
9 have that photocopied.

10           As you come forward, please indicate  
11 your name so that the court reporter is sure to get  
12 that down. We are going to start with those speakers  
13 who notified us first, and it will follow also with  
14 those who check in during the course of the meeting.  
15 They will be called in the order in which they  
16 presented themselves.

17           All speakers, both those who reserve  
18 time in advance and those who register this afternoon,  
19 will be given the opportunity to speak. The only  
20 exception to this will be in the order of the  
21 exception that we may make is if public officials may  
22 come in and we may take them out of order to  
23 accommodate them. But that will be the only  
24 exception.

25           Likewise, we're going to have recesses.

1 I can tell by the gathering here that we're not going  
2 to use up all of our time, and in that case we're  
3 going to go into recess for a certain period of time.  
4 As others arrive who want an opportunity to speak, we  
5 will again adjourn the meeting, and we will hear  
6 their comments.

7 We are here to hear from the public,  
8 and we want to hear from you and give everyone an  
9 opportunity to do that. We ask that only one person  
10 speak at a time. This is obvious for the court  
11 reporter, and to make sure that we do get down  
12 exactly what you're here to say.

13 There will be no questioning of the  
14 individual providing the comments except, as  
15 previously indicated by Carl, a question may be asked  
16 by the panel to the information giver, the person at  
17 the mike, in order to clarify their position to make  
18 sure that we understand exactly what they're saying.

19 I also may announce any further  
20 procedural rules during the course of this meeting to  
21 make sure that everyone is heard, and that it goes  
22 smoothly. Again, we want to thank you for coming,  
23 and without any further ado, we'll call on our first  
24 speaker who is Mr. Carl Johnson.

25 Mr. Johnson, come forward.

1 MR. JOHNSON: Thank you. My name is  
2 Carl Johnson. I am the administrator of technical  
3 programs for the Nevada Agency for Nuclear Projects.  
4 The Nevada Agency for Nuclear Projects, the Nuclear  
5 Waste Project Office, is the state agency assigned by  
6 Nevada statute to oversee the U.S. Department of  
7 Energy's high-level waste repository program  
8 management, and the disposal program itself. The  
9 professional staff of the agency and its technical  
10 contractors, including elements of the University of  
11 Nevada System and private-sector firms, are now in  
12 the process of carrying out a technical review of the  
13 Department of Energy's Site Characterization Plan for  
14 the Yucca Mountain Candidate waste repository site.

15 The Agency for Nuclear Projects has  
16 been instructed by Nevada Governor Bob Miller to take  
17 the time necessary to review and assure its  
18 thoroughness and technical rigor, notwithstanding the  
19 schedule constraints imposed on the SCP review  
20 process by the DOE. This is similar to the direction  
21 of the chairman of the U.S. Nuclear Regulatory  
22 Commission to the NRC staff regarding its required  
23 review of the same SCP document. The Agency expects  
24 to submit its technical review to Department of  
25 Energy on behalf of the State of Nevada by September

1 1, 1989, at which time it will also be released for  
2 public distribution.

3           We have made a preliminary analysis of  
4 the available elements of DOE's overall program of  
5 studies and evaluations proposed to be carried out  
6 during the site characterization period. Our  
7 conclusion is that the comprehensive program remains  
8 conceptually incomplete, in that the supporting and  
9 associated documents necessary to even begin site  
10 characterization are either incomplete, nonexistent  
11 or lacking in sufficient detail to determine what  
12 work is actually proposed, and how the various work  
13 elements interface with each other.

14           Without a clear articulated  
15 comprehensive plan of activities and proposed  
16 specific studies and all the necessary environmental  
17 plans and activities, it is not possible to evaluate  
18 the true merit of the plans that are being presented  
19 here for review. Of particular note, in light of the  
20 Department of Energy's stated initiation to begin  
21 Exploratory Shaft Facility construction in November  
22 1989, is the lack of sufficient and acceptable ESF  
23 location rationale, and study plans to support the  
24 initiation of this potentially irreversible action.

25           The DOE has scheduled initiation of the

1 Exploratory Shaft site preparation for May of 1989.  
2 The State of Nevada objects to this activity being  
3 undertaken as scheduled, and strongly recommends that  
4 the ESF site preparation be deferred until the  
5 following concerns are resolved.

6           The DOE expects the Exploratory Shaft  
7 Facility site preparation to result in the  
8 application of 6.7 million gallons of water to the  
9 site for surface pad construction.

10           Also, some fraction of the 43 million  
11 gallons of water allocated to dust control at the ESF  
12 will also be applied to the pad. This is roughly  
13 equivalent to dumping an additional one full year's  
14 rainfall directly on the ESF site in a short period  
15 of just a few months. It is important to recognize  
16 this because the studies planned at the ESF include  
17 hydrologic analysis of the unsaturated zone while the  
18 underground ESF is still being constructed.

19           The data collected are intended to be  
20 used, ultimately, in determining the site's  
21 suitability, and the artificial addition of a  
22 significant amount of water to the unsaturated  
23 hydrologic system will bring the validity of these  
24 data into serious question.

25           Knowing of this concern, it is

1 reasonable to conclude that the ESF site preparation  
2 is, in the terminology of the Nuclear Regulatory  
3 Commission, important to safety in repository  
4 licensing considerations. This being the case, the  
5 ESF site preparation should not proceed until the  
6 following two matters are adequately addressed.

7           First, the potential effects of this  
8 addition of water to the hydrologic system being  
9 studied must be sufficiently understood to resolve  
10 the data validity question.

11           Second, the resolution of the data  
12 validity question and the actual application of the  
13 water to the site must be subject to the controls of  
14 an approved Quality Assurance Program and Procedures,  
15 which at this time are not fully in place in the DOE  
16 program, nor is it expected that they will be in  
17 place by May 1989.

18           I now would like to repeat the essence  
19 of some of our findings regarding the draft SCP  
20 released last year for our informal review and  
21 comment. These comments bear repeating, since we  
22 have not discovered that they were heeded in DOE's  
23 preparation of this statutorily required Site  
24 Characterization Plan.

25           We believe the DOE's conceptual

1 approach to site characterization at Yucca Mountain  
2 should be re-examined, and the SCP significantly  
3 revised before it can be viewed as a credible basis  
4 for evaluating the suitability of the site for the  
5 safe nuclear waste isolation for the thousands of  
6 years required.

7                   It should come as no surprise that  
8 Nevada's expectations are that any repository site  
9 determined to be suitable must first be the best  
10 understood piece of geology on earth. To meet this  
11 requirement, nothing less than the most rigorous,  
12 objective scientific investigation will be acceptable.  
13 This must precede the emphasis on engineering a  
14 repository at Yucca Mountain, which is the most  
15 obvious focus of the DOE's current Site  
16 Characterization Plan.

17                   This misdirected emphasis on DOE's part  
18 results from its apparent but unproven assumption  
19 that the site is suitable for a waste repository.  
20 This assumption seems to prevail in spite of the fact  
21 that the key standard for determining site  
22 suitability for long-term nuclear waste isolation has  
23 yet to be established by the U.S. Environmental  
24 Protection Agency. And it is not expected to be  
25 final, finally adopted into regulation for another

1 two to three years. The initial EPA standard was  
2 overturned in federal court, and returned to the  
3 Agency for additional consideration.

4           The Site Characterization Plan also  
5 does not, but should, reflect a high priority on  
6 carrying out the prerequisite geologic and  
7 geohydrologic studies that address the conditions  
8 most likely to lead to an early disqualification of  
9 the site. These include such issues as faulting and  
10 earthquake potential, volcanism, the significance of  
11 fracture flow in both the unsaturated and saturated  
12 zones, and mineral resource potential at the site.

13           The conceptual approach of the Site  
14 Characterization Plan puts unjustified early emphasis  
15 on construction of the Exploratory Shaft Facility,  
16 when critical surface-based geologic and hydrologic  
17 studies should have the highest priority in the  
18 initiation of site characterization activities.

19           With those remarks, thank you very much.

20           MR. MILLS: Now, it's indicated you  
21 have two more minutes, Mr. Johnson.

22           MR. JOHNSON: I know, but that  
23 completes my statement.

24           MR. MILLS: Thank you. Have you given  
25 a copy of that either back there at registration?



1 Would you go back, please and do that for them?

2 MR. JOHNSON: I can do that.

3 MR. MILLS: Thank you very much.

4 Our next speaker will be Doris Jackson.

5 MS. JACKSON: In the year 1862, three  
6 young prospectors -- I don't believe they were all  
7 old -- walked across Amargosa desert, meaning Bitter  
8 Land. They looked up a mountainside and one said:  
9 Hey, Bruce -- they weren't all named Zeke or Tex. --  
10 look at all them Yuccas. Why, they go way up the  
11 hill. We'll call this Yucca Mountain. And maybe if  
12 we're lucky, why, they'll deposit all the high-level  
13 waste in there. Why, we'll be famous. Just for  
14 finding the exact spot in all the lands of America to  
15 bury all the waste.

16 We'll be rich. We won't have to  
17 prospect anymore. Turn ol' "Mazy" loose. Well, not  
18 loose. Just tie her up over by them "Yuccies".  
19 They'll want all this land and they'll pay us. Why,  
20 I'll bet we'll get at least \$200. We'll head for San  
21 Francisco. Nothing ever happens there.

22 Oh, but what about all them people that  
23 live in that valley, Bruce? What in the world's  
24 going to happen to them?

25 Well, what do you mean? They'll be all

1 right. Don't you know, they flood whole towns when  
2 they build a dam. They what you call relocate people.  
3 They take them off your homestead -- it's only a lot  
4 of hard work. -- and they buy you a little house on  
5 a lot with neighbors and shrubs and everything, even  
6 a sidewalk. But you'll have to stay put and don't  
7 complain; it's all for the best. You'll adjust.  
8 What the hell, you've done it before.

