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2	SCOPING MEETING FOR PREPARATION) Univ. Nevada Library
3	OF AN ENVIRONMENTAL IMPACT)
4	STATEMENT FOR A REPOSITORY AT)
5	YUCCA MOUNTAIN, NEVADA) BUS/GOV INFO CENTER
6	* * * * * *
7	Baltimore, Maryland
8	October 11, 1995
9	Hearing in the above matter held at the
10	Maritime Institute of Technology and Graduate Studies,
11	5700 Hammonds Ferry Road, Baltimore, Maryland, before
12	Dianna C. Kilgalen, RPR, beginning at 8:30 o'clock a.m.
13	PANEL MEMBERS:
14	WENDY R. DIXON, EIS Project Manager
15	DR. JEAN L. YOUNKER DR. TED B. DOERR
16	DR. STEVEN J. MAHERAS WILLIAM A. FREELAND
17	MEETING FACILITATORS:
18	
19	CATHERINE TICE KEITH JULIAN
20	Departed by
21	Reported by: Dianna C. Kilgalen, RPR





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PUBLIC IN ATTENDANCE:

Karl Novak.

Paul Langosch.

Barbara Stevens.

Fred Miller.

Joe Strolin.

John Dossett.

Robert Holden.

Eileen Supko.

ART
MILLER
& Associates
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MS. TICE: I only see a see a few hands.

I believe we will have enough time. In order to

maximize the time that we have available, I would ask

that you keep your questions brief and to the point.

I want to remind you also that there are

Department of Energy representatives in the exhibit room
who will be available this morning and afternoon to
answer additional questions you may have. Again, you
may use any of the methods we mentioned earlier to
submit comments and questions.

We have a few additional ground rules and procedures to review before we begin. These are summarized on the posters that are on the wall, and also outside the room in the handouts, I believe.

Again, a reminder, today's proceedings are being recorded word for word by the court reporter. The transcript is a part of the official record. We ask that when you ask your question, you identify yourself and speak slowly and clearly into the microphone that is here in the center of the aisle so that the court reporter can record your questions accurately.



Please be courteous and respect the views of others. If you have cellular phones or beepers, turn them off. And please refrain from having side conversations during the question and answer period.

Just raise your hand to be recognized for a question. I will keep track of questioners in the order I see hands go up and call on people. You don't need to stand in line or verbally indicate your desire to ask a question. We will keep track of it.

I would like to ask importantly that you save your comments for the formal comment segment later this (morning. This question and answer period is really a very good opportunity to ask constructive questions and to gain additional insight and get additional information on the repository Environmental Impact Statement and the project.

Initially, I would like that you ask one question at a time. We will kind of rotate around through questioners so that everyone does have the opportunity to ask their question.

With that, we are ready for the first question.

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1 I believe I saw a hand here on the right. 2 MR. NOVAK: My name is Karl Novak. 3 from Pennsylvania. One of the items I had here, I didn't hear terrorism mentioned this morning. 4 Terrorism is certainly a blight of our times. I was wondering if 5 6 anybody has formally included that as part of the EIS 7 system. 8 MS. DIXON: As it relates to potential 9 impacts at the repository itself and during 10 transportation, I presume? 11 MR. NOVAK: That is exactly right, 12 primarily as it moves through Pennsylvania, and, for 13 that matter, any state in our union. 14 MS. DIXON: Our Environmental Impact Statement will look at accident scenarios as it relates 15 to transportation, including things that are, as long as 16 17 they are reasonably entertained and reasonably feasible, low probability but very high consequence. Steve, would 18 you like to add to that? 19 20 DR. MAHERAS: I agree that terrorism is a blight on our times. It is a shame that we have 21



accidents like the one that just occurred in Arizona. The Department of Energy is, of course, concerned about terrorism and these kind of acts on its shipments.

One of the things that we have to point out is that the casks are not designed to be proof against a terrorist attack. But because they are so large and heavy and have so much steel in them, they have been found experimentally to be quite adverse to terrorist attack.

They have done experiments at SNL where they put explosives besides the casks and blown them up, where they have taken the casks up in a helicopter and dropped it onto the desert floor to mimic it plunging off a bridge.

So we incorporate by our accident analyses those kinds of impacts into the cask design.

MS. TICE: I would like to just clarify. Steve referred to SNL. That is Sandia National Lab. I saw a hand on this side of the room. The Ouestion? gentleman in the blue shirt.

MR. LANGOSCH: My name is Paul Langosch.

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I'm from Silver Spring, Maryland. I'd like to know that since there is such a long period of time between the Impact Statement and when the transportation is actually going to begin, for instance, where I live in Silver Spring, 495, the Beltway, is very overused road that is going to have a lot of problems in the next five or six years.

I want to know what the Department of Energy is doing to anticipate the conditions of the interstates through urban areas when the transportation of this material is actually going to occur.

MS. DIXON: I will start that off and hand it over to Steve as our transportation expert. I guess I need to emphasize the fact that routing of spent nuclear fuel and high-level radioactive wastes on our interstates is not something that is regulated by the Department of Energy.

We are required to follow DOT preferred routing requirements. Now, the reason why the Department of Transportation has set it up in such a fashion that the state can come up with preferred routes contrary to what



is already in existence within DOT, i.e., the interstates and the shortest distance between two points, is done in recognition of the fact that the various states out there know more about their state than DOE or DOT or any other Federal agency does.

If the state wants to come up with a preferred route to keep something away from an area they think is risky or hazardous, the state has the ability, through the guidelines published by the Department of Transportation, to do just that. Steve, do you have anything.

DR. MAHERAS: In addition, at the time the decision is made on the route, they take into account population density along the route. And if the state has allowed an alternative way to get from Point A to Point B, that would be considered in the routing decision.

MS. TICE: I see the lady in the white jacket was first, and then you will be next.

MS. STEVENS: My name is Barbara Stevens.

I'm from Greenbelt, Maryland. Three questions about the

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2	MS. TICE: Would you like to take them one
3	at a time?
4	MS. STEVENS: Yes, one at a time.
5	MS. TICE: Okay.
6	MS. STEVENS: An earthquake undoubtedly
7	will happen in that area with considering such a long
8	period of time for storage of the waste. I didn't hear
9	you speaking we are going to have an earthquake
LO	somewhere sometime, no doubt about it, over such a long
11	period of time.
12	MS. TICE: Your question is what study is
L3	being factored into the EIS on seismic activity?
14	MS. STEVENS: Yes.
15	MS. DIXON: I will kick that off. I would
16	like Doctor Younker to add to that with the work she has
17	been doing. Seismicity potential effects as it
18	relates to the earthquakes certainly is something that
19	we have been looking at and studying through our
20	analyzing site characterization.
21	MS. STEVENS: I might have missed your

realization that you will have to expect an earthquake.

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1 presentation of that.

MS. DIXON: Not a problem. It is something that we have been looking at through our site characterization process in order to understand whether or not this is, in fact, a suitable site for a repository.

The area they have selected for a potential repository, Yucca Mountain, is an area that was selected looking at where existing faults currently are, plus design for potential earthquakes is something that is fed into the design of the repository, both underground and more importantly, on the surface.

There have, in fact, been earthquakes in the area of Yucca Mountain. There was one about twelve miles from Yucca Mountain that was over five, on the order of five in 1992, I believe, in a place called Little Skull Mountain. We used the data from that earthquake to help us in our analysis tied in the design.

In fact, there were a couple of tunnels in Little Skull Mountain which were right on top of the

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Tops in Turnaround Time Immediate-Daily-Expedited Eves. - (410) 367-3833 epicenter. We went in and checked them out, after the earthquakes. There was no structural damage at all that you could see as a result of the quakes.

But the long and the short of it is it is something we are looking into very seriously as part of our analysis.

DR. YOUNKER: I think Wendy has covered about all of the points. When we look at it from the standpoint of the safety aspect of it, what would happen underground, it turns out whether the earthquake will cause any additional water to get to the waste that would be a problem.

There are not very many ways we can figure out where the earthquake would cause more water to contact to the waste, since that is the real safety issue.

MS. STEVENS: The next question is concerning the monitoring over the long haul, monitoring. Is that in your plan? A very complicated, hopefully very detailed, with money available or figuring out how to make money available for monitoring over the million, however long, the uncountable years?



MS. DIXON: The system was set up, the Act was set up such that there would be a period of time called the retrieval period. We are looking at a hundred years for that time frame right now, where there would be very extensive monitoring going on, and a decision made before we ever closed the repository that could tie to two different things, maybe more than that before the time that 100 years was up.

Principally, if within this 100 years, is there something economically viable with respect to the spent fuel. If the country gets into reprocessing again or whatever, you might want to retrieve the material.

If the decision is made to respace or change the spacing based on the data that we acquire through monitoring during that 100-year time frame, you can get in there and modify the spacing between your waste packages. If during that 100 years, Congress at that point in time or the government at that point in time elects to leave the facility open for a longer period of time, it can also do that.

Once the facility is determined to be closed

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and it is backfilled, monitoring underground was not the long-term plan. The long-term plan was to have the repository, the natural system of the repository contain the waste.

MS. STEVENS: So after 100 years, it is gone? There is no contact with humanity with it? Okay. The next question is hard for me to put. But many scientists feel that small levels of radiation are very dangerous, and I gather that the DOE has never acknowledged that.

I feel that this Impact Statement, since it is affecting so many huge populations on the East Coast, had better, please. The question is are you going to address the scientists' claim, the other scientists' claim that small amounts of radiation of much smaller levels cause cancer, cause people and babies to be deformed?

