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2 MR. PERNA: Frank Perna, P-E-R-N-A.

3 This is the title page, "Report of the ACNW  
4 Working Group on Chemistry Issues and Related NRC Staff  
5 Capability for the Proposed High-Level Waste Repository  
6 at Yucca Mountain." This is going, addressed to  
7 Honorable Richard Meserve, Chairman, U.S. NRC,  
8 Washington, D.C., and August 13, 2001.

9 "The Department of Energy's post-closure  
10 safety case for the proposed Yucca Mountain high-level  
11 waste repository has shifted from an original focus on  
12 the geology of the site, to emphasis on the engineered  
13 barrier system."

14 Okay. And I'd like to say since it has  
15 shifted from geology, Yucca Mountain is irrelevant  
16 because in the beginning, they were saying we're going  
17 to put it in the mountain and even if it leaks, the  
18 mountain is going to protect the environment. That's  
19 not true with Yucca Mountain because water moves  
20 through the mountain. They find condensation in the  
21 tunnels that contains microorganisms and also brine,  
22 corrosive brine, which would not only affect the drip  
23 shields, but will affect the storage waste packages

24 themselves.

25 Now, in here, they talk about cladding

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1 degradation. When you're talking about cladding

2 degradation, waste form dissolution and mobilization

3 and transport of radionuclides, you're talking about

4 the interior of the cask; you're not talking about the

5 exterior. So there's also a problem there.

6 Now, I asked this question about slump in

7 accidents. I also don't know what the cladding is made

8 of. I was told by one scientist that lead was not used

9 because of environmental concerns going back to lead

10 pollution or -- I don't know what you call it -- but

11 the dangers of lead. Now, if a cask were to smash on

12 the ground and not get broken, you still would have

13 slump of lead if you had lead inside as a shield. The

14 lead would move with the accident and it would go in

15 one part of the cask, which means that cask is going to

16 have more radiation emanating from it than one that's

17 fully clad.

18 They're also talking about varying moisture

19 inside the waste packages, which is something that

20 we're not talking about. Most of us are talking about

21 exterior. This is talking about interior problems.

22 Now here's another statement -- "Given the

23 time scales involved, the NRC is faced with the task of

24 making judgments about phenomena and processes that

25 cannot be tested directly and that are outside the

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1 framework of scientific endeavors where the outcome of

2 an experiment and the test of a model where a

3 hypothesis can be directly observed." Now, this came

4 from page one, labeled "Introduction," on the top.

5 What they're saying here is, you can't prove

6 nothing. You know, a lot of words to say they can't

7 prove it. And that's their task. If they can't prove

8 it and the NRC is oversight over the DOE, then let's

9 forget about it; maybe they failed.

10 Congress is going to be deciding this

11 supposedly on scientific basis. If they are, then this

12 one page should say, let's stop the charade and let's

13 do something else. If the mountain itself is not going

14 to protect the environment, then why go through the

15 medium of using the mountain? Leave it on site where

16 it is. It's been up there safely -- in fact, it's been  
17 there safely since, if you count weapons, since 1945.  
18 Say, it's been safely for 56 years. Up to 56 years,  
19 it's been stored safely, dry cask storage on site.  
20 Now, we have an \$11 billion waste fund, yeah,  
21 waste fund that was taken from -- the rate payers paid  
22 it. If you divide that by 106, you come out with \$90  
23 million per site, which can be used to harden these  
24 sites. By hardening, make them safer and more secure  
25 than they've ever been.

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1 In the military, I worked in ammunition  
2 dumps. They take ammunition and they put it in a  
3 place, a storage place, repository. Then they put a  
4 heavy cover over the top. Then they burn the earth  
5 over the top of that. The purpose is, if it blows up,  
6 it won't kill everybody on both sides of it.  
7 I was talking to a fighter pilot the other  
8 day and he said, well, that waste would make a very  
9 attractive target, but it won't make a very attractive  
10 target if it's hardened by building a building around  
11 it and then using earth as a berm to prevent the

12 missile or whatever from going in there. So, the point  
13 is that \$90 million is available per site and, in fact,  
14 in fact, that might not even be true. There are  
15 actually only 65 sites, although there are 103 plants.

16       Excuse me, ma'am. Is that right? There are  
17 65 sites? There is 103 operating plants, three  
18 decommissioned, but they're only on 65 sites? Some  
19 have multiple plants on them.

20       MS. QUENELL: I don't know those exact  
21 numbers.

22       MR. PERNA: I think that's true. In fact,  
23 there is more than \$90 million available per site if  
24 they use the \$11 billion to harden, make these sites  
25 more secure. There's also the point that if you took

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1 every bit of nuclear waste off, away from these 103  
2 reactors and decommissioned sites, there are still 106  
3 targets. You haven't reduced your targets. By  
4 transporting it, you'll increase your targets. If you  
5 transport it by truck, there will be six loads a day  
6 for decades and every one of them being an attractive  
7 terrorist's target. If they stay on site, you haven't

8 increased your targets like that.

9 That's about all I have. I have other papers

10 here. Can I just submit the papers?

11 MS. QUENELL: Are those your originals? Do

12 you need those copied also?

13 MR. PERNA: If you can give me a copy of

14 these two articles, please.

15 MS. QUENELL: Okay.

16 MR. PERNA: I'll be able to give you this by

17 just stapling this onto these pieces. One is

18 transportation. One is atomic plants, a newspaper

19 article, the other is Department of Defense munitions

20 trucks, transport, accidents. Okay. That's all.

21 Let me add something. The 1987 legislation

22 to study Yucca Mountain as a nuclear repository was

23 flawed in that unscientifically, other logical sites

24 were eliminated because of political influence by

25 certain members of Congress. And, in essence, it was a

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1 NIMBY bill.

2 Also, at that time, it was based on some

3 erroneous assumptions, that desert is valueless; that

4 only a few people lived here; and that we already had  
5 the Nevada test site, so if there was pollution, so  
6 what? We'll add some more to it.

7       Between 1951 and 1987, there must have been  
8 approximately 700 detonations of nuclear devices, some  
9 of which pollute the water table. Well, their  
10 assumption about population was correct. But since  
11 then, our population has sextupled, has grown six times  
12 as much. We are now 1.5 million population in the Las  
13 Vegas Valley and our tourist population is 90,000 per  
14 day. We are approximately 90 miles from the mountain.

15       Now, traveling north, you'll come across the  
16 Paiute Snow Mountain Reservation, which has since been  
17 developed and has many tourists visiting it daily to  
18 their golf courses, restaurant, tobacco shop. Go down  
19 another 25 miles closer to the mountain, you have  
20 Indian Springs. There is an Air Force facility and a  
21 growing civilian population. Going closer still to the  
22 mountain, in fact, within 20, 25 miles of the mountain,  
23 is Amargosa Valley where a large dairy is located,  
24 ostrich and cattle are raised, foodstuffs are raised,  
25 vegetables, and the population has grown there also.

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1 Population was grown in Beatty, which is approximately  
2 the same distance from the mountain. And a little  
3 further still is Shoshone, Shoshone, which is --  
4 Shoshone, Tecopa, they've grown also. Near Tecopa is  
5 also a date ranch, which is a tourist destination,  
6 China Ranch.

7       So any assumptions from '87 are wrong today.  
8 And even if Yucca Mountain were scientifically suitable  
9 -- and it isn't -- it should be abandoned because of  
10 erroneous assumptions made in 1987. The desert isn't  
11 worthless. It's very valuable.