9                   Woa, woa, woa, Bruce. Now you've gone  
10 too far. I've changed my mind. I'm not hurting them  
11 folks. Instead of Yucca Mountain, we'll call it  
12 Endangered, and we'll put it on the list.

13                   If this had happened, we wouldn't be  
14 here today. But since we are, these are my comments:

15                   Mr. Gertz, I would like to commend you  
16 on the way you've turned DOE around. As far as the  
17 public concerns, you have the insight to put these  
18 major problems on a more personal basis than did your  
19 predecessor, Dr. Veith. We felt somewhat intimidated,  
20 and he had a way of making our questions seem  
21 ridiculous.

22                   Now that this policy has changed, yes,  
23 we have comments, and these are mine: "I" is a word  
24 not used very often by me. Today it is a word  
25 uppermost in my mind. I love Amargosa Valley. I

1 love the people that live in Amargosa Valley. I love  
2 the air. I love the quiet. I love the freedom. I  
3 love the scenic beauty. I love the colors. I love  
4 the sunsets. I love the dawns. The stars light up  
5 our desert floor. I am not a martyr. I do not want  
6 Yucca Mountain high-level waste repository.

7                   This valley is the only place I know of  
8 where no one wants to leave. We never look for a way  
9 out; we look for a way to stay. This enchanted  
10 valley has a hold on us, like a mother holds a child.  
11 The traumatic and negative impact on us all will be  
12 severe. The stigma of a radioactive dump will be  
13 everlasting.

14                   Amargosa Valley experiences a slow but  
15 steady growth, doubling in size about every ten years.  
16 All looking for the same things I mentioned at the  
17 beginning of my comments. What reaction will they  
18 have once the repository is here? A black mark that  
19 we will be unable to erase. Without growth, you  
20 become stagnant. Property values go down, businesses  
21 fail, and you die. My children and grandchildren  
22 live in this valley. Is this the legacy I want to  
23 leave Amber Dee? I think not.

24                   Back in the 40's, little did they know  
25 the problems they would be leaving for further

1 generations. As we progress with new technologies,  
2 we create problems that we and generations after us  
3 are going to have to deal with.

4 Stigma is crucial to Nevadans, and most  
5 critical to Amargosa Valley. To what extent has and  
6 does this stigma harm us and our family life? The  
7 potential benefits from taxable repository purchases  
8 could easily be undone by risk effects. Projection  
9 of grants equal to tax revenues would not compensate  
10 for the shortfall.

11 We the public want consideration. We  
12 the public want some control. We the public want  
13 warm feelings. We the public want property values,  
14 assurances. Perhaps during site characterization,  
15 you'll draw down the water and the pup fish will save  
16 us all. We will have the benefits of knowing more  
17 about our valley than any other place in the world.  
18 Then we can continue to build and fulfill our dreams  
19 of living out our lives in peace. Without Yucca  
20 Mountain waste repository.

21 Thank you.

22 MR. MILLS: Thank you.

23 Our next speaker will be Roger Dehart.

24 MR. DeHART: Thank you. Here are some  
25 written comments from Inyo County to the Department

1 of Energy, and my testimony will sort of parallel  
2 that letter.

3 MR. GERTZ: Thank you.

4 MR. DeHART: My name is Roger Dehart,  
5 and I am the Inyo County planning director. I am  
6 here today to present to you and make it a matter of  
7 public record some of the apprehensions and concerns  
8 of the residents of Inyo County, especially the  
9 residents of eastern Inyo County. These  
10 apprehensions and concerns have come about as a  
11 result of Congress' decision to locate the nation's  
12 first high-level nuclear waste repository at Yucca  
13 Mountain, Nevada.

14 The testimony you are supposed to  
15 consider and hear today involves the DOE's Site  
16 Characterization Plan which will be implemented over  
17 the next few years. Now, I cannot specifically  
18 address the contents of the Site Characterization  
19 Plan as it has not been made available for public  
20 review in Inyo County.

21 Inyo County is the second largest  
22 county in the State of California, with approximately  
23 10,000 square miles. It's very rural in character  
24 with a population of only 18,000. In addition, over  
25 98 percent of our county is under the ownership of

1 various governmental agencies. Now, this places Inyo  
2 County at an extreme disadvantage in being able to  
3 expend time and monies necessary to fully evaluate  
4 the Site Characterization Plan and the impact the  
5 Yucca Mountain Repository may have on the environment  
6 and on the citizens of Inyo County.

7           Based upon this lack of resources, Inyo  
8 County applied to the Department of Energy for the  
9 designation of an affected unit of local government.  
10 This request was justified, based on a number of  
11 facts which indicate Inyo County will be directly  
12 affected by this project. In fact, Inyo County has  
13 the second greatest potential of being adversely  
14 affected environmentally than any other county,  
15 excepting Nye County.

16           A few of these facts are:

17           Inyo County is the closest adjacent  
18 county to Yucca Mountain, being only 14 air miles  
19 away.

20           Inyo County shares a common aquifer  
21 with Yucca Mountain Repository site, and this aquifer  
22 flows southwesterly into Inyo County, and into the  
23 Amargosa River drainage basin.

24           The first area this common aquifer  
25 surfaces is at Ash Meadows, adjacent to the Nye

1 County/Inyo County border, and also at Alkali Flats,  
2 which is located within Inyo County. In addition, it  
3 is thought that the springs which surface at Furnace  
4 Creek Ranch in Death Valley National Monument also  
5 are fed by this common aquifer.

6 One of the proposed railroad routes for  
7 the shipment of high-level nuclear waste to Yucca  
8 Mountain passes through Inyo County. A study is now  
9 being conducted on the possible highway transport of  
10 this nuclear waste using routes located in Inyo  
11 County; specifically, State Highways 127 and 178.

12 Approximately 20 percent of Inyo County  
13 is included within the radiological monitoring  
14 program sampling area.

15 Based upon these facts, Inyo County  
16 will be affected, and I think it's realized by the  
17 Department of Energy.

18 Recently, Death Valley National  
19 Monument has expressed concern over this project and  
20 the possible impacts it may have on the Monument.

21 The citizens of Inyo County have,  
22 through their board of supervisors, supported Inyo  
23 County's request to be designated as an affected unit  
24 of local government.

25 The State of Nevada has supported Inyo

1 County's request to be designated as an affected unit  
2 of local government.

3           The California Energy Commission has  
4 supported Inyo County's request to be designated as  
5 an affected unit of local government.

6           The governor of the State of California,  
7 George Deukmejian, has supported Inyo County's  
8 request to be designated as an affected unit of local  
9 government.

10           And presently our two senators, Cranston  
11 and Wilson, are now being asked to support Inyo  
12 County's request to be designated as an affected unit  
13 of local government.

14           Our initial request to the Department  
15 of Energy was denied back on October 3rd, 1988, by  
16 the then secretary Mr. Herrington. Inyo County has  
17 subsequently asked for reconsideration by the new  
18 Secretary of the Department of Energy, Admiral  
19 Watkins, in December of 1988, and we are still  
20 awaiting his reply three and a half months later.

21           I understand we can't ask any direct  
22 questions, but I would like a response as soon as  
23 possible from the Department of Energy. If the 180-  
24 day appeal period elapses from the first denial by  
25 Mr. Herrington, will that prohibit Inyo County from



1 taking any appeal measures through the Federal Courts?  
2 Or does our request for reconsideration place this  
3 180-day appeal period on hold? I would like to get  
4 an answer as soon as possible on that.

5 Inyo County can attest to the fact that  
6 we have the potential to be directly affected by the  
7 Yucca Mountain Nuclear Waste Repository. Much more  
8 so than Clark County which will be affected primarily  
9 from a socioeconomic standpoint. Or by Lincoln  
10 County which is affected only by its possible  
11 transportation of high-level nuclear waste through  
12 its borders; the same as Inyo County.

13 To summarize, we feel it was ridiculous  
14 for the Department of Energy to deny Inyo County's  
15 request to be designated as an affected unit of local  
16 government, and thereby prohibiting Inyo County and  
17 its citizens from taking any active role in the  
18 review and evaluation of the Site Characterization  
19 Plan. Inyo County does not have the resources or  
20 manpower to undertake such a monumental task on its  
21 own without federal support.

22 We therefore demand that the Department  
23 of Energy immediately review our second request to be  
24 designated as an affected unit of local government.  
25 If approved, this will permit Inyo County to take an

1 active role in the site characterization process, and  
2 to evaluate any adverse environmental impacts which  
3 may occur within our borders. This will also allow  
4 Inyo County and its citizens to be considered in the  
5 decision making process which we so greatly desire,  
6 and we feel rightfully deserve.

7 Thank you.

8 MR. MILLS: Thank you.

9 Our next speaker will be Paul Payne.

10 MR. PAYNE: I am Paul Payne. I  
11 represent the Fifth Supervisorial District of Inyo  
12 County. My district covers over 5,000 square miles,  
13 and over one-half of the area of Inyo County. It is  
14 an area which contains an immense range of land forms  
15 and vegetation and wildlife habitats (from Mount  
16 Whitney to Bad Water).

17 Within my district are numerous small  
18 rural communities consisting of Lone Pine, Olancha,  
19 Darwin, Keeler, Shoshone, Tecopa, Death Valley  
20 Junction, just south of here.

21 The economic base for many of these  
22 communities was supported by mining operations. Over  
23 the last few years, mining activity has declined in  
24 the eastern portion of Inyo County. Today, many of  
25 the economies are based upon highway and tourist

1 services.

2                   This is clearly evident when one  
3 realizes the number of tourists visiting Death Valley  
4 National Monument is in excess of 720,000 people per  
5 year. There is pending legislation to elevate the  
6 Monument to national park status, which will no doubt  
7 increase the number of visitors. Any proposal which  
8 would adversely affect this expanding economy base  
9 will be opposed by Inyo County.