The question is, you know, what about people sitting at the railroad crossings and behind a truck on the beltway? Where I come from this, most passionately, is from the DOE hearings that presenters are saying



well, the truck drivers will be driving really fast. They are not going to stop. They are getting the doses of radiation the whole way.

This is from the DOE, you know, maybe you. I'm saying, okay, you must, in your Impact Statement, look again at the dissenting scientists who spell out doom for fetuses and things, people getting leaking doses off of trucks and casks.

MS. TICE: Is your question --

MS. STEVENS: Are you going to study those other scientists who claim damage from lower levels of (radiation that come from not an accident?

MS. DIXON: I'm going to kick this off, and then I would like Steve to tie into one part of your comment, and Ted to the other.

With respect to the overall premise about even small amounts of radiation are harmful to the human being, we all receive radiation, normal background radiation around 300 millirem on an annual basis just for a living.

If you live in Denver or a higher area than

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others, you have more radiation. If you fly in airplanes, you have more radiation. We cannot get away from radiation.

MS. STEVENS: Accepting that, knowing

MS. DIXON: Steve, do you want to kick off?

DR. MAHERAS: In the dose assessments that are done for the Repository EIS, they do plan to evaluate the normal operational dose assessments that occur because of not accident conditions.

The end point in those calculations is typically a dose that is then converted to the number of cancers that could be expected to occur in the affected population. And in addition, you can convert that dose to the number of genetic effects and to other effects that you can quantify.

Now, the Department of Energy plans to use estimates for those conversion factors that are developed by other international organizations as consensus estimates developed around the world.



that.

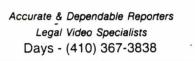
So we are not just relying upon the Department of Energy folks to make these estimates of cancers, but we are relying upon the international community to tell us what their best estimate of the conversion of dose to cancer is.

MS. STEVENS: How do we know that you are not just consulting the ones that agree with you? I mean, are you going to go on a whole gamut?

DR. MAHERAS: Because these reports are reports that are usually freely available to the public. The data is available to the public. In addition, the results are published in journal articles that other people around the United States have reviewed.

MR. DOERR: Let me just add one more tick to what Steve said. The requirements for the Environmental Impact Statement, there are two requirements. One is to identify levels of uncertainty relating to information in our existing knowledge.

The other requirement is there information that may be competing related to levels of uncertainty related to impacts. We would be taking a look at those





2 and the potential consequences. MS. STEVENS: 3 Thank you. 4 MS. TICE: I have a gentleman in the back 5 of the room. DR. MILLAR: Hi. I am Fred Millar. 6 with the Nuclear Waste Citizens Coalition. I would like 7 8 to respond and ask a question about the routing. seemed to me when the routing question came up earlier, 9 the basic impression was left that there is something 10 rational about the routing situation that we have now. 11 12 I don't think we ought to leave here with that impression. I want to particularly talk to your 13 14 transportation expert. Correct me if I am wrong. My understanding is that we have a Federal routing 15 16 regulation for only high-level nuclear waste trucks. Namely HM164, which is the Federal regulation that was 17 passed some years ago, mainly, in order to force nuclear 18 19 shipments through New York City. DR. MAHERAS: It applies to spent nuclear 20 fuel. 21

as they relate and are relevant to the proposed action



DR. MILLAR: Highway controlled quantities of nuclear material would be the technical term. That was passed after many years of controversy in order to force nuclear fuel by truck through New York City.

We do have a Federal routing regulation for the highway shipments of high-level nuclear material.

Secondly, there is no rail routing regulations for Federal. There is no barge routing regulations. I want to clarify for people if they come away with the impression there is some kind of a rational system here we have a difficult question to ask of you.

The third thing is that in terms of the state routing, my understanding, I may be wrong again, is that there is only one state that has designated routings in a thorough way, and that is Colorado. Now, maybe there is some additional thing you can enlighten me about that.

I think we certainly do want to say that the majority of states that would be impacted by these shipments, namely, 43 states, I would like to know how many states of those that passed what you consider to be



1 adequate routing regulations that could handle the shipments? 2 3 MS. TICE: Is that the question? Do you 4 want to do that first? 5 DR. MILLAR: That is sort of a subquestion. 6 The number of states is ten 7 DR. MAHERAS: 8 states across the United States. 9 Highway regulations? DR. MILLAR: 10 DR. MAHERAS: Exactly. 11 DR. MILLAR: Any for rail regulations? 12 DR. MAHERAS: No. 13 DR. MILLAR: I want to mention an incident 14 which kind of leads to the dilemma that I think the 15 Department has on this. A Navy torpedo truck turned 16 over in Denver at the major intersection of the two 17 interstates that crossed in Denver. 18 It snarled traffic in Denver. They closed down 19 the interstates in all directions for five miles. snarled traffic in Denver all day long. 20 21 Representative Pat Schroeder wrote a letter to Defense



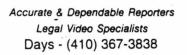
Secretary Weinberger and said what was your Navy torpedo truck doing in downtown Denver, you know what the answer she got was from Cap Weinberger?

He wrote a letter, Dear Pat: Well, in effect, he said, you know, we don't have routing on our trucks for Navy torpedos. We just put them on the truck at one end of the country and say go to New London, Connecticut at the other end of the country, and obey all laws, and good luck, boys.

Now that is a major shipper of very dangerous materials that looked very irresponsible when their cargo had an accident in a metropolitan area. So I guess, you know, this was A Risk Trucking Company that chose those routes. And the reason they had gone through Denver was instead of going Interstate 90 or Interstate 80, they dropped down to go Interstate 70 in order to avoid the tolls on the Indiana Turnpike and Ohio Turnpike.

This is not a rational routing system for hazardous materials that we have in the United States.

As a major shipper of the nuclear waste, you have been





handed that lovely job, obviously, the question comes up why isn't DOE accepting the responsibility to choose those routes as a major shipper?

I'm not saying that you are the only people who could do that. You can force the carriers to do that.

Maybe A Risk Trucking Company is still in business or Tristate or whoever. It is not a very credible program for the Department of Energy saying we are going to have the carriers out there and they will choose the route.

We don't know when they are going to choose them. So we can't exactly do the detail, a mile-by-mile analysis of the dangers, and we can't go to the states and say what do you think about this route, what do you think about that route?

I partly want to suggest isn't it the case that the Department is getting itself into more and more of an irrational bind if they don't come out fairly early with a set of proposed routes, and then let the state and local officials enlighten people about the dangers and difficulties of those possible routes?

DR. MAHERAS: I'm not sure what the



1 question was.

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MS. TICE: Dr. Millar, could maybe we refocus that? It is a two or three-part question. I think initially your question was why isn't DOE taking primary responsibility for identifying routes?

DR. MILLAR: That is the key question.

DR. MAHERAS: First of all, the statutory responsibility does not belong to the DOE. It belongs to the Department of Transportation. That is what the law says.

So if the DOT would like us to route spent fuel shipments a different way, then the DOT, being the agency of the government that is responsible for protecting the public's health and safety in areas of transportation, both truck and rail, has got to pass the law that says that it is the DOE's responsibility to do that. The DOE can't take that on itself.

DR. MILLAR: The DOE is a major shipper of a major hazardous cargo. They certainly can tell their carriers where to go. They can certainly tell their carriers we are not going to hire you as a carrier

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I mean, if you just talk to any major shipper in the country, DuPont, Dow and Monsanto, and ask them do you feel free to tell your carriers to avoid Chicago? What do you think the answer to that question is going to be? Please don't say that DOT has a regulatory responsibility. I'm talking to you as a shipper.

MS. TICE: Dr. Millar, could you let Dr. Maheras finishing answering the question, please?

DR. MAHERAS: In addition, I think you are confusing the way that other commodities are shipped, not spent fuel type commodities, with the way spent fuel is shipped. The Department of Transportation has told both the commercial industry and the DOE that those commodities have inherently a higher hazard, and they have to follow different rules.

So the routes have got to be preapproved by the NRC, and the procedures for a deviation from the route are also preapproved by the NRC. So it is not like you throw the guy the keys at the gate to the nuclear power



plant, tell him he has to be on the East Coast in a week and he just goes. No. He has to follow a route plan that is approved by the NRC and follows the DOT rules.

DR. MILLAR: Let me clarify for people who don't know this. The NRC route is chosen for security purposes, not for safety purposes, and the carrier chooses the route and goes to the NRC and asks for approval, right?

DR. MAHERAS: In addition, though, the NRC requirement says that you have to comply with the Department of Transportation rules. They are not going to approve a route that doesn't comply with the DOT rules. Terrorist aspects, as we have seen just today, are an important consideration in any type of transportation.

DR. MILLAR: So, I mean, the Department of Energy's current position is that as a major shipper of this cargo, they do not accept the responsibility to basically designate those routes; is that correct?

DR. MAHERAS: It is a state responsibility to designate preferred routes, if that is what you are

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It is a state responsibility. 1 getting at. 2 DR. MILLAR: I understand. It is a state 3 DR. MAHERAS: 4 responsibility, though. That is what the law says. The 5 DOE cannot --DR. MILLAR: 6 The law doesn't say that. 7 think you are misleading people about that. 8 DR. MAHERAS: No, I don't believe I am. 9 The law says it is the state's responsibility to 10 designate preferred routes, correct? DR. MILLAR: It also says the states may 11 designate preferred routes. The law does not state that 12 the states choose DuPont's routes. 13 The states don't 14 choose DuPont's routes. But if the state has got a 15 DR. MAHERAS: problem with a particular route, then they have the 16 flexibility to say go Route A instead of B. 17 DR. MILLAR: I understand the 18 possibilities. I'm saying if you have 43 states 19 impacted, it is not a credible political position on the 20 part of the Department to basically be punting that 21



responsibility to a whole bunch of states out there, especially, given the fact that if Congress wants to hurry up and move this stuff in 1998, here we are sitting in 1995 with no adequate time to do any of those preparations that is necessary for choosing those preferred routes, and training and equipping people along routes.

I'm just trying to say it seems to me, I want to clarify your Department's position at this point, it seems to me you are still in a decade's long position of not accepting responsibility to choose those routes. I (think it is not going to work to your benefit.

MS. TICE: Dr. Millar, I might suggest that some of the questions you asked be reformulated into comments and it might be very helpful to present the Department during the formal comment segment. Do we have any other questions?

Okay. The gentleman who is right here next to the microphone. Then Mr. Strolin and you will follow.

MR. NOVAK: He should be first. I have already spoken once.

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MS. TICE: That is fine. He actually made the signal for you to go first, but that is okay.

MR. STROLIN: My name is Joe Strolin, and I represent the State of Nevada Agency for Nuclear Projects. We have been covering all of these meetings. We try not to monopolize the question and answer periods.

Two things, one comment and question on the routing issue. As Doctor Millar pointed out, I think there are alternative ways of approaching routing. The Western Governors Association, the Western Energy Board the Southern States Energy Board, Midwest Council of Governments have all worked closely with the Department of Energy's transportation people in the last ten years basically moving people very slowly toward the realization that yes, this is a national problem, and yes, we really need to do something on transportation routing, and that we can't leave it to the states.

I think that you perhaps haven't been involved in those sorts of discussions. You may be, you seem to be backing off what has been a position that the

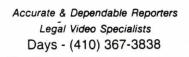


Department of Energy has been moving toward in the last ten years.

I think there is a real responsibility here that the Department of Energy or the Federal agency needs to take to coordinate a selection of routes for a shipping campaign that is going to incorporate thousands of highway shipments over a 28 to 30-year period. I think leaving it to the states is very unrealistic.

That kind of rolls into the first. The first question was has the Department of Energy determined at this point whether or not you are going to, as part of (your Environmental Impact Statement, you are going to work toward or incorporate an actual route-specific analysis of transportation and transportation risks, or whether you will be doing another sort of generic analysis as has been incorporated in the environmental assessments for the Yucca Mountain and other sites in the 1980s?

MS. DIXON: Joe, what we plan on doing in this Environmental Impact Statement is looking at representative routes from the reactor site to Las Vegas





or to the Yucca Mountain in Nevada, representative routes using, you know, the different types of computer modeling and programming available to us to use, using route specific population information, using state level accident information. So that is where we are moving right now in this Environmental Impact Statement.

MR. STROLIN: When you will be incorporating issues, will you be incorporating reactor specific conditions, infrastructure and reactor capabilities in terms of identifying modes? Will you be incorporating things like barge capabilities, barge transportation, barge to rail transport in that analysis?

MS. DIXON: Steve, do you want to go into that?

DR. MAHERAS: I guess it is my turn again. As far as the truck and train issue, the mode will split. We do plan on evaluating 100% truck as an upper bound on potential impacts, and then a case to present a lower bound where we evaluate, based on the infrastructure that is available at the reactor and



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2 cases. So we come out in our calculations with 3 4 somewhere around four power plants that would have to 5 use truck. The rest could use train, but that could be up to as high as around 10 to 20 reactors that might 6 7 have to use truck. MR. DOERR: In addition to what you 8 mentioned, Joe, was barging and intermodal barging would 9 also be considered as part of that. 10 MR. STROLIN: I will save my last question 11 12 for later. Thank you. MS. TICE: Mr. Novak? 13 14 MR. NOVAK: I'm very concerned about --15 I'm very concerned about Mr. Novak is my name again. I don't know if that is being part of 16 the canisters. the EIS program or not. But the canisters, I do believe 17 that they are vented. I would like to get that 18 19 clarified. 20 MS. TICE: Do you want to go ahead and get

could conceivably be upgraded in the future, train



that question answered?

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1 MR. NOVAK: Yes. Are they actually vented in their design, or are they completely enclosed and 2 3 there is no venting whatsoever? . 4 DR. MAHERAS: Are you asking about 5 transportation? 6 MR. NOVAK: I'm talking about the 7 multipurpose canister that is going to be used to transport this stuff all the way out west. 8 9 DR. MAHERAS: After you put the fuel inside the canister at the reactor facility, it is 10 11 sealed. It is not vented anymore, unless it somehow 12 That would be an accident condition. breaks. goes into a transportation container. It is sealed 13 14 inside that container. There is nothing coming out of 15 MR. NOVAK: that container? 16 DR. MAHERAS: Welded shut. 17 MR. DOERR: Once is welded at the reactor 18 site, it remains sealed and welded until it reaches the 19 20 repository service facilities. 21 During the first years, the estimate is there



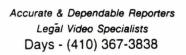
will be some number of canisters, those MPCs, if MPCs were used, that would be reopened for a variety of reasons, but they would be resealed.

When they are opened, they are opened in hot cells with filter systems to again minimize and meet air emissions standards and requirements. But during transportation, they are sealed.

As Steve said, you have the multipurpose canister, which is sealed at the reactor site. Then that is slid into a transportation cask and sealed, shipped across the U. S. to the repository service facility where the transportation container, or excuse me, transportation cask is opened, and the MPC is removed and then handled as appropriate.

MS. DIXON: I guess as another add-on, too, and Steve referred to it a little earlier, but the casks that are used have to be certified by the Nuclear Regulatory Commission. To get your certification, you have to be able to show that this cask can withstand a number of accident scenarios.

There is a whole list that have been tested and



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analyzed, too, such as fire, such as water, such as drop 1 tests, to ensure the integrity of the cask design and 2 protect the population. 3 4 MR. NOVAK: Are any of these design casks, 5 are any of them done with the actual fuel inside the 6 cask to really give us the ultimate test? 7 DR. MAHERAS: No. The tests are usually conducted on computer models, or else on a scale model 8 9 test without any fuel inside. 10 MR. NOVAK: So we really don't know what 11 would be the end result with the real thing in a 12 canister? 13 DR. MAHERAS: No. No. That is not true. Because we do do the computer runs, and we do do the 14 15 scale model testings. And we use other things inside 16 the cask besides spent fuel, so we don't contaminate the 17 first cask so we can't do Test Number 2. Do you see what I'm saying? 18 MS. DIXON: There are ways to use tracers 19 20 or other things to find out whether or not there has been --21



It is all theoretically okay,

MS. DIXON: I don't think that is what he 3 was saying. You can run the same kinds of analyses. 4 5 MR. NOVAK: I'm saying essentially, what you are doing is all predicated on something that you 6 7 hope is reality but is not reality. DR. MAHERAS: But the computer codes that 8 9 are used to do these analyses have been tested against experiments that use casks and crash them into walls and 10 other barricades. So the computer modes have gone 11 through a great deal of experimental work to generate 12 data to make sure that the predictions are okay. 13 14 MS. DIXON: I think as another point, too, 15 real time tests, which I think you are heading towards, is that spent nuclear fuel and high-level radioactive 16 waste have been transported on our nation's highways now 17 for decades. 18 19 Over the period of decades, there has not been 20 a transportation on the highway that has resulted in the release of radioactive materials, you know, to the 2.1

MR. NOVAK:

but it isn't reality, is it?



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environment.

MR. NOVAK: I guess we just have been fortunate to date. Essentially, what you are saying is we are not talking, in the past 25 past years, as to what has been published in one of your handouts here, it is a small number compared to what we are looking to in the next 25 years.

In fact, in Pennsylvania we are looking at 6,000 canisters going through our fair state. That is substantially more than has been transported in the last 25. That is not the sum total of what is going to be transported throughout the United States.

I don't think we can really logically say it has been okay for the last 25. Therefore, it is going to be okay because of what we are going to do in the next 25.

DR. MAHERAS: Well, I guess I believe that you, to make your own -- by the procedures that you follow, by the cask testing that you do, by the oversight that you have on the program, that we're conducting our transportation affairs in a safe manner.



1	MR. NOVAK: We certainly hope so. Thank
2	you.
3	MS. TICE: Do we have any other questions?
4	Mr. Strolin, did you have another question? No. Any
5	other questions for the panel at this time?
6	MS. TICE: One more, Mr. Novak?
7	MR. NOVAK: Yes, I have one more. In your
8	presentation, essentially, you said that there would be
9	no alternative sites to Yucca Mountain. This is
10	ordained by Congress. Is that true?
11	MS. DIXON: Yes, sir. (
12	MR. NOVAK: At the same time, you are
13	saying the alternative of considering no action at all
14	is also being considered. Is that true?
15	MS. DIXON: That is also true.
16	MR. NOVAK: Don't they conflict with one
17	another?
18	MS. DIXON: It is a bit confusing. I
19 -	can't argue that. Congress gave us the road map that we
20	described in that presentation that says alternatives to
21	Yucca Mountain, alternatives to geologic disposal.



In writing an EIS, one normally considers looking at a no-action alternative. That is part of the process. Part of what it does is provide you with a base line to compare against if this action did not move forward, you know, what would the impacts or effects be. Ted?

MR. DOERR: The reason for that appearance of discontinuity is the National Environmental Policy Act requires the evaluation of a no-action alternative. The National Waste Policy Act amendments do not relieve DOE or limit nuclear DOE in that evaluation.