10                   The Yucca Mountain High-Level Nuclear  
11 Waste Repository is a proposal which may not have any  
12 adverse impact upon this economic base. The fact  
13 that Inyo County could be affected by air or ground  
14 water contamination; by the transportation of nuclear  
15 waste through Inyo County by rail or truck; and just  
16 by the location of the repository near a major  
17 tourist attraction is of great concern.

18                   Yes, we have legitimate fears and  
19 concerns which were only intensified by the  
20 Department of Energy's denial of designating Inyo  
21 County as an affected unit of local government. All  
22 Inyo County has at present is a two-page letter from  
23 the Department of Energy, which in summary, simply  
24 states, Don't worry. Inyo County will not be  
25 affected. Trust us.

1           Being able to take an active role in  
2 the Site Characterization Plan as an affected unit of  
3 local government will help assure Inyo County that  
4 Yucca Mountain will not have the same problems which  
5 are now occurring at Hanford, Washington; Fernal,  
6 Ohio; Clinch River, Tennessee; Savannah River,  
7 Georgia; Rocky Mountain Arsenal, Colorado, and Idaho  
8 Falls, Idaho.

9           As the elected representative from the  
10 Inyo County's Fifth Supervisorial District, I have  
11 the obligation and responsibility to promote the  
12 health, safety and welfare of its citizens. The  
13 Department of Energy, through its denial of Inyo  
14 County's request to be designated as an affected unit  
15 of local government, prohibits me from fulfilling  
16 this obligation.

17           Thank you.

18           MR. MILLS: Thank you.

19           I notice some of you have come in after  
20 we started. This is your moment to be heard. If you  
21 wish to be heard, go ahead and register at the back  
22 of the room.

23           Our next speaker will be "Leslie" Lowe.

24           MR. LOWE: That's Lisle Lowe. I am on  
25 the Amargosa Town Advisory Board. I just wanted to

1 make a comment on the timing of the meeting at 2:00  
2 in the afternoon. Most of the residents have jobs or  
3 are not available. If they were, I think you would  
4 find that 80 to 90 percent of the people are for this  
5 project, and it would be better if they were here.  
6 That's all I have to say.

7 MR. MILLS: Thank you. For your  
8 information, there is also hearings going to be  
9 conducted tonight as well to give everyone an  
10 opportunity.

11 Paul Watkins is next.

12 MR. WATKINS: My name is Paul Watkins.  
13 I am the elected president of Death Valley Area  
14 Chamber of Commerce.

15 The Death Valley Area Chamber of  
16 Commerce is an association of business people, mostly  
17 in eastern, southeastern Inyo County. Some of our  
18 chamber business members are from the Pahrump Valley,  
19 and some of them are from the Amargosa Valley that we  
20 are in now. Our service area includes the Stovepipe  
21 Wells, Furnace Creek Ranch, Tecopa's Hot Springs and  
22 Shoshone. We also have members from Pahrump, San  
23 Bernardino County -- that is Baker -- and Nye County,  
24 that is Amargosa Valley.

25 I have come here today to underline and

1 support Inyo County Board of Supervisors in their  
2 requests, seeking affected status as an affected unit  
3 of local government. We have been monitoring this  
4 request for affected status by the Inyo County Board  
5 of Supervisors and support it.

6 I would like to reiterate that the  
7 second request has been made, as Mr. Dehart said;  
8 that the first request was turned down. I would like  
9 to underline the realities that the communities of  
10 Tecopa and Shoshone and Death Valley Junction have  
11 the potential to be significantly impacted by the  
12 site characterization study, and the high-level  
13 repository, inasmuch that the aquifer of the Amargosa  
14 has its source in Nevada and some on the Test Site  
15 and on Yucca Mountain itself.

16 It is difficult for a chamber of  
17 commerce to stand up to the Department of Energy, and  
18 it is difficult for Inyo County, with only 18,000  
19 residents, to stand up to the Department of Energy.  
20 But I am compelled to come here on behalf of the  
21 business people that the Death Valley Chamber  
22 represents, and express our concerns over the impact  
23 on our lives of this site characterization and the  
24 high-level nuclear repository.

25 Death Valley enjoys a transient

1 population of some -- some of our visitors stay for a  
2 few weeks to a few months during the winter. Some  
3 are just traveling through. But in the entire Death  
4 Valley service area, it is upwards of 800,000 people  
5 this year -- or that is last year. We anticipate  
6 that to reach a million people within the next two  
7 years. That is more than the population of the City  
8 of Las Vegas.

9                   This transient population is the  
10 lifeblood of the businesses and the people in  
11 southeastern Inyo County. Anything that would be  
12 done to stigmatize this area as a nuclear waste zone,  
13 or any accident that happened on Routes 127 and 178,  
14 that are considered alternate routes for  
15 transportation of high-level nuclear waste into the  
16 repository, would seriously affect our communities.

17                   Our chamber hasn't had the chance to  
18 thoroughly read the Site Characterization Plan. We  
19 have a committee that is studying it. Although it is  
20 very costly, we are fortunate to have a young  
21 scientist, Fred Johnson, who will be making written  
22 and oral input into testimony this day. We support  
23 his testimony, and we will most likely be sending him  
24 to Washington with further testimony, and we will be  
25 monitoring this process throughout.

1           There's some other points I'd like to  
2 touch on. Our concerns are, of course, the long-term  
3 safety and health of our communities. We question  
4 how the Department of Energy can at all consider  
5 state highway Routes 127 and 178 as transportation  
6 routes for high-level nuclear waste into the  
7 repository, without granting affected status of a  
8 unit of local government to the Inyo County Board of  
9 Supervisors.

10           There are no incorporated townships in  
11 southeastern Inyo County. The communities that I've  
12 mentioned are just small communities that are  
13 represented by the Board of Supervisors of Inyo  
14 County, and we support, once again, their efforts to  
15 seek affected status.

16           Also in my testimony, I would like to  
17 step outside of my hat as president of the Death  
18 Valley Area Chamber of Commerce and make a personal  
19 comment. As a resident of Tecopa for 21 years with  
20 two young children and a homeowner, I would like to  
21 express my concerns over what would happen if  
22 something wasn't right at the nuclear repository. If  
23 there were an accident on any of the transportation  
24 routes in our communities, and what would happen if  
25 the repository caused an international stigma over



1 this whole area. I enjoy riparian rights on the  
2 tributary of the Amargosa River, as appropriated from  
3 the State of California Water Resources. I am  
4 concerned about the purity of water in my riparian  
5 rights water designation -- appropriation, that is.

6 I am not submitting written testimony  
7 at this time. I am just saying that we will support  
8 the testimony by our committee head, what we call  
9 Legislative Watch, Mr. Fred Johnson who will be  
10 giving his testimony later. Thank you.

11 MR. GERTZ: I have a question. Excuse  
12 me, Paul. Thank you very much for your testimony.

13 I just have one clarifying question  
14 about the DOE's supposedly consideration of routes  
15 within California for high-level waste transportation.  
16 Is there any -- I know of no consideration that we're  
17 doing that. But there may be some documents that I  
18 am not aware of. If you could provide that to me a  
19 little bit afterwards or something, I'd appreciate it.  
20 Because in our current planning, I don't know of any  
21 transportation routes within Inyo County that we are  
22 considering for high-level waste transportation.

23 MR. WATKINS: As alternate routes we  
24 had heard of Routes 127 and 178 being used as  
25 alternate routes in the event of something happening

1 on Nevada 160 or Nevada 95 as alternate routes. I  
2 don't have documentation at this time. I'll rely on  
3 the testimony of Mr. Johnson and any documents he may  
4 have.

5 MR. GERTZ: I appreciate that. Thank  
6 you very much.

7 MR. MILLS: Thank you.

8 The next speaker will be Bennie Troxel.

9 MR. TROXEL: My name is Bennie Troxel.  
10 I am a retired but not inactive geologist. I live in  
11 Napa, California, and I have a field office in  
12 Shoshone, California.

13 My main concern is based upon an  
14 incident that occurred I think nearly two years ago,  
15 if not a little farther back. I was in the field and  
16 a fellow was sharing my home in Shoshone with a  
17 geologist from the U.S. Geological Survey. He got a  
18 phone call from his boss in Menlo Park, who said that  
19 the DOE had initiated a stop work order, and he had  
20 to report back to his office immediately. That stop  
21 work order has since, as I understand it, stopped all  
22 Geological Survey employees from any further field  
23 research.

24 Being a field geologist I may be  
25 somewhat prejudice in this, but I don't see how you

1 can gather all the data you need to make the  
2 decisions required to be made without wearing out the  
3 outcrop to the utmost for such a critical problem.

4 I know, and I have a lot of respect for  
5 the several Geological Survey employees, geologists  
6 who I have had the privilege of working with or  
7 become acquainted with in the field out here. Many  
8 of whom were working on DOE money with the Survey.  
9 And I regret that their great talent is not being  
10 utilized to the utmost, particularly in light of the  
11 fact that, as I understand it, there are deadlines to  
12 make decisions based on the data available, and I am  
13 deeply concerned that not all the data will be  
14 available if this stop work order is to continue for  
15 any significant period of time in the future.

16 My expertise is such that I have a  
17 moderately reliable background in regional tectonics  
18 in this area, and I have had the privilege of sharing  
19 this with some of the Geological Survey people. As a  
20 matter of fact, my colleague, Loren Wright, my field  
21 colleague, and I have actually provided data to the  
22 Geological Survey on peripheral areas here not within  
23 the Test Site itself; Funeral Mountain's immediately  
24 to the west of us, for instance.

25 So I don't need to dwell any further on

1 this, but I still see a significant need for field  
2 research, based in the several categories. For  
3 instance, there's a need for more deep boreholes, and  
4 I am sure many people agree to this, but my concern  
5 is why are they not going on now?