It simply limits DOE in evaluating alternative sites. It is silent related to no action. Therefore, the Department is including the evaluation of no action. As Wendy said, it makes sense. You need a basis of comparison.

MR. NOVAK: Everything we do in life is somewhat politically charged. I just wonder whether or not Congress would look favorably on your somewhat self-imposed alternative here. I'm just wondering if this is a ruse, or is this reality that we are speaking



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to at this point the time?

Is there really this no-action alternative, or is it just something we are dangling out in front of the public, but there is really, in essence, nothing in the way of real substance there?

MS. DIXON: The Environmental Impact
Statement is a document that helps the decision maker
make informed decisions based on environmental
consequences. And in order get a good assessment of
potential impacts from the proposed action and compare
it to what would happen if there were no action, and
that is important information for the decision maker to
have, Congress has directed us to look at this program
seriously as it relates to Nevada and the repository.

The Environmental Impact Statement is not the only decision-making process that is on our plate. We also have a suitability analysis. We have a licensing process through the Nuclear Regulatory Commission where we have to present all of our detailed technical analyses and go through hearings and either get a license from them or not get a license from them to



proceed forward.

So this is one element among several that is required to make a determination as to whether or not we move forward, in fact, on the repository or we don't.

MR. NOVAK: Oh, I see somebody else has a question.

MS. TICE: If you have one more, why don't you go ahead.

MR. NOVAK: Yes. The EIS schedule that we saw flashed on the wall there, is that flexible or can that be changed by politics, or is that something that somebody has said hey, this is it, and has made a contract with you, DOE, to make sure that you get that amount of time, or is that just something that is theoretical?

MS. DIXON: What we presented to you was DOE's schedule for the preparation of this document. It was not anything that was thrust upon us. What we did was sit back and take a look. We had experience on this program before in both developing an environmental assessment and what is called a site characterization



plan.

We know that when you have a program of this nature, that you end up with a sizable amount of comments. We knew we would get a number of them through the scoping process and through the comment hearing process on the DEIS, and it would be greatly in excess of what is the norm for most Environmental Impact Statements.

We wanted to pull together a schedule that would allow us time to deal with the comments and do an adequate job in the preparation of the document. Again this is DOE's own internal schedule. It is not mandated by anyone else.

The Environmental Impact Statement is a companion document to a license application. That license application is scheduled for the year 2001. It definitely needs to be done prior to the submittal of a license application to the Nuclear Regulatory Commission.

MR. LANGOSCH: The main thing that I'm concerned about is somebody doesn't come along and say



well, you thought you had until the year 2000, but we want it done in 1998, or whatever it might be. Is there any way of assuring the public that you will get an adequate amount of time to do your thing in a proper and safe manner?

MS. DIXON: Congress can always change the rules of any game. I won't speculate on what Congress

I can just tell you that this is based on the legislation before us today, our schedule for moving forward. And if the legislation we have on the table today does not change, that is our schedule.

may or may not do in the future for this program, you

MR. LANGOSCH: Okay. Thank you very much.

MS. TICE: Doctor Millar and then Ms.

Stevens and then Mr. Langosch.

I can't address.

know.

DR. MILLAR: I think Steve brought up in response to my question, he mentioned the question about terrorism. That kind of jogged my memory that about ten years ago or so, DOE produced, as I recall a couple of board games. One was called Skirmish and one was called





Ambush.

These were board games designed to train the people who were carrying nuclear waste by truck, and it showed riflemen skulking in the hills and then looking down on a spent fuel truck that was parked by the side of the road, and it apparently had been intercepted by this gang of riflemen.

I guess my question to Steve is, and this is probably just a catch-up question for me, is that the currently state of the art in terms of training? At the time, that was public information. So the Washington (Post did an article about it.

Is that the currently state of training for this kind of shipment, and is there a set of documents the I should be looking for that describe the current state of training to deal with these kinds of problems, and are those documents now classified?

DR. MAHERAS: To be honest, I'm not aware of any classified board games that are out there. I don't know if those exist or not.

The training program requirements that, like

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1 the escorts have got to go through, are outlined in NRC They describe a, well, like an outline for 2 regulations. the training programs. 3 DR. MILLAR: Well, in nuclear terminology, 4 5 what is the design basis threat? Do you know what that is? 6 DR. MAHERAS: 7 No. 8 DR. MILLAR: Okav. 9 MS. TICE: Okay. Ms. Stevens? question. 10 11 MR. LANGOSCH: Not right now. 12 MS. TICE: You will follow Mr. Langosch. 13 He had his hand up for a few minutes. I'm going to 14 remind you to state your name again for the court 15 reporter. 16 MR. LANGOSCH: My name is Paul Langosch. I live in Silver Spring, Maryland. 17 I'm just curious, since the State of Maryland has no preferred routing 18 plan in place as of right now, and just assuming that 19 this is going to start happening somewhere down the 20 line, I'm curious whose responsibility is it to have 2.1



some kind of plan in place to deal with an accident if an accident does occur?

Is it the Department of Energy's responsibility, or is it the State's responsibility?

I'm thinking specifically where I live, Interstate 495 comes very close to a couple of schools right in Silver Spring, and the county right now is planning on building one of the largest high schools in the country and it is going to be located less than a hundred yards from Interstate 495.

Now, whose responsibility, if something happens, is it going to be to get people, you know, to some kind of safety before they're seriously affected?

MS. DIXON: Let me start out in answer to the question, and I will have Steve follow on with more information. Again, going back to the very original question, which goes back to the issue on routing, you know, right now, you would look to what routing falls out of the DOT regulations that are specifically for spent nuclear fuel and high-level radioactive waste.

The state has plenty of time right now to take





a look at what the scenarios are within the state, to look at, you know, schools and other local issues on its highways and interstates and come up with a preferred route to give to the Department of Transportation. So there is plenty of opportunity still available for the state to do that.

As was mentioned, I think by an earlier commenter, because what one state does has the potential of impacting other states, there is also a responsibility to coordinate those alternative preferred routes with the neighboring states to make sure you are not causing a bigger impact on them. That is the state's responsibility.

With respect to emergency planning in case of an accident, that point is included in the Nuclear Waste Policy Act under Section 180 (c), which is the provision to provide funding to individual states to set up programs for emergency response in case of an accident.

And, in fact, there have been two notices that have gone out, Federal Register Notices, that have gone out for comment from the public, one in January of this



year and one in July, asking for input dealing with the funding mechanisms tied with getting money to the states and the localities.

The intent or the purpose is, quite frankly, rather than having DOE come in as omnipotent, "I know everything that the states need," which it doesn't, the states know more about what their specific needs are than the Department of Energy does, that is to provide the funds to the states, to have the states make the determination as to what the weaknesses are and their emergency management response programs, and to use the money in the best way for that particular state to, you know, train people, to buy equipment, or to do whatever is necessary.

MS. TICE: Steve, do you have anything?

DR. MAHERAS: No, there is nothing to add

MS. TICE: We have a question here.

MR. BARENTI: Mike Barenti, Nuclear Waste News. I was curious what would be the impact of budget cuts on this EIS process, and also what budget

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to that.



assumptions were used in developing this time frame under the Administration's FY95 and out year request, or what it looks like you all are going to get from Congress, which is significantly less.

MS. DIXON: That is another -- I mean, we are subject to the budget appropriations process. Most certainly, it has affected our ability to do long-range planning, because sometimes it is very difficult to ascertain ahead of time what is going to come out and how much money is going to be available to the Department of Energy to move forward on these programs.

Right now, the schedule is still as I have defined it. There is, obviously, a possibility that things could change, and I guess probably a larger impact on potential change than funding, because overall with respect to dollars, this Environmental Impact Statement process compared to the rest of the program is not a large user of funds.

But I think a larger impact than the funding provision is potential issues tied to new legislation on the Hill. And again, whether or not anything passes



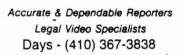
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that will affect what we are doing in this particular 1 EIS or doesn't would be a guess. 2 3 MR. BARENTI: That is HR1020, the legislation? 4 5 MS. DIXON: That is one, yes. 6 MS. TICE: Ms. Stevens, do you have 7 another question? 8 MS. STEVENS: Barbara Stevens. 9 while ago, you were discussing the no-action alternative in such a way as it sounded like it was just going to be 10 a base line from your, in your impact study, instead of (11 a viable alternative. That is how I was receiving what 12 13 you were talking about there.

So do you want to go ahead and tell me, is this an alternative or just a base line, what I would call a base line study and maybe wrongly?

MR. DOERR: For purposes of the EIS, the no-action alternative is just that. It is an The reason we talk in terms of a base line alternative. is related to regulations and terms as far as being able for a decision maker to understand if they would pursue



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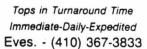
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1 an alternative other than the no action, that you have a basis of comparison. 3 However, we are going to look at the no-action alternative in a pinch (phonetic) of consequences 5 associated with that alternative. 6 MS. STEVENS: As a possibility? 7 MR. DOERR: That is correct. 8 MS. TICE: Mr. Novak, did you have another 9 question? 10 MR. NOVAK: Yes. Since you mentioned 11 funds, I would like to know what this grand event has 12 already cost the taxpayers of the United States, and 13 what you anticipate the total cost will be at the time of whenever this thing is established as it is presently 14 15 perceived as being Yucca Mountain as the alternate place to store this waste? 16 When you say what 17 MS. DIXON: Excuse me. this thing has cost us, what thing are we talking about? 18 I'm talking about dollars. 19 MR. NOVAK: 20 MS. TICE: I want to clarify. Are you talking the environmental analysis? 21



MR. NOVAK: I'm talking the actual tunneling that has been done already, and anything in the way of salaries. Your salaries, obviously, have gone into this mix, too, and whatever other costs have been associated with doing what has already been done to Yucca Mountain.

MS. DIXON: With respect to dollars associated with the investigations at Yucca Mountain, to date, we have spent, since the inception of the Act, approximately two billion dollars. I don't have at the top of my head what the potential number is for carrying this all the way through. You are talking about construction, operation, total life cost, we can find that information out.

DR. MAHERAS: Ms. Dixon, you may also want to explain where the source of that funding is for the nuclear waste.

MS. DIXON: The nuclear utility companies pay into what is called the Nuclear Waste Fund, which is what pays for the majority of this program. That fund is derived from the nuclear utilities paying one mill





per kilowatt hour into the fund.

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So we use -- the majority of our money is not from taxpayer dollars, but from the money set aside from the utility companies that generate the electricity that is utilized. There is a small amount of money, tied to the small amount, about ten percent of the total allocation of spent nuclear fuel and high-level radioactive waste is allocated to the Department of Energy.

That small amount, that ten percent, is paid for by the Federal Government. We, hence, the taxpayers' dollars. There is about ten percent that ties to DOE, our own spent fuel and high-level radioactive waste. The other 90 percent is through this Nuclear Waste Fund paid for by this one mill per kilowatt hour.

MR. NOVAK: When you put it together, it is all of us in this room paying this cost, isn't that right?

MS. DIXON: I'm not trying to make light of how much money has been spent. It is a large sum of



1 money.

MR. NOVAK: Is there any way of finding out the additional cost in doing this thing? Somebody has sat down, I'm sure, and put together these figures. I'm sure there are estimates. The public should be aware what this thing is costing us and what we are going to pay for it.

MS. DIXON: I can get you that information. We just don't have it on the tips of our tongues right now. If you wouldn't mind, make sure that question is left.

MR. NOVAK: I will make sure I ask that again.

MS. TICE: Thank you. We have a gentleman in the back of the room.

MR. DOSSETT: My name is John Dossett.

I'm with the National Congress of American Indians, our nuclear waste program. My question relates to the cultural and social impact, particularly upon Indian tribes, but also in general. Do you have plans to examine those impacts under the various alternatives in

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your Environmental Impact Statement?

MS. DIXON: Socioeconomics is part of the environmental issue that is included in this EIS, and most EISs, Environmental Impact Statements.

MR. DOSSETT: Do you have plans to particularly address these issues as they affect Native American tribes?

MS. DIXON: There is something right now that you are probably very much familiar with called environmental justice. Certainly, environmental justice issues will be looked at. The first level analysis is to determine if there is any significant environmental impact.

If there is a significant environmental impact, then the next question is, is that significant environmental impact adversely affecting minorities, Native American tribes, in a different fashion than it would the rest of the population.

Environmental justice is something we are going to be looking at and taking into consideration in the preparation of this document.

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MR. DOSSETT: Okay. There is also the social and cultural impacts. Aside from the environmental impacts directly, there is the social and cultural impacts of separating a large area of land that was once indigenous to the Indian tribes and sealing it off for thousands and millions of years.

Those impacts, a lot of your alternatives, the thermal load, the amount of access people will have to the site depends on the various alternatives that you will choose.

Do you plan to address each of those separately, the different alternatives, what cultural and social impacts those will have on the tribes?

MS. DIXON: For inclusion into the Environmental Impact Statement, and I will have Ted add to what I'm going to say, there needs to be some relationship to the physical system to roll it in in your impact analysis.

With respect to distinguishing differences between the various thermal load alternatives on cultural impacts, that would be, I would, you know,





believe very difficult to do.

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MR. DOSSETT: Well, I think two of the big issues for the tribes are protection of cultural sites and cultural remains there at the Nevada test site at Yucca Mountain, and then access to the site. Both of those are impacted by the different alternatives that you are discussing, the very technical things you are discussing.

MS. DIXON: With respect to access, it is pretty much the same for all three alternatives. There is no difference.

MR. DOERR: I guess in addition, Wendy can obviously elaborate right here on this, DOE, the Yucca Mountain Project, has been very aggressive in evaluating historical and cultural resources, as well as archeological resources. They have an ongoing program that has been associated with the site characterization process.

In addition to the socioeconomic evaluations that Wendy mentioned, obviously, the EIS will also be evaluating cultural, historical and archeological

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Tops in Turnaround Time Immediate-Daily-Expedited Eves. - (410) 367-3833 resources within the EIS, and the consequences from the implementing alternatives and the no-action alternative. MR. DOSSETT: Thank you.

MS. TICE: Okay. I see Ms. Stevens and Mr. Langosch has his hand up again. Ms. Stevens?

MR. LANGOSCH: My name is Paul Langosch. I was just wondering if you could explain, since so much of this seems to depend on the state assuming responsibility for a lot of aspects of this, could you explain how the Department of Energy interacts with, for instance, my Congressman, keeping him informed about the decisions and getting input?

And, for instance, is there somebody here from Congressman Gwinn's office today, or perhaps tonight, if you know offhand if there is going to be anybody here.

MS. DIXON: I don't know if there is anybody here from your Congressman's office. Dreyfus is the Director of the Office of Civilian Radioactive Waste Management, which is an organization that participates in this program, and Dan Dreyfus spends an incredible amount of time testifying on the



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Hill to the status of this program.

Certainly, they are very much interested in the viability of the site, the amount of money that has been spent, the schedule that exists. This is not a program that has not been noticed by Congress. It has been very much in their eyes. Like I said, our Director has spent a great deal of time sharing information and answering questions that Congress has had.

MR. LANGOSCH: For instance, if my
Congressman doesn't feel this is anything that is
terribly important, then it kind of just, the state is
not represented as aggressively as another state who has
elected officials that feel that this is of a great deal
of importance to their constituents?

MS. DIXON: I'm sorry?

MR. LANGOSCH: I'm just asking, it seems to be that the level of involvement on the state's part is dictated by the importance that the various representatives feel is attached to this issue.

VOICE: That is how politics works, I think.

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MR. LANGOSCH: I want to be clear on this myself. You don't know offhand if there is anybody attending these meetings today?

MS. DIXON: No. I'm presuming if there was, they would be raising their hands right now.

MS. TICE: Thank you. Ms. Stevens, you had another question.

MS. STEVENS: I want to know if you are going to keep, in generalities, in the Impact Statement. It seems like some specific kinds of wording should be dealt with. I'm just going to really say what I heard before. And I have heard that the Yucca Mountain is a holy mountain for Native Americans, a holy mountain.

So those kind of words are sort of specific.

I'm sure you won't ever use them. But could you, I

guess I will ask you, are you going to get a little bit

specific about considering that cultural aspect of

bringing what eventually will be European and mostly the

East Coast waste to put into somebody else's cultural

holy mountain? Are you going to get specific about the

cultural aspects?



MS. DIXON: There will be, as Ted was mentioning --

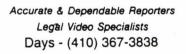
MS. STEVENS: Environmental justice.

MS. DIXON: Right -- a discussion on and evaluation of as impacts relate to cultural resources both with respect to Native American issues and, you know, archeological types of issues that are tied to Native American issues.

We have spent a great deal of time, and as Ted was indicating, as a matter of fact, we pulled together, I think, one of the very first programs that tied to the American Indian Religious Freedom Act. We were very aggressive when this all started in doing an analysis on what Native Americans had at one point in time or in the past utilized Yucca Mountain for hunting, for seed gathering, for quarrying, whatever purpose.

We have been dealing with the Native American tribes to gather their input, to seek their interpretations, to help protect the resources that exist on that site. We will continue to do so.

With respect to the discussion that Yucca



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Mountain is holy ground, we have had a lot of input from Native American folk. And as you probably know, a lot of things to the Native American people are considered sacred or holy or have religious significance, most water, most streams, most mountains.

So it is really hard to pull back and say that, you know, there is anything that the Native American people have populated that isn't very sacred or important to them. And we need to respect their issues and their concerns in our efforts. We certainly try to do so.

MS. STEVENS: On that one, real quick, the Mescarlero voted completely against, the people voted against Wendel Chino's attempt at that. Wendel Chino took that petition around and forced them not to go along with what they knew and felt. You have something going there where politics is very ugly.

I don't know. You know, where, do you decipher or study if somebody is in control, who is not representative of the people who is speaking to you about these issues? I probably --

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MS. TICE: That is a rather tangled question. I think you are referring to the MRS which is separate.

MS. STEVENS: I will drop that.

MS. TICE: We have another hand. We have time just for one more question. I would like to defer to the gentleman in the back of the room.

MS. DIXON: I guess we just wanted to make sure that it was clear that the Mescarlero issue is tied to a monitored retrievable storage program. It is a different program than what we are talking about here. I wanted to make sure there was no confusion.

MR. HOLDEN: Robert Holden with the National Congress of American Indians. I would be glad to talk to the lady about Mescarlero. Mescarlero is a case, when you talk about negative politics, there is no difference than the perception of this program. States have sovereignty to do as they please. So do Native American governments. They are still governments of their own people. I will be glad to talk with you about that.



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Going back to this issue, I guess my question is have the people who will be doing the social and cultural impact assessment at Yucca Mountain, will they be the same people doing the non-Indian as well as the Indian impact assessment?