6                   Seismic studies, where at one time  
7 there was a proposal for deep seismic retraction  
8 studies. "Kopor" type of study that was proposed,  
9 but has not been further followed, as far as I know.  
10 Trenches across known fault traces in this area to  
11 gain as much information as we can about when they  
12 occurred, what the recurrent intervals are, and so on.  
13 Especially on the fault traces in the younger fault  
14 zone which abound to the south and to the west of the  
15 Test Site.

16                   Volcanic activity patterns need to be  
17 determined, based primarily on field sampling, and  
18 then further laboratory analyses. Secular and  
19 spatial migrations of faults or extensions of faults,  
20 or movements along the fault zones.

21                   Regional geologic framework, as  
22 probably we need to know more about this to get the  
23 proper background for what's occurring, or is apt to  
24 occur within the Test Site itself. Chronology of  
25 volcanic ash. We are blessed with an abundance of

1 field deposits, of deposits of ash in many of the  
2 young rocks around here, and many of these remain  
3 unsampled.

4 An area that has just barely been  
5 touched upon is the study of folds. There are many  
6 small folds in the valley floors within this region  
7 as precursors of fault activity. In other words, a  
8 folding of the young sediments before there's an  
9 actual ground rupture. One of the areas, the  
10 particular feature that I am concerned with is the  
11 Death Valley Fault Zone. I have done some field  
12 studies on many segments of it, and I feel that  
13 there's much more to be done on that.

14 An area outside of my expertise, but I  
15 certainly agree that it needs much more study is the  
16 study of hydrology of the basins in through here.

17 I thank you.

18 MR. MILLS: Thank you.

19 That concludes those that we have a  
20 list for. We're going to take a five-minute break.  
21 I've noticed some of you folks have come in later.  
22 We are here to hear from you. Just go right back to  
23 the table back there and sign up if you want to be  
24 heard. Or some of you who spoke earlier, if  
25 something's been said that brought to your mind

1 something else you wish to tell us, please sign up  
2 again. We want to hear from you.

3 With that, we'll take a five-minute break.

4 (Thereupon a brief recess was  
5 taken, after which the following  
6 proceedings were had:)

7 MR. MILLS: Our next person will be  
8 Jean Gray.

9 MRS. GARY: Good afternoon. I am Jean  
10 Gary, a 25-year resident of this community. I worked  
11 the first seven years that I lived here at the Nevada  
12 Test Site. Since then I've been employed in this  
13 community or at our home ranch. We have a ranch  
14 within just a few hundred yards of this building. We  
15 are now -- we now have a fourth generation of Garys  
16 at that ranch.

17 We can see Yucca Mountain from our  
18 ranch, and in general our family has never had any  
19 conflict between our personal lives and what has been  
20 transpiring at the Test Site. We further do not  
21 expect any problems with our life-style, our health  
22 and our welfare from activities associated with Yucca  
23 Mountain. We feel that we are properly informed by  
24 the government agencies concerning Test Site  
25 activities.

1                   Our physical well-being is well  
2 monitored by the Environmental Protection Agency,  
3 Desert Research and USGS, who conduct extensive  
4 sampling and continuous monitoring for the community  
5 and the communities surrounding Nevada Test Site.

6                   Our local library maintains an updated  
7 reference table of information. A community  
8 monitoring station is installed near the library, and  
9 maintained by the Environmental Protection Agency as  
10 part of a network of monitoring stations in  
11 surrounding communities.

12                   In addition, water, milk and animal  
13 tissue samples are routinely collected and analyzed.  
14 A number of our neighboring families have volunteered  
15 for whole body counts, and data through three  
16 generations is now being taken.

17                   As a resident of the closest community  
18 to the proposed repository, I feel that the agencies  
19 involved in the site selection process are  
20 functioning within the intent of the Nuclear Waste  
21 Policy Act and its amendments. The long-term nature  
22 of these studies is reassuring to me. I think it  
23 behooves us all to become informed and to stay  
24 informed about the progress of these studies, rather  
25 than forming opinions emotionally without benefit of

1 information.

2                   And so for that reason, I appreciate  
3 these types of meetings and the opportunity to speak  
4 to you about my feelings of being comfortable with  
5 them.

6                   Thank you.

7                   MR. MILLS: Thank you, Mrs. Gary.

8                   There appearing at this time that there  
9 are no further people who wish to be heard, we will  
10 take a recess until 3:45. If anyone comes in or  
11 wishes to speak prior to that, we will take  
12 consideration at that time. But as it now stands, we  
13 are recessed until 3:45.

14                   (Thereupon a brief recess was  
15                   taken until 3:45, at which time,  
16                   the following proceedings were had:)

17                   MR. MILLS: If we could have your  
18 attention, the time is 3:45, and we would like to  
19 again come to order. We have one person who signed up  
20 to speak to us. Our next speaker will be Cal Weston.

21                   MR. WESTON: My name is Calvin L.  
22 Weston. I get my mail in Pahrump.

23                   I just wanted to make a statement that  
24 there are more people here that's been against this  
25 high-level dump at Yucca than there has been before.



1 It seems like the people who live nearest are the ones  
2 that are more in favor.

3 If it should come to a point to where  
4 it would be disband, I want to go on record as saying  
5 that we already have a dump site, a tremendous dump  
6 site in Yucca Flats, and if they would move it into  
7 the craters at Yucca Flats because it's already  
8 contaminated, the materials that come from all over  
9 the United States could be flown in because it's a  
10 level country and they could easily make a landing  
11 strip. That would avoid any sabotage enroute by truck.

12 If it was placed in the craters, the  
13 hole would already be dug so we could save cost on  
14 that. There's local sealant here in the country that  
15 could seal it, and when the crater was filled you  
16 could dome it over and that would keep the rain  
17 waters out. At such time if they wanted to retrieve  
18 it, it would be very possible to retrieve it, and the  
19 material could be used again.

20 But the big thing is it is in already  
21 contaminated country, or an area that's been highly  
22 contaminated. Every test out there is a dump site.

23 That's all I got to say.

24 MR. MILLS: Thank you, Mr. Weston.

25 It does not appear at this time that

1 there are any more speakers. As a consequence, we  
2 will adjourn until 4:30.

3 (Thereupon a brief recess was  
4 taken until 4:30, at which time,  
5 the following proceedings were had:)

6 MR. MILLS: For the record, the meeting  
7 will now come to order. Because no one has signed up  
8 to speak, we will adjourn until 4:55, at which time  
9 we will review and see if anyone else has come in.  
10 We'll stand adjourned until then.

11 (Thereupon a brief recess was  
12 taken until 4:55, at which time,  
13 the following proceedings were had:)

14 MR. MILLS: The meeting will now come  
15 to order.

16 There being no further people having  
17 presented themselves to be heard, we will adjourn  
18 this meeting until 7:00 p.m. this evening.

19 MR. GERTZ: As the hearing official,  
20 I'd like to announce that this session is adjourned  
21 until 7:00 p.m.

22 (Thereupon a dinner recess was  
23 taken, after which the following  
24 proceedings were had:)

25

1 MONDAY, MARCH 20, 1989, 7:00 O'CLOCK P.M. SESSION

2 \* \* \* \* \*

3 MR. GERTZ: I guess we are going to get  
4 started, ladies and gentlemen.

5 Good afternoon and welcome. My name is  
6 Carl Gertz, I am manager of the Yucca Mountain  
7 project office. I will be the Department of Energy's  
8 presiding official for today's hearing on the Yucca  
9 Mountain Site Characterization Plan which describes  
10 the U.S. Department of Energy's plans for  
11 characterizing Yucca Mountain, Nevada to determine  
12 its suitability for a nuclear waste repository.

13 For the record, this hearing is  
14 convened at approximately seven p.m. on March 20th at  
15 the Amargosa Valley Community Center in the town of  
16 Amargosa Valley, Nevada.

17 This hearing was noticed in Federal  
18 Register on Friday, December 30th as well as being  
19 advertised widely in local newspapers.

20 In addition notices were sent to public  
21 mailing lists and the news media were notified.

22 We are here today to receive your  
23 comments on the Site Characterization Plan.

24 The Department of Energy has prepared  
25 this document as a plan to guide detailed scientific

1 studies which will be conducted at Yucca Mountain  
2 during the next five to seven years.

3           The SCP or Site Characterization Plan  
4 as we call it is a living document. It will be  
5 updated and modified as more is learned about the  
6 geologic, hydrologic and climatological conditions of  
7 the site.

8           These changes will be compiled into SCP  
9 progress reports which will be issued semiannually to  
10 the Nuclear Regulatory Commission, NRC, the State of  
11 Nevada and to the public.

12           The first SCP progress report is due to  
13 be published this summer.

14           In addition to the comments that you  
15 make this evening, written comments on DOE Site  
16 Characterization Plans may be made at any time during  
17 the site characterization period which is expected to  
18 last the next five to seven years.

19           These comments may be sent to the Yucca  
20 Mountain project office, U.S. Department of Energy  
21 Post Office Box 98518, Las Vegas, Nevada, 89153-8518.

22           Both oral and written comments will  
23 receive the same consideration.

24           At about the same time the SCP progress  
25 reports are issued, DOE will issue comment response

1 packages. These will contain responses to the  
2 comments on the SCP that you make this evening and  
3 any written SCP comments that are submitted.

4 This includes comments made by the  
5 public, State of Nevada, Nuclear Regulatory  
6 Commission and other interested parties.

7 Originally April 15th was the  
8 deadlining set for the close of the initial SCP  
9 comment period.

10 At the request of Governor Miller the  
11 deadline now has been extend to June 1st. Let me  
12 emphasize, however, that comments on DOE site  
13 characterization studies or activities received after  
14 June 1st will be considered by DOE and receive  
15 responses at a later date.

16 Last month DOE held a series of project  
17 update meetings. These meetings were designed to  
18 provide the public information about the project that  
19 the public told us they wanted to here. Those  
20 meetings were intended to furnish you with  
21 information. This afternoon--tonight, I should say,  
22 we are looking for information from you.

23 Notice of both the project update  
24 meetings and the SCP hearings was widely advertised  
25 in local newspapers, was printed in the Federal

1 Register.

2 In addition public mailing lists and  
3 the media were notified.

4 In a few moments I will introduce the  
5 moderator of tonight's hearing. The moderator is an  
6 individual with experience in chairing public  
7 proceedings and he is not a DOE employee. He will  
8 conduct the hearing calling on speakers and closely  
9 following the presentations.

10 He also will certify the record of the  
11 hearing.

12 Also here tonight is a technical expert  
13 who also will listen to the presentations and who  
14 along with myself may ask clarifying questions in  
15 order to make sure that the record fully reflects  
16 your comments.

17 All comments made here today are being  
18 recorded by a professional court reporter and will be  
19 transcribed. The transcript from the hearings will  
20 be made available in local libraries as soon as  
21 possible, approximately three weeks after it is  
22 prepared.

23 A list of these libraries is available  
24 at the door.

25 Anyone wishing to purchase a copy of

1 the transcript can make arrangements with the hearing  
2 reporter during breaks or after the hearing.

3 Now, I would like to introduce the  
4 technical representative of the panel this evening.  
5 On my right is Jean Younker, a Yucca Mountain project  
6 geologist who had a major role in development of the  
7 Site Characterization Plan. She worked with about  
8 300 scientists and engineers to develop the plans, to  
9 obtain data to assess the suitability of Yucca  
10 Mountain for a high level waste repository.

11 She is a former university professor  
12 and has a doctorate degree in geology.

13 At this point I would like to introduce  
14 tonight's moderator. Lamond Mills is a former U.S.  
15 attorney in Southern Nevada who now is in private  
16 practice in Las Vegas. He has experience in  
17 conducting public proceedings.

18 As I said earlier, he's here to conduct  
19 the meeting, call on speakers and follow the  
20 presentations.

21 I will now turn the hearing over to him.

22 MR. MILLS: Thank you, Carl. Before we  
23 begin, I thought I'd take just a couple of moments  
24 and explain the procedure so that we are all aware of  
25 them.

1                   We made arrangements so that everyone  
2 who comes here tonight will have an opportunity to  
3 come to the microphone, give their name and address  
4 this panel.

5                   You will be given ten minutes at that  
6 time, and after you have spoke for eight minutes, I  
7 will hold up my hand indicating that there is two  
8 minutes left, and we would ask at the end of your  
9 time when I hold up my hand such as this that you  
10 conclude your remarks and conclude the thought that  
11 you are on.

12                   This is an opportunity for you to  
13 express your views, and as I indicated, we are  
14 encouraging that. Some of you may have brought a  
15 written statement. If you do, and you get an  
16 opportunity beforehand, please check back at the  
17 registration desk so that they can make extra copies  
18 because we'd like a copy to go into the record as  
19 part of our public record as well as a copy kept back  
20 there, and we'll give you back a copy of your  
21 addresses.

22                   We are going to be taking everyone in  
23 the order in which they applied, and for people who  
24 come in later, we will add them in. We certainly  
25 have plenty of time tonight and we don't want to cut



1 anyone short at any time.

2 We ask that only one person speak at a  
3 time. As Carl mentioned, we are taking it down with  
4 a court reporter.

5 And, finally, there is going to be no  
6 questioning of a person providing comments except by  
7 the panel. And the panel's questions are limited to  
8 questions to serve to qualify comments given. They  
9 are not here to interrogate or question in any way.  
10 This is our opportunity to hear from you and that's  
11 the purpose of this meeting.

12 If there is any further procedure  
13 changes as we go along, we will announce them as we  
14 proceed.

15 Finally, I'm going to call on our first  
16 speaker, and that's Mr. Brian Carter. If he would  
17 come forward and address the panel.

18 If Mr. Carter is not here, then let's  
19 hear from Fred Johnson, and I'll pick up Mr. Carter  
20 in a few minutes.

21 MR. JOHNSON: My name is Fred Johnson  
22 and I'm a geologist from Tecopa, California down in  
23 Inyo County, California, and I am currently employed  
24 by American "Borate" Company in Amargosa Valley and  
25 over in Death Valley, and I have lived in Inyo County

1 in Tecopa and worked in Death Valley area for about  
2 15 years.

3 I am here tonight primarily to ask for  
4 effected status for Inyo County. I'm also here  
5 tonight not to express an opinion for or against the  
6 Yucca Mountain site, but to express my support for a  
7 thorough and politically unbiased study of the site.  
8 I believe that a study that will be thorough and that  
9 will not compromise scientific data and facts because  
10 of political pressures, that's what I'd like to see.

11 This is not an issue of for or against,  
12 it really can't be at this present time. We've got  
13 an edict from Congress to do this, and we should do  
14 it right.

15 It's up to everyone here and everyone  
16 involved to ensure that the study is done right  
17 because we are talking about high level nuclear waste  
18 that must be contained for over 10,000 years. Just  
19 one big slip in 10,000 years could be devastating,  
20 therefore there is a great responsibility that rests  
21 upon the shoulders of all concerned parties that  
22 should include the nation, everyone to do it right.  
23 Continuous and informed interaction during the study  
24 phase is the responsibility of the public, Department  
25 of Energy, the scientific community, the U.S.

1 geological survey, our legislators and the press.

2           In light of this needed interaction and  
3 concerns expressed by many citizens, I wish to  
4 discuss some important concerns and present  
5 reservations on the present processes.

6           I feel the DOE must work quickly to  
7 solve and answer some of the following problems and  
8 questions actually to sort of keep a good faith and  
9 credibility between the agency and the people. I've  
10 got a few reservations that I'll run through here.

11           Of course, due to the congressional  
12 decision we only have one site selected for  
13 characterization, and that's Yucca Mountain. Even  
14 those original choices were originally limited to the  
15 areas that were already effected by DOE so we really  
16 didn't get a site that was selected by unbiased  
17 scientific study, it was a politically convenient  
18 situation on a single site.

19           We have no alternatives so therefore we  
20 must really study this site quite a bit, but I would  
21 like to suggest that the Department of Energy and the  
22 U.S. geological survey show some very good faith in  
23 going back to Congress and lobbying Congress to have  
24 an alternative site set up, at least one to be  
25 studied just in case we have some problems with this

1 one that we can't overcome.

2           The sites that they should study should  
3 be based on true scientific inventory rather than  
4 political convenience.

5           To show good faith and to get close to  
6 the present timetable, the Department of Energy must  
7 immediately rescind the two-year old work stop order  
8 on the U.S. geological survey. Now is the time when  
9 all the knowledgeable input is needed to augment and  
10 insure a good scientific data base for geologic  
11 conclusions.

12           There is some very real concern that  
13 the Department of Energy will have--whether or not  
14 the Department of Energy will have all the needed  
15 surface and underground geologic studies done before  
16 licensing in 1995. With the U.S. geological survey  
17 not doing any work for two years and only three years  
18 after things get going in the underground to start  
19 looking at the underground data, the timetable set by  
20 the Department of Energy is unrealistic. Will the  
21 Department of Energy start waste haulage and  
22 emplacement without thorough evaluation of all data?  
23 This may lead to an unfavorable incident that allows  
24 a high level nuclear waste repository that later  
25 becomes scientifically indefensible.

1                   The Department of Energy should show  
2 good faith and reevaluate the timetable and inform  
3 the public.

4                   Much is not known, not known about the  
5 hydrologic system of Yucca Mountain site and  
6 especially the northern and southern Amargosa Valley.  
7 There has been some concerns about ground water  
8 pumping and, oh, concerns about, oh, of course there  
9 is concerns about contamination and things like that,  
10 but on the ground water pumping issue, will the major  
11 usages of water in the site characterization process  
12 add to a net cumulative effect which may be negative  
13 to Amargosa?

14                   In order to estimate these potential  
15 effects, hydrologic studies, especially deep well  
16 drilling and on and off Test Site studies may be,  
17 should be accelerated and expanded.

18                   I might suggest that maybe the  
19 Department of Energy get with the State of Nevada and  
20 possibly some industry-related people and try and  
21 form some sort of a thing where we can study some of  
22 the hydrologic basin outside of the Test Site so that  
23 we can have an overall look and we don't sit and put  
24 all of our drill holes in one boulder and not realize  
25 what the real world is telling us.

1           The Department of Energy, unfortunately,  
2 we got totally ignored in Inyo County for the obvious  
3 potential effects of the Yucca Mountain site to the  
4 southern Amargosa Valley in Inyo County, California,  
5 and this affected community status should have been  
6 approached in the study section in the 175 report.

7           Even though the community area of  
8 Tecopa and Shoshone and southern Amargosa meet the  
9 size criteria by being more than 250 residents within  
10 a hundred miles to the Amargosa entrance to Yucca  
11 mountain, this problem should be alleviated as soon  
12 as possible because it's an obvious mistake and  
13 overlook but it may actually lead to showing bad  
14 faith toward the Department of Energy to the people  
15 even though it may have been a Congressional decision  
16 that caused some of these problems. I believe an  
17 addendum to the study of section 125 should be  
18 requested and done. These communities share a  
19 surface ground water aquifer with the Yucca Mountain  
20 site and anything that could potentially adversely  
21 effect this vital water resource in our desert will  
22 drastically impact the socio-economic viability of  
23 the Tecopa-Shoshone area. Other adverse economic  
24 impacts may occur as workers leave Inyo County to  
25 relocate near the Test Site.