I guess if that is the case, I don't think it is a good idea. I would hope that someone new would come in. Because I'm aware that Yucca Mountain has been working with the technical people that are hired by the Department of Energy to work with the tribes, have a select group that is not necessarily expressing the view of all of the tribes, all of the people impacted at Yucca Mountain based on a flawed study several years ago, flawed meaning that the science may not have been flawed, but certainly the conclusion of who would be impacted at Yucca Mountain, indigenous people, in fact at, Yucca Mountain.

MS. TICE: I was just going to try to clarify the question. I thought you were finished.

MR. HOLDEN: I'm getting there. This is questions and issues, but still we need to expound. I





need to expound on the whole underlying situation in order to get the question out, if you will. I can save this for the comment period. It is directly related to what we are talking about here.

But I'm just saying that the question is have you decided who those people are going to be? My reason for asking that is because we are still getting, the NCI is still getting comments from Indian country, from people in that area that they are dissatisfied with people who are the go-betweens, the coordinators of these Indian issues.

For instance, one person was saying, who has been sent to our meetings, met with a group of Indian people and said --

MS. DIXON: Robert, I would like to intercede at this point.

MR. HOLDEN: -- has said that well, it is good that President Clinton signed these statements, these executive orders on Indian religious freedom.

That way, it gives you Indians the right to go and kill all the eagles you want, which is denigrating.





MS. TICE: We really want to answer your question. My interpretation of the basic question is will there be a new team or different team of cultural resource specialists involved in the study during EIS, that is different from teams that did work in the past? Is that the question?

MR. HOLDEN: Exactly.

MS. DIXON: Well, there were two questions. I would like to go back to the very first one. One of them tied with who can get input and get involved in the EIS process. Certainly, in the end, if (not at this stage which is what I think you were referring to, the research work that was done some years ago, there were 17 tribes that were identified that had at one point in time utilized the Yucca Mountain area. There is now consideration for and the number has grown a little bit more from that for different purposes.

All of that is academic as it relates to the Native American population, whatever it might be, having the ability to provide input into this Environmental Impact Statement. In fact, we sent out the Notice of

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Intent to numerous tribes for that input.

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So whoever within the Native American community has an interest to provide input into this Environmental Impact Statement, please disregard any study that has ever been done and what the mandate is and what our program is today, that NOI, the input, the request for scoping is for everyone.

We want to encourage that they provide their comments. They don't have to do it here verbally. They can send them in to us. We still have until December 5th to receive their comments.

With respect to impact analyses and who will do the impact analyses themselves, that will be done by an independent contractor who currently does not exist now. We have gone out for solicitation. We are getting very close to its final, you know, completion, and that is all I can say about that.

Right now, it is in that sensitive stage where you can't really talk about it. It has been competitively solicited. There will be an independent contractor selected from that.



MR. HOLDEN: Within the context of notice and consultation with the tribes, I think the DOE in a lot of its Indian policy trust responsibility needs to take full active approach. And if they are not getting the response from the tribes, they have to go that full extra step.

MS. DIXON: I really agree with you wholeheartedly on that, and perhaps we will have somebody who I know you have dealt with, which includes my chief Native American contact, Joe Chirieleison, and he has been making phone calls every single day to the Native American tribes that have been involved in one way or another with our program, trying to set up schedules so that he and whatever NEPA folk can get out to those sites.

Again, it is what you said, a little bit more along the line of personal encouragement to provide input into the Environmental Impact Statement scoping process.

MS. TICE: We have come to the end of the time that we have for questions and answers this

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morning. I want to thank everyone. We have had some very good questions this morning and very thoughtful participation.

We are going to take a break for about 15 minutes. According to the clock in the back of the room, it is 20 after 10. We will reconvene at 25 minutes before 11 o'clock to begin the formal comment segment this morning.

I would like to remind you there are Department of Energy representatives available in the exhibit area if you have questions. Thank you, and we will see you in 15 minutes.

(Thereupon, there was a recess from 10:20 a.m. to 10:35 a.m.)

MR. JULIAN: We have two representatives of the Department of Energy here at the front table, Jean Younker, the DOE Technical Project Manager, and Bill Freeland, DOE EIS Technical Lead.

The Yucca Mountain Repository Environmental

Impact Statement is being prepared in accordance with

the Nuclear Waste Policy Act of 1982 and its amendments,

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the National Environmental Policy Act of 1969 known as NEPA, and the Council On Environmental Quality Regs to implement NEPA, as well as, of course, Department of Energy procedures for implementing NEPA.

The Department of Energy invites Federal, State and local agencies, Native American tribal organizations, and all other interested parties to participate in determining the scope and content of the Environmental Impact Statement.

The Nuclear Waste Policy Act directs that the Department of Energy evaluate the suitability of using Yucca Mountain as a potential repository for the disposal of spent nuclear fuel and high-level radioactive waste.

Development of a repository would constitute a major Federal action, and, therefore, under NEPA an Environmental Impact Statement or EIS must be prepared. The Nuclear Waste Policy Act also provides that the Environmental Impact Statement does not have to consider the need for a repository, alternatives to geologic disposal or alternative sites to Yucca Mountain.

17.



The Environmental Impact Statement will evaluate reasonable implementation alternatives for the proposed construction, operation and closure of the repository at Yucca Mountain, as well as options related to transportation and packaging of spent nuclear fuel..

Your comments should focus on environmental issues associated with the construction, operation and closure of the repository, and on reasonable alternatives for implementing the proposed actions. There are other forums to express opposition to or support for the project. However, today this is an opportunity for you to offer constructive input into the Environmental Impact Statement process.

I would like to reiterate that written comments may be of any length and need be submitted today to one of the facilitators or one of the Department of Energy representatives or at any time until December 5th, 1995 by mail, toll-free fax, telephone, e-mail or internet before the close of the 120-scoping period again, again, which is December 5th, 1995. You can find telephone numbers and addresses at the registration table or in



the exhibit room.

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Before we begin today, I would like to review the procedures and ground rules for this session. These procedures are also summarized on the postures displayed along the walls and were available at the check-in table for registration.

Today's proceedings are being recorded word for word by a court reporter. The transcript will become a part of the official record. We ask that you identify yourself, your address, and any organizational affiliation before you begin making your comment.

Please speak slowly and clearly into the microphone to help the court reporter record comments as accurately as possible. Please be courteous and respect the view of others. Refrain from holding side conversations while comments are being made. These distractions make our commenters' and court reporter's job much more difficult.

Commenters will be called in the order registered. I will call two names at a time. The first name will be the current commenter. The second name



will be the on-deck. The current commenter should come to the microphone here in the center aisle and the on-deck commenter may sit to the side while awaiting their turn.

If anyone wishes to make an oral comment today and has not registered, please do so now at the registration table immediately outside the hearing room. We currently have eight commenters who have preregistered to speak at this segment.

There is a ten-minute time limit for oral comments. This limit is to ensure that all registered people have a chance to make an oral comment. You are encouraged to keep your comments brief and to the point. We have a light clock here at the podium. The yellow light will indicate that you have one minute remaining, and the red light indicates that your time is up. I will also give you a signal when you have one minute remaining.

There will be no responses by Department of Energy officials to your comments, although all comments will be noted in the Implementation Plan for the



Environmental Impact Statement.

The purpose of the formal comment segment is to obtain public input on the scope of the EIS. Our first two commenters today are Mr. Joseph Strolin and Mr. Robert Holden. Mr. Strolin, will you come to the microphone? Mr. Holden, you will be next.

MR. STROLIN: For the record, my name is Joseph Strolin, and I'm the Administrator for the Planning Division of the Nevada Agency for Nuclear Projects, which is the agency that is responsible from the Governor's office for overseeing the Federal high-level radioactive waste program.

The State of Nevada has long opposed a high-level nuclear waste repository at Yucca Mountain, 80 miles from Las Vegas and less than 20 miles from the Nevada/California border. The state maintains that the site should have been disqualified as a potential repository for technical and safety reasons.

We are here today not to discuss Nevada's opposition to Yucca Mountain or to debate the issues surrounding the Federal high-level radioactive waste

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Tops in Turnaround Time Immediate-Daily-Expedited Eves. - (410) 367-3833 program, but to provide input into the Environmental Impact Statement process the Department of Energy has begun.

MR. JULIAN: Mr. Strolin, will you slow down a little bit. The court reporter is having a hard time keeping up with you?

MR. STROLIN: Before addressing specific EIS issues, a brief comment on the way the scoping process has been handled both in Nevada and around the country I think is in order. On the other hand, DOE's decision to hold public scoping meetings in strategic cities is to be commended.

On the other hand, the failure to adequately inform the people of the location of likely shipping routes and potential risks and impacts of spent nuclear fuel transportation negates the purpose of holding public meetings across the country.

We are very concerned that the notices of public scoping meetings do not adequately describe the proposed action and that the Yucca Mountain -- and that the DOE program has chosen not to make people aware of



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potential transportation routes through their communities and consequent risks of high-level waste shipments as part of these scoping meetings.

For example, DOE has not informed the people of Maryland that it is seriously considering barge shipment of spent nuclear fuel from Calvert Cliffs reactors to Baltimore Harbor for subsequent shipment to Yucca Mountain, nor has DOE informed the people of New Jersey and Delaware that as part of DOE's proposed action, spent nuclear fuel could be barged from the Salem and Hope Creek reactors across the Delaware River into the Port of Wilmington.

The impacts associated with the proposed high-level radioactive waste repository at Yucca Mountain that is located about 2500 miles from any of the eastern U.S. reactors, those impacts will affect the State of Nevada, as well as 42 other states, at least 30 Indian tribes, hundreds of cities and communities, including communities in Maryland, Virginia, Pennsyvania and the surrounding states. Those communities are all located along highways and rail lines that will be used

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for waste transportation.