1                   Geologic Concerns: Major geologic  
2 concerns, I'm sure you guys are looking at them, I  
3 just want to reiterate a little bit of it. There is  
4 potential for the rise in ground water table which  
5 has been brought to attention by your geologist  
6 Symansky. In the Amargosa Valley in my experience  
7 there is a widespread evidence of young siliceous  
8 sinter springs which moved quartz material with hot  
9 water to very near the top of the valley fill in many  
10 of these areas along fracture zones. These hot water  
11 zones moved upwards along faults, okay, that  
12 fractured the surface of the valley fill.

13                   Now, this is quite young. I have not--  
14 I have noticed that the faults actually do interrupt  
15 some alluvial cover on top of that. Some of these  
16 are occurring along the extension of the Pahrump  
17 valley fault zone as it extends northwestward across  
18 the Amargosa Valley, stepping left laterally toward  
19 the Bear Mountain and Yucca Mountain area.

20                   I believe the study should extend out  
21 into the Amargosa Valley and look at these siliceous  
22 spring sinters that extent in the Ash Meadows area  
23 coming upward through the American Borate Company  
24 mill area and on toward Yucca Mountain.

25                   The Pahrump Valley fault zone could be

1 an important fault zone and may give you an idea of  
2 the timing of some of these events.

3 My observations also on many of the  
4 basalt or lava flow areas of the past, six million  
5 years ago in the Furnace Creek formation were that  
6 there were almost always somewhere nearby evidence in  
7 nearby in time of siliceous springs, siliceous or  
8 quarts rich water, okay.

9 Detail study of the faults and  
10 tectonics may lead to helping you on that.

11 On ground water, actually we go past  
12 that ground water situation, we go into volcanic  
13 activity. We realize there is some young volcanic  
14 activity and we need to work toward trying to  
15 determine where in the sequence of volcanic activity,  
16 we realize in about 100,000 year cycle these things  
17 run in, where we exist in that particular thing.  
18 Faults will continue to move, they will continue to  
19 open up. We realize there are faults at Yucca  
20 Mountain.

21 Now, what's real important, we must  
22 determine whether or not we are going to be dealing  
23 with a fracture flow system in the future 10,000  
24 years or whether we are still dealing with a rock  
25 flow.



1                   In closing in response upon suggestions,  
2 I believe that the public is responsible and they are  
3 very responsible for getting mailing lists and  
4 becoming informed and interact with the project, to  
5 ask questions and offer knowledgeable suggestions to  
6 the DOE.

7                   The DOE's responsibility is to solicit  
8 that information, evaluate every knowledgeable  
9 concern from the public that they can, keep the  
10 public informed of new concerns, and their actions  
11 toward them. Maintain flexibility to incorporate  
12 change.

13                   I believe that, you know, if we are  
14 faced with a dangerous and insurmountable  
15 consequence, be up front and let us know right away.  
16 Be willing to stop work and move to an alternative  
17 site.

18                   The legislators' responsibility  
19 essentially is to start looking for that alternative  
20 site right now because if there is a possibility,  
21 we've got to have it.

22                   The responsibility of the press, it's  
23 the press' responsibility to report the facts, keep  
24 the public knowledgeable. The press should guard  
25 against instigating controversy by sticking to

1 scientific facts and staying away from opinions  
2 formulated from fear, lack of knowledge and rumor.  
3 The press should try to help all concerned and help  
4 keep this important site characterization away from  
5 political pressure and toward real truthful  
6 scientific evaluation. Thank you.

7 MR. MILLS: Thank you, Mr. Johnson.

8 A question, sir.

9 MS. YOUNKER: I just wanted to ask you  
10 about the siliceous deposits that you mentioned that  
11 you thought might be young. Do you know of anyplace  
12 in the published literature where we could look for  
13 anything about that, or is this pretty much your own  
14 observation?

15 MR. JOHNSON: They haven't really been  
16 studied or written up very well. Throughout the  
17 Amargosa Valley where there's fault structures, some  
18 of them you can pick up on satellite photos.

19 MS. YOUNKER: I have seen the ones you  
20 were talking about, but I thought you were talking  
21 about ones that you were pretty sure had some silica  
22 in them.

23 MR. JOHNSON: Oh, yes.

24 MS. YOUNKER: Okay.

25 MR. JOHNSON: One ideal place is right

1 at the base of the hill at the American Borate  
2 Company mill site.

3 MS. YOUNKER: Okay.

4 MR. JOHNSON: In that particular one  
5 you have an older alluvium that is sitting on top of  
6 valley fill material that has been tilted up at about  
7 50 degrees along the fault, and there is a sileaceous  
8 center that's welling up through the clay deposits up  
9 to the base of the alluvium.

10 MS. YOUNKER: Thank's very much.

11 MR. MILLS: Our next speaker will be  
12 Mr. Charles Holtz.

13 MR. HOLTZ: My name is Charles Holtz.  
14 I have lived in the Amargosa Valley for a little over  
15 20 years. I have a degree in physics with a major in  
16 fusion power generation so I probably know enough to  
17 just be dangerous.

18 I read all of your reports, the site  
19 characterization plans until I'm blue in the face  
20 with them, and you have generated mountains of  
21 paperwork, and I think all in all it's a pretty  
22 convincing job, but I think that the, that we have  
23 been--well, you have made the decision to put the  
24 repository here, apparently it's been made. Unless  
25 something disasterous shows up that says no, this has

1 been designated as the spot. I think that the--well,  
2 I think that the, we have been doing a lot of cutting  
3 bait. I think the time has come to go fishing and no  
4 pun is really intended there, but it's time to get  
5 the show on the road. I think that the, from the  
6 standpoint of doing the right thing for the country,  
7 I think it's patriotic to do something with the  
8 repository. I think that this, from what I have read  
9 is probably the best place to put it. There is no  
10 ideal place. You are not going to find it, so I  
11 think that we should be going full steam ahead until  
12 something shows up one way or the other.

13           Now, I have a feeling that if it does  
14 show up, you're probably going to find solutions to  
15 whatever those problems are.

16           I'm a little concerned about the 10,000  
17 year thing. The half life of plutonium is 25,000.  
18 In 100,000 years you are still going to have a  
19 significant quantity of that material left, so we are  
20 talking about an awful long time, but I suspect that  
21 10,000 is probably designated by Congress to be some  
22 date that you have to work to because obviously we  
23 are not going to work to 100,000.

24           I have been accused of being for the  
25 repository. I'm neither for nor against. I like my

1 life-style here. I don't think the repository is  
2 going to do much for me or for the area. If we wind  
3 up with 200 people, that's not a lot.

4 The air is good, the climate is good,  
5 and now unless you put nuclear materials into the  
6 atmosphere, I don't think we are going to have much  
7 trouble around here, and you are not going to create  
8 a lot of smoke or bad things in that respect.

9 Now, I think that the, it behooves the  
10 DOE to adequately compensate the state and the county,  
11 and I have a deep concern about the local areas,  
12 Beatty and Amargosa. I think if we have to rely on  
13 the county, we are not going to do very well in  
14 Amargosa. There is a lot of things that we need that  
15 I think probably could be obtained, schools, police  
16 facilities, things like that, fire safety.

17 I have a three-point program that I  
18 would like to offer. The one is, the one point is  
19 the adequate compensation to the state and county and  
20 the local area, and the other one is at one time I  
21 was accused that Holtz wants it all, and that's  
22 probably partly correct because I think if you are  
23 causing a problem all over the country, lots of  
24 states are up in arms, people are attending meetings  
25 and putting all kinds of objections in and you get

1 this problem everywhere you go, so a long time ago I  
2 proposed or suggested that the MRS facility should be  
3 here where the repository is going to be. You've got  
4 MRS's at all of the power generation facilities, and  
5 I think if it were shipped here and installed in an  
6 MRS here, also if it was packaged here and placed  
7 here, yes, we would have it all. But I think that  
8 would be perhaps an incentive to the state and to the  
9 areas to be more willing to accept the repository  
10 because you are going to bring a lot more labor and a  
11 lot more income to this state. So I can see that.

12                   And my last concern is the amount of  
13 material that you have. I think I mentioned this  
14 before, too, but I'm concerned that you possibly  
15 could have a critical mass.

16                   Now, a long time ago, I think it was  
17 over a thousand years, it was stated that there was a  
18 nuclear explosion that took place in Africa  
19 spontaneously. We are going to have a mountain of  
20 this stuff here, and I think it should be looked into  
21 very carefully that the possibility of a critical  
22 mass is not there.

23                   Now, I know 235 is not very easy to  
24 make a high order, 238 is a little easier and  
25 plutonium is easier yet, and we have a lot of it, and

1 we have neutrons flying all over the place, from the  
2 sun. If it will go through 20,000 or 20 yards of  
3 lead, it sure is going to go through a lot of dirt.  
4 So I would like that particular area looked into very  
5 carefully, and I thank you for your attention.

6 MR. MILLS: Thank you, Mr. Holtz.

7 Our next speaker will be Shauna  
8 Crossland.

9 MS. CROSSLAND: Well, I'm not a  
10 geologist and I'm not an economist, but I am a mining  
11 brat with a degree in agriculture, and I've spent a  
12 good deal of my life moving into or out of boom towns,  
13 so I know that in a socio-economic sense this area is  
14 going to survive with or without the repository.

15 The two things that concern me much  
16 more than socio-economic things are, number one,  
17 water. When you look around us in all the  
18 surrounding states and all the surrounding areas,  
19 everybody in the western United States particularly  
20 is becoming increasingly aware that we are using up  
21 our water resources, and they are not being  
22 replenished as fast as we are using them.