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The program that the Environmental Impact
Statement must address is unprecedented for a Federal
project in its scope, time frames and the geographical
area that it encompasses. It is also unique in that the
EIS must address not only the more traditional effects
of a large and complex project, but to the environment,
to the public health and safety, to area populations, to
state and local economies, but the EIS must also address
those impacts of the program which derive from the
highly controversial nature of this activity and the
fact that the program involves the handling, management
movement, and storage of spent nuclear materials.

It is the nuclear nature of this project that makes it different from the more traditional Federal project and requires the Environmental Impact Statement to fully examine the risks, perception and stigma associated with the project in Nevada and states and communities through this spent nuclear fuel must pass en route to Yucca Mountain.

As I indicated, the Yucca Mountain EIS must

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also inform potential affected states and stakeholders that DOE is actively considering large scale barge shipments of spent nuclear fuel through Baltimore and other major ports for rail shipment to Yucca Mountain.

A recent DOE contractor report recommended that 14 reactor sites use barge transportation to ship large multipurpose canisters to various inland and coastal ports for transfer to rail cars for subsequent shipment to Yucca Mountain.

Nevada believes that DOE has to date demonstrated neither the desirability of barge transportation from a comparative safety standpoint, nor the technical or institutional feasibility of large scale barge transshipments to rail facilities.

In particular, we have repeatedly advised DOE that the recent barge rail movement of very lightly irradiated fuel from the Shoreham site in New York to the Limerick site in Pennsylvania have not established a convincing precedent for future large scale movements of spent nuclear fuel to an interim storage site or to a repository. Accordingly, we have not yet revised our

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own routing studies and routing maps to incorporate barge movements.

The DOE believes, however, that barge transportation is likely as a part of the transportation system to a repository. Then as a recent contractor reports suggests, the DOE in its EIS must identify the reactors, the shipping routes and the receiving port facilities that are likely to be affected by barge transport.

Moreover, due to the last of previous barge transportation experience, except for the Shoreham shipments, from operating nuclear power plants around the country, the recent public and official concern over waterborne shipments of naval reactor fuel and foreign research reactor fuel, DOE must make a concentrated effort to solicit scoping input from affected states and local governments, including state and local port and waterway authorities and state costal management programs, as well as appropriate federal agencies such as the U.S. Army Corps of Engineers, the U.S. Coast Guard, and the U.S. Fish and Wildlife Service.

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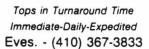
The draft EIS must compare specifically the risks and impacts of barge, rail and truck transportation from specific reactor sites along specific routes to Yucca Mountain. The potential environmental impacts of both routine shipments and accidents involving inland and coastal waterborne shipments of spent nuclear fuel from commercial light water reactors will require some significantly and substantially different analyses than previously conducted for proposed marine shipments of naval reactor fuel and foreign research reactor fuel to Atlantic, Guli and Pacific ports.

Consideration of perceived risk and special socioeconomic impacts will also be an important part of the draft EIS if large scale transportation is really, barge transportation is really a part of the Yucca Mountain proposal.

For example, consider the potential consequences of barging spent fuel from Calvert Cliffs reactors approximately 70 miles up the Chesapeake Bay to Baltimore harbor. The draft EIS will have to address

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potential adverse impacts of routine shipments and accidents with and without release of radioactive materials on a wide range of aquatic, estuarian and coastal environments.

The draft EIS will also need to consider potential adverse impacts on the Chesapeake Bay regional tourism, real estate and seafood industries. Even an accident with no release of radioactivity could adversely affect nonresident visitation rates, commercial and residential waterfront property values, commercial demand for fish, crabs and oysters.

Additionally, the draft EIS must consider potential impacts on other users of harbors such as the Baltimore harbor. While the number of spent fuel shipments will be very small compared to other traffic on the harbor, the security requirements could affect other commercial and recreational users.

The Yucca Mountain EIS must also inform potentially affected states and stakeholders of the transportation modes and routes likely to be used under DOE's proposed MPC base case scenario, which is DOE's





current base planning scenario for high-level nuclear waste transportation.

While 43 states, including Maryland, Virginia, Pennsylvania and the D.C. area will be impacted by transportation of spent nuclear fuel and high-level radioactive waste to the Yucca Mountain facility the effects of the program will not be uniform for all states and communities and under all the program scenarios.

Under DOE's MPC base case for waste transportation there will be at least 326 rail shipments of spent nuclear fuel shipped through the Maryland and D.C. area, affecting Baltimore, Washington, Cumberland and smaller communities along the CSXT and Conrail railroad lines.

Virginia would experience a minimum of 480 shipments from the Maguire, North Anna and Surry reactors. Pennsylvania would see as many as 6,069 shipments, 3,879 highway and 2,190 rail shipments, under this optimistic base case.

If waste is not shipped by rail or if smaller

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rail shipping containers are used, which are possibilities that can't be overlooked given the uncertainties inherent in the program, the numbers of shipments affecting the area could increase dramatically.

In addition, to addressing MPC base case scenarios, then the EIS must inform people that DOE is also proposing an all-truck scenario that would affect states and communities differently. In an all-truck scenario, for example, Maryland would experience 2366 shipments, almost 2400 shipments, of spent fuel affecting almost all major interstates in the state, as well as Highway U.S. 301 and Highway U.S. 50.

Virginia would be affected by an additional 1411 truck shipments. Pennsylvania would see 12,720 shipments along Interstates 70, 76 and 80.

With respect to transportation risks and impacts likely associated with the proposed repository, such a facility at Yucca Mountain would receive overall between 15,000 and 6,000 cask shipments, depending upon the assumptions in the report.



MR. JULIAN: One minute, Mr. Strolin.

MR. STROLIN: These shipments would come from locations around the country, including locations in Maryland, Virginia and Pennsylvania. Each year, more spent fuel will be shipped to the repository than was shipped during the past three decades combined.

The Yucca Mountain Environmental Impact
Statement must, therefore, examine the full range of
credible risks and impacts, especially low probability/
high consequence events, such as very serious accidents
and successful terrorist attacks, which might result in (
the loss of radiation shielding or the release of
radioactive materials to the environment.

The probability of an accident severe enough to release radioactive materials is admittedly low, assuming that rigorous quality and licensing standards are enforced for the transport containers which are yet to be designed and/or constructed, but history is replete with instances of high consequence/low probability events that have the audacity to occur in spite of the odds.

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To date, DOE official documents, including fact sheets distributed at scoping meetings, understate the potential risks and adverse impacts of large scale, long duration, nationwide shipping campaigns. DOE should distribute detailed maps showing potential radioactive waste shipping routes at these scoping meetings. The EIS must analyze risks and impacts in a route specific and state-by-state manner.

We appreciate the opportunity to participate in the scoping process. The State of Nevada intends to continue to provide comments on all aspects of the repository program and nuclear transportation the both in written form and at future scoping meetings. Thank you.

MR. FREELAND: Joe, thank you. By the way, are you going to be submitting those comments in writing today?

MR. STROLIN: Yes. I have a copy here.

MR. FREELAND: For the record, we will

mark those Baltimore Number 2.

MR. JULIAN: Our next preregistered

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commenter is Robert Holden, followed by Barbara Stevens.

MR. HOLDEN: Good morning. I'm Robert

3 Holden, Director of Nuclear Waste Program for National

4 Congress of American Indians, 2010 Mass Avenue,

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Northwest, Washington, D. C., 2nd floor, 20036. I will

6 begin by reading a letter to Ms. Wendy Dixon.

Dear Ms. Dixon: Thank you for including this letter from the National Congress of American Indians in the Department of Energy Environmental Impact Statement for a geological repository disposal for spent nuclear fuel and high-level radioactive waste at the Yucca Mountain, Nevada Test Site.

The NCAI is the oldest largest national Indian advocacy organization in the country and has a membership of 187 American Indian and Alaskan native governments. We are aware that representatives of tribes potentially impacted by the proposed repository are unable to send a representative to this and other scoping meets.

However, after hearing from tribal representatives, we would like to make a few initial

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comments at the outset of this EIS process.

Thank you for accepting into the record our comments on this important issue. Sincerely, JoAnn K. Chase, Executive Director.

There are several issues that may be of concern to the tribes in evaluating the Department of Energy Office of Civilian Radioactive Wast Management's scoping process for EIS for a geological repository for the disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain, Nevada Test Site.

The following comments reflect initial concerns. The NCAI may provide additional comments during the EIS process.

1. The DOE Yucca Mountain Site
Characterization Office has established a limited
working relationship with the tribal governments whose
peoples and cultural would be impacted by the placement
of a geological repository at Yucca Mountain.

The Foreward of a 1990 DOE support study states, quote, Yucca Mountain symbolizes the cultural diversity and conflicting values in America. To some

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government officials, state and Federal, it is a vast, useless landscape fit only for the toxic waste of modern society.

It has an owner who has the right to define how it is used. To the Southern Paiute, Ownes Valley Paiute, Western Shoshone, and other groups of Native Americans in the Las Vegas area, Yucca Mountains a bountiful harvest of plants, animals and cultural remembrances.

It means food, medicine, religious inspiration and cultural history. It is a living place without ownership. It is there for all to use as needed. The contrast and attitude between western civilization and Native American cultures is stark and immediate.

For the past two years, federally-recognized tribal governments in the Yucca Mountain region have met with DOE headquarters and Yucca Mountain Site Characterization Office officials on the issue of DOE providing oversight activities and funding.