23 This area does have apparently a lot of  
24 ground water, and I'm appalled at how little we know  
25 about that resource, for sure where it comes from,

1 how fast it can be replenished, if it's used. We  
2 don't even know if the agricultural use that's gone  
3 on up until now has lowered the water table. And if  
4 we know that little about the ground water now, how  
5 can we determine the amount that you people and the  
6 mining companies want to take out are going to affect  
7 us and how can we risk that water with it being  
8 contaminated, possibly, for in the future. We have a  
9 very precious commodity that we are sitting on top of,  
10 and I think we need to take, make every effort we can  
11 to make sure that we don't jeopardize it.

12                   The other thing that concerns me, being  
13 around mining people all my life I have had to learn  
14 a little bit about geology just out of self-defense,  
15 and one of the things that fascinated me about this  
16 area when I first came here was how unstable it's  
17 been throughout its history. In every direction you  
18 look there are faults and evidence of volcanic  
19 activity and the whole history of this area  
20 geologically is one of instability, and I can't  
21 believe that with that kind of history right up until  
22 recent times it could suddenly become so stable that  
23 there would be no threat from earthquakes or volcanic  
24 activity or any of those kind of things as far as  
25 storing nuclear waste underground for the next 10,000



1 years.

2                   So I hope--I guess I'm not really  
3 against it and I'm not for it because I really feel  
4 like we don't know enough to make a good decision,  
5 and what I hope that you will do is to study it, work  
6 with the State, work with whoever you have to work  
7 with to study the water and to study the geology and  
8 to make certain that this really is the best place,  
9 and if it looks like it isn't, to choose another one  
10 that would be better. Thank you.

11                   MR. MILLS: Thank you.

12                   Our next speaker is Steve Bradhurst.

13                   MR. BRADHURST: Thank you. Mr.

14 Moderator and panelists, for the record my name is  
15 Steve Bradhurst and I'm here tonight on behalf of Nye  
16 County Board of County Commissioners. Nye County  
17 wishes to comment on the Site Characterization Plan.  
18 Written comments will be submitted in addition to my  
19 oral comments tonight.

20                   First comment pertains to hydrology and  
21 you have already heard a number of comments relative  
22 to the hydrology of the area and the studies that are  
23 anticipated, and more specifically I'd like to  
24 address the hydrologic test holes that are planned.  
25 The Site Characterization Plan indicates a number of

1 hydrological test holes will be drilled in Amargosa  
2 Valley to better understand the Amargosa Valley  
3 hydrologic system.

4           It appears, and I could be wrong, that  
5 these test holes will be limited to the valley fill  
6 aquifer and will not go deep into the deep carbonate  
7 aquifer.

8           Nye County has said in the past and  
9 will say it again that it is important to have a  
10 comprehensive picture of the Amargosa Valley  
11 hydrologic system or systems.

12           So we recommend that DOE drill into the  
13 deep carbonate aquifer and that the test holes be  
14 located in the Ash Meadows sub basin as well as the  
15 Alkalai Flats sub basin, that is the test holes that  
16 will go into the valley fill aquifer as well as the  
17 deep carbon aquifer.

18           Another hydrologic concern is the  
19 ground water extraction. Site Characterization Plan  
20 states that one of the events that could, this is a  
21 quote, one of the events that could significantly  
22 affect the waste isolation ability of the Yucca  
23 Mountain site is intentional withdrawal of ground  
24 water, unquote.

25           It's certainly no surprise to the

1 people in this room that Las Vegas Water District  
2 covets Amargosa Valley water, whether it be the  
3 shallow fill aquifer water or the deep carbon aquifer.  
4 And no doubt Las Vegas will need new sources of water  
5 to sustain its growth in the 21st century.

6           The question that begs an answer is  
7 what will be the impact on the repository if the deep  
8 carbon aquifer that lies beneath the Yucca Mountain  
9 site is depleted to some extent of water due to  
10 significant pumping by, say, the Las Vegas Water  
11 District, whether the pumping be in Lincoln County or  
12 someplace in Nye County, what will happen if that  
13 significant resource of water is, as I say, depleted  
14 over time? It might take 10, 15, 20, 50 or 100 years.

15           I don't know if DOE has the authority  
16 and the ability to preclude that from happening. So,  
17 therefore, the question would be if there is  
18 significant withdrawal of water from the deep carbon  
19 aquifer, will there be subsidence and will there be  
20 some subsidence with respect to Yucca Mountain.

21           Another comment that pertains to the  
22 site characterization work force, the Site  
23 Characterization Plan states, quote, care will be  
24 taken to minimize adverse environmental and socio-  
25 economic impacts, unquote, and also, quote, as

1 discussed in the DOE environmental assessment for the  
2 Yucca Mountain site, no significant adverse  
3 socio-economic impacts are expected from site  
4 characterization, unquote.

5           The concern is that the Yucca Mountain  
6 environmental assessment states that the site  
7 characterization work force will be 273 people. The  
8 recently released DOE section 175 report states that  
9 the site characterization work force will be 1425  
10 people. Granted a number of these folks will be in  
11 the Las Vegas valley. This difference, I believe,  
12 needs to be addressed. Nye County has stated in the  
13 past and I will state it again tonight that we  
14 welcome the work force. All we need is some lead  
15 time to work with you to accommodate that work force.

16           Another comment concerns the off-site  
17 support facilities for the Yucca Mountain project at  
18 the Test Site. Site Characterization Plan states DOE  
19 facilities at Jackass Flats at the Test Site will be  
20 used to support repository work. Such work will be  
21 done in laboratories at this site. There will be  
22 architectural engineering work and there will be a  
23 visitors center at this site.

24           Over the last few years Nye County has  
25 requested that the DOE relocate the visitors center

1 and that will be associated with the repository at a  
2 site that the county has selected off site on Highway  
3 95 by Lathrop Wells. It is a site that would be at  
4 the entrance to the Test Site at Lathrop Wells.

5           So reading in the Site Characterization  
6 Plan that this visitors center is going to be at the  
7 Test Site deep within the Test Site away from the  
8 general public is disturbing, and it is our hope that,  
9 and I know we have support from some DOE officials  
10 that this can be turned around and that any visitors  
11 center that is located or that is built associated  
12 with the repository be located off the Test Site so  
13 the general public can access that visitors center  
14 without going through the cumbersome process of being  
15 badged.

16           Also the county feels that DOE should  
17 do everything in its power to locate other repository  
18 support facilities off-site and encourage repository  
19 contractors to locate offices off-site.

20           Nye County just recently asked the  
21 Bureau of Land Management to set aside 480 acres at  
22 the entrance to the Test Site at the Lathrop Wells  
23 road that goes into the Test Site and that 480 acres  
24 is the site that we have in mind for our science park  
25 and as I said in the area we'd like to see our

1 visitors center located. We certainly would welcome  
2 the DOE to locate other support facilities and to  
3 encourage its contractors to locate off site at that  
4 area or private land in Amargosa Valley.

5                   Finally I have an observation regarding  
6 the schedule, site characterization schedule. NRC's  
7 last quarterly report on repository program states  
8 DOE is having trouble meeting it's timetable for  
9 supplying NRC with documents that must be reviewed  
10 and approved by NRC prior to the exploratory shaft  
11 excavation in November, '89.

12                   It appears with this slippage more and  
13 more work is going to have to be done over a shorter  
14 and shorter period of time, and the concern that the  
15 county has is that as we see this compression and  
16 that if DOE does not make this schedule, can't meet  
17 the schedule, there will be a call for a reform in  
18 the program; that is, if there isn't actual  
19 excavation come November of '89, there will be  
20 institutional pressure, Congress specifically as well  
21 as maybe pressure from the atomic nuclear industry to  
22 get on with the job, so to speak.

23                   NRC is perceived and rightly so as  
24 being the primary safeguard to the people of Nye  
25 County and particularly here in Amargosa Valley, and

1 that is that the process that DOE has to go through  
2 to get an application to construct and to operate a  
3 repository means that NRC is going to be looking at  
4 that site to see if it is safe, will it safely  
5 contain nuclear wastes over the 10,000 plus year  
6 period.

7           So the concern is that as the DOE has a  
8 problem meeting its schedule that there may be an  
9 effort, as I say, to reform the system, the process  
10 and there may be a desire on the part of some to  
11 dilute NRC's involvement in the program.

12           Knowing that NRC is going to read this  
13 transcript or at least some of their people, I'm  
14 inserting this into the transcript to point out that  
15 we would like to have NRC aware of our concern that  
16 they not be taken out of the picture and that their  
17 role not be deleted.

18           I guess the statement that should be  
19 made is that Nye County wants DOE and NRC to adhere  
20 to a schedule driven by quality assurance and not the  
21 other way around.

22           Thank you.

23           MR. MILLS: Thank you.

24           Mr. Edward Garey will be the next  
25 speaker.

1 MR. GAREY: Good evening, my name is  
2 Eduardo C. Garey, and I'm a graduating senior at  
3 Beatty High School, and I have made an application to  
4 the University of Nevada, Reno.

5 As a student I'm interested in the  
6 studies of the Yucca Mountain repository and realize  
7 that this country must solve its energy problems.

8 Our class was invited to a low level  
9 waste--well, low level disposal site operated by U.S.  
10 ecology in Beatty. We felt that the operation was  
11 conducted safely and thoroughly.

12 Last year I had the pleasure of  
13 participating in a close-up program in Washington,  
14 D.C. and we had the experience of meeting in person  
15 with the Honorable Senator Reid and Hecht and  
16 Representative Vucanovich.

17 I was able to present prepared  
18 questions to each of them. They answered the social  
19 and economic questions directly but they purposely  
20 avoided questions pertaining to nuclear waste  
21 management.

22 Senator Reid chose to change the  
23 subject, Representative Vucanovich just ignored the  
24 question and Senator Hecht expressed concern and hope  
25 that a solution would be solved, would be found.



1 Needless to say, our group was disappointed.

2 I welcome this opportunity to express  
3 my opinion that I consider the Department of Energy  
4 is presenting a realistic approach to the nuclear  
5 waste problems and believe that their conclusion, it  
6 will represent a logical solution to nuclear waste  
7 management.

8 Thank you, sir.

9 MR. MILLS: Thank you.

10 Has Mr. Brian Carter come in?

11 I notice that some of you have come in  
12 after we started. We are going to take a brief  
13 recess for approximately ten minutes. Any of you who  
14 have come in who did not hear the initial  
15 introduction, feel free to sign up at the back desk  
16 and you will be given ten minutes to make a  
17 presentation. After you have completed eight of  
18 those minutes, I'll hold up a two-minute signal and  
19 at the end of ten I'll raise my hand and you should  
20 conclude that thought. With that, we'll take a brief  
21 recess for ten minutes.

22 (Brief recess taken.)

23 MR. MILLS: If we could come back to  
24 order, our next speaker will be Nancy Fisher.

25 MS. FISHER: Thank you very much. I am

1 not a geologist, I am not a socio-economic major, I  
2 just want to make a comment for the record.

3           It seems to me that everything that I  
4 have heard so far is assuming that technology stops  
5 as of March 30th, 1989, and it is my understanding  
6 that technology doubles every 13 to 15 years. I kind  
7 of get the feeling that by the time we get around to  
8 building this thing we will be so far advanced that  
9 it may not even resemble what we are starting out  
10 with now.

11           If you could take someone from 1950,  
12 which is 39 years ago, put them in a deep sleep and  
13 wake them up today and try to explain to them that  
14 you could take a plastic cup, put a cup of coffee in  
15 it, stick it in a black box, touch a flat pad with  
16 numbers and you got a hot cup of coffee in a minute,  
17 explain the numbers or the letters TV, VCR, Xerox,  
18 laser, cat, pet scans, that's 40 years.

19           I have an idea by the time this study  
20 is over we'll feel like we were just walking and  
21 getting our first pair of shoes. Thank you.

22           MR. MILLS: Thank you.

23           That concludes those who have signed up  
24 to speak to us this evening. What we propose to do  
25 is take a 30-minute recess. We are going to be here

1 until ten o'clock as was announced. If anyone who  
2 has addressed this panel earlier wishes to again,  
3 please sign up and we'll be glad to hear from you,  
4 and the rest of you here, if you want to address  
5 again with the guidelines we have set forth, we  
6 encourage you to put your name on the list back there  
7 and come forward and state your piece, and with that,  
8 we will be in recess until 8:35.

9 (Brief recess taken.)

10 MR. MILLS: We'd like to call the  
11 meeting back to order. And our first speaker will be  
12 Pat Copeland.

13 MS. COPELAND: My name is Pat Copeland,  
14 and I represent several members of the Copeland  
15 family, and I want to speak on behalf of my husband  
16 Bill who is out of the area for a few days, but I  
17 wanted the opportunity mainly to let you know what we  
18 feel. We have resided in this valley for 21 years.  
19 We have naturally been very concerned as everyone has  
20 as the years have gone along, but we, in being  
21 involved in several government agencies or, I mean,  
22 getting the data from several government agencies we  
23 have been relaxed as the years have come along  
24 because we have felt the safety value has increased  
25 as far as living where we are adjacent to the Test

1 Site.

2                   One of the main things that we feel  
3 very relieved about--first off, we feel that this  
4 study on the Yucca Mountain study is going to be very  
5 beneficial. We feel that we are going to get the  
6 facts laid before us. The main thing that we are  
7 involved in are the monitoring stations. We have  
8 managed the monitoring station at 373 and 95 for  
9 several years. We get the complete readout data  
10 every week from all of the community monitoring  
11 stations, it's very in-depth. You would have to go  
12 to college several years, I think, to understand all  
13 of this, but we are kept completely abreast of any  
14 radiation.

15                   This also involves not only our own  
16 area but it's a worldwide detecting monitoring  
17 station. The stations are controlled by satellite,  
18 as you well know.

19                   We went through the Chernobyl event  
20 right along with them, and we were called in the  
21 middle of the day to increase our monitoring and we  
22 were at this time monitoring every few hours, and  
23 also I might add that we feel also that this station  
24 helps us in the U.S. Ecology problem that we kind of  
25 have with some of those trucks that go through.

1                   We had one that went through recently  
2 and apparently pulled over and stayed overnight off  
3 of the road near the monitoring station up on the  
4 highway there, and shortly after 6:00 a.m. we got a  
5 telephone call from Las Vegas letting us know the  
6 satellite had gone off and was, as she put it,  
7 beeping these stations out here, and what had  
8 happened, there was a little bit of low level  
9 radiation from the truck that was in route to U.S.  
10 Ecology, pulled over to spend the night and go on.

11                   It was just within a matter of a very  
12 few hours they had that detected, they had the truck  
13 located, they knew where he had come from, where he  
14 was going and who he was, and the situation was well  
15 in hand.

16                   But we do, we are notified the minute  
17 there is any change.

18                   Of course, we can see by our own  
19 readouts, you know, but this factor alone we feel  
20 very safe. I don't know what goes on inside the Test  
21 Site, all I know is what goes on outside of it by our  
22 own monitoring, and from this alone we feel that at  
23 least we have some kind of a control knowing what's  
24 happening. At least we get a look beforehand where a  
25 lot of these people don't in other areas, but I

1 appreciate being able to speak before you and to let  
2 you know that we certainly are in favor of this.

3 Thank you.

4 MR. MILLS: Thank you. Our next  
5 speaker will be Mr. Ken Garey.

6 MR. KEN GAREY: Good evening. My name  
7 is Ken Garey. I have lived in this community of  
8 Amargosa Valley for approximately 25 years, and I  
9 have worked for various contractors and agencies at  
10 the Nevada Test Site. I'm a graduate engineer,  
11 retired after the completion of the spent fuel  
12 demonstration program in 1987 at the "Hemat" facility  
13 in area 25.

14 I worked on my first nuclear project in  
15 1959, and I have been associated with nuclear  
16 projects since that time.

17 I am presently working as a consultant  
18 on a TRU Clean II Volume Reduction Program with  
19 equipment at the Nevada Test Site in Johnson Island,  
20 Pacific Ocean. I'm also station manager for the EPA  
21 community monitoring station located in this building  
22 complex.

23 From previous and continuing experience  
24 in the nuclear industry I try to keep informed of  
25 developments, and waste management is certainly one

1 of the aspects in the industry. In my opinion it is  
2 solvable with existing technology and experience  
3 available.

4 The Nevada Test Site, I feel, is an  
5 ideal location to conduct studies and for  
6 consideration of storage of high level nuclear waste.

7 The National Laboratories scientific  
8 community and most of all experienced personnel are  
9 available here.

10 The security is in place and many  
11 corporate entities have had good experiences at the  
12 Test Site.

13 A waste repository is just a  
14 continuation of the ongoing nuclear development.

15 The Nuclear Regulatory Commission has  
16 set forth rules and regulations requiring compliance.  
17 Notably these are spelled out in the 10 CFR and 40  
18 CFR regulations, and in addition the workmanship  
19 standards and materials are required to comply with  
20 the NQA-1 requirements for NRC licensing. With these  
21 guidelines in place, investigation, design,  
22 construction of the nuclear repository will be  
23 carried out in a safe and responsible manner in my  
24 opinion.

25 The public or these public

1 informational exchanges such as the one we are  
2 attending today are examples of the NRC standards and  
3 regulations. Public opinion and comment is a  
4 necessary part.

5 I am confident that the nuclear  
6 industry can and must move forward into the next  
7 generation of reactors if this world is going to meet  
8 its energy requirements. A responsible approach to  
9 waste management is one aspect of energy development,  
10 and the Yucca Mountain repository investigation is an  
11 important part of that development.

12 The investor-owned public utilities  
13 acknowledge their responsibility by funding.

14 Our federal Department of Energy is  
15 carrying out their responsibilities and private  
16 industry is cooperating with all agencies and the  
17 National Laboratories to resolve the spent fuel cycle  
18 of energy production for this nation.

19 As a citizen who has received the  
20 benefit of electrical energy and continues to benefit  
21 from low energy costs related to nuclear power, I  
22 feel responsibility to help in any way possible to  
23 assist in the waste management program.

24 I believe that the Yucca Mountain  
25 investigation concept is a sound concept and urge



1 that it continue in its well-defined program to  
2 completion. Thank you.

3 MR. MILLS: Thank you.

4 If there is no one else who signed up  
5 to speak, we will again take a recess for 30 minutes  
6 until 9:15. We'll stand in recess.

7 (Brief recess taken.)

8 MR. MILLS: For the record it's 9:15.  
9 We will reconvene. There is no one who signed up to  
10 speak and therefore we will recess until 9:55.

11 If there is anyone who wants to sign up,  
12 we'll still take sign ups.

13 (Brief recess taken.)

14 MR. MILLS: Is there anyone else who  
15 wishes to address the panel?

16 MR. GERTZ: Seeing no one else, as the  
17 hearing official, the hearing is officially closed at  
18 approximately ten p.m.

19 (Thereupon the proceedings were  
20 concluded.)

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CERTIFICATE OF REPORTERS

STATE OF NEVADA )

SS:

COUNTY OF CLARK )

We, Anna Maria Ciarrocchi and Barbara Shavalier, certified shorthand reporters, do hereby certify that we took down in shorthand (Stenotype) all of the proceedings had in the before-entitled matter at the time and place indicated; and that thereafter said shorthand notes were transcribed into typewriting at and under our direction and supervision and the foregoing transcript constitutes a full, true and accurate record of the proceedings had.

IN WITNESS WHEREOF, I have hereunto affixed my hand this 31st day of March, 1989.

Anna Maria Ciarrocchi  
Anna Maria Ciarrocchi, C.S.R. #188

Barbara Shavalier  
Barbara Shavalier, C.S.R. #84