The Yucca Mountain Site Characterization Office Project Manager recently informed the tribal governments

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in the Yucca Mountain region that efforts to make funds available have ceased. Meanwhile, the State of Nevada and ten county governments continue to receive impact funding and are in line for funding in FY '96.

The NCAI has supported the efforts of the tribes impacted by the site characterization process to receive funding for oversight activities. Yucca Mountain Site Characterization Office's decision to halt the funding initiative is disappointing. Indian tribes have a government to government relationship with the United States grounded in the U. S. Constitution and solemn and extant treaties which bind the parties to this day.

Indeed, from the earliest days of the U.S., tribal sovereignty has been recognized. As far back as 1832, the U.S. Supreme Court rules that Indian tribes are distinct independent political, excuse me, public communities.

On April 24, 1994, President Clinton issued a Memorandum for the Heads of Executive Departments and Agencies on Government To Government Relations with



Native American Tribal Governments. A copy of the memorandum will be sent to you for your consideration.

The memorandum states that in order to ensure the rights of sovereign tribal governments are fully respected, executive branch activities shall be guided by the following. One particular excerpt, A, the head of each executive department shall be responsible for ensuring that the department or agency operates within a government to government relationship with fairly recognized tribal governments.

B, each executive department and agency shall consult, to the greatest extent practical and to the extent permitted by law, with tribal governments prior to taking actions that affect federally recognized tribal governments. All such consultations are to be open and candid so that all interested parties may evaluate for themselves the potential impact of relevant proposals.

C, each executive department and agency shall assess the impact of Federal Government plans, projects, programs and activities on tribal trust resources and



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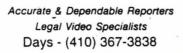
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assure that tribal government rights and concerns are considered during the development of such plans, projects, programs and activities.

The Yucca Mountain Site Characterization is also aware of the State of Nevada and some county governments are supportive of meaningful tribal participation. We are mindful of Yucca Mountain Site Characterization Office budgetary constraints, but the process will remain one of inequity if the State of Nevada is funded while tribes continue to be excluded.

The NCAI requests the Yucca Mountain Site
Characterization Office to reconsider its decision on
the funding issue. That will make significant progress
in fulfilling its trust responsibility to protect the
health and safety of the citizens of the indigenous
nations, and the continuity of the culture by providing
oversight assistance to the tribal governments at this
critical juncture.

It is quite clear that the site characterization process, construction, operation and eventual closure of a repository at Yucca Mountain will





indeed impact the indigenous peoples of the region. Without resources and technical assistance, the tribes will remain unable to participate in the EIS scoping meetings and the actual EIS.

Two, several Federal cultural resource protection statutes presently require meaningful consultation with potentially impacted Native American tribal governments in order to achieve full compliance, i.e., National Historic Preservation Act, Native American Graves Protection and Repatriation Act, and the Archaeological Resources and Protection Act.

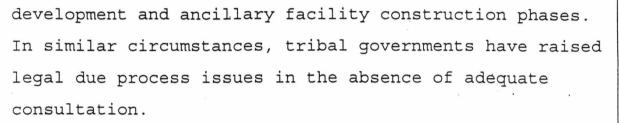
The consultation that has taken thus far in Yucca Mountain is considered inadequate by tribal government officials. These officials contend that consultation has been defined by non-Indian agency representatives and contractors without input from tribal officials. Tribal officials were not participants in the process when the current consultation strategy was implemented.

The inadequate consultation process will create additional problems during the transportation, cask



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These circumstances and faulty procedures do not keep faith with the Federal obligation or the President's April 29, 1994 memorandum.

Three, scoping meetings have been scheduled at several locations within the State of Nevada and throughout the country. No meetings have been scheduled in northern Nevada or in Indian country in that region. (A potential rail shipping route to Yucca Mountain in northern Nevada crosses lands under tribal jurisdictions.

The right for tribes to exercise governmental powers is an inherent attribute of their sovereignty. Tribal representatives north of the proposed Yucca Mountain site will be unable to attend meetings in distant locations due to lack of resources. We request the Yucca Mountain Site Characterization Office to work with tribal officials in that region to locate an

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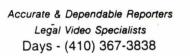


accessible Yucca Mountain EIS scoping meeting site.

We have stated in the past, and we again remind the Department of Energy, that it should adhere to its Indian Policy issued in 1992, which is based on federal policy, treaties, federal law, and the DOE's responsibilities as a federal agency to ensure that tribal rights and interests are identified and fully considered in pertinent decision making.

Section 3 of the DOE Indian Policy states that the Department will consult with tribal governments to assure that tribal rights and concerns are considered prior to DOE taking actions, making decisions or implementing programs that may affect tribes. DOE will take a proactive approach to solicit input from tribal governments on Departmental policies and issues. The Department will encourage tribal government and their members to participate fully in the national and regional dialogues concerning departmental programs and policies.

A statement from an unnamed tribal chairperson contained in the cultural resources study mentioned





above will serve as closing remarks. The best thing that could happen to the United States of America is for a group of us Indian people to be elected to address the Supreme Court. Because there are so many things that they don't understand, it is like this black thing that I'm holding, where did it come from? The earth. Right. Because all material is from the earth.

Who is to say that this part, pointing to one part of the object, is more important than that one over there, pointing to another part of the object. We have to put these things in perspective. It is like this thing, the high-level nuclear waste site proposal that came out, they are saying we are not damaging that. All we are going to do is cut down that tree.

As an Indian, I feel I am important, but am I more important than that tree or is that tree more important than me? We are on this earth. We are insignificant. Indian people say what is more important, the earth we stand on, the air that we breathe or the water that we drink? They all have their reasons for being here.



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That is what we have to get over to the United States Supreme Court. We are nothing. All together, it forms a circle. We all have to live together no matter what, because it is our earth. These things are here. We didn't put them here. So who are we to remove them? We didn't create them, but we are here to protect them.

MR. FREELAND: Thank you, Mr. Holden. He

marked Baltimore AM Number 1.

MR. JULIAN: Our next registered commenter is Barbara Stevens, followed by Mr. Auerbach. Ms.

has submitted comments, and for the record, they will be

Stevens

MS. STEVENS: Mr. Auerbach could not make it. He will not be here. My name is Barbara Stevens. I'm a citizen of the City of Greenbelt. The City of Greenbelt is standing in line for landmark status like Mt. Vernon.

Greenbelt is a little community that really should be preserved, and it is going to be sort of -- that is going to be an obvious thing. Okay. The City of Greenbelt received some information that gave it



realization that due to this concept of most direct cost efficient routes, the radioactive wastes from Virginia's two nuclear reactors would travel north, I'm going to skip over certain words, north through, the trains going through D. C. and Takoma Park and north through Western Montgomery County and around this route has major drawbacks.

It is a curving, mountainous route which may be unsuitable for the waste casks, and unavailable during winter. So another major CSX line in the area runs right through Washington, D. C. and intercepts Prince (George's County, goes through Washington, Prince George's County, Mount Ranier, where they have a resolution against the waste passing through that area, into Brentwood Heights, College Park and Greenbelt is also the route that would be considered.

So then it also goes into detail of how problems will arise, and I'm not going to go through it all, but I will turn it in as comments, that the most likely route for shipment of truck casks from Calvert Cliffs would be Route 4 to I-495, which is the Capitol





Beltway. This goes through our town.

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We are talking about the Metro tracks of our town, Greenbelt, and the Capitol Beltway, which we are adjacent to. It implicates that Bowie on another train track not far away would also have this waste coming through it, and then right above us would be through Takoma Park. It is just coming at us from all around. Many, many, many opportunities for disaster for our area.

Okay. So what I want to print or leave here with you is that letter, and then the letters from our City Council saying that they do not want this situation to happen. This city realizes that this is a complex issue, and that nuclear waste has to be stored somewhere.

However, given the safety issues involved with transportation of nuclear waste, the city believes that this matter should receive careful, careful evaluation and study before decisions are made.

It also says, the city, that this plan that includes transporting nuclear waste from Northern



Virginia and Calvert Cliffs would potentially endanger hundreds of thousands of people in Prince George's County, including the City of Greenbelt, and throughout the nation, should some type of accident occur during the transport of these materials. So I leave that here.

Coming from that place, I would ask that in the Environmental Impact, there would be extensive studies of all studies that were ever done of the danger of low-level exposure to radiation, because the canisters will give off some kind of radiation. There is an underestimation of what happens with low-level exposures.

There is traffic stopped on the beltway, the railroad crossing. These are just facts that you know you can sit there forever behind a big truck full of canisters or at the railroad crossing.

So you have to go past what you want to do and study all of the information on the dangers of routine, non-accident situations to our communities, this much-populated area, Greenbelt, Bowie, Beltsville, all these communities, plus the jillions of others want to

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know how well the communities are being informed as to what kind of training and equipment will be necessary for every possible scenario.

This is in case of some kind of low-speed accident could unseat a valve or damage a seal releasing radioactive particles to the environment. The same event could crack a brittle metal tubing. I'm reading from an information sheet.

According to the Truck American Petroleum

Institute, heavy truck accidents occur about six times
each million miles traveled. With thousands of truck
shipments, at least 15 accidents would be expected each
year. Shipping containers are designed to withstand
crashes at 30 miles per hour.

Obviously, on the beltway and other interstates, they go much faster than that. The thought of fire and persons downwind inhaling radioactive particles and later developing cancer or genetic defects.

So low-level accidents and non-accident scenarios must seriously be dealt with in EIS. Special

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effects on property values along the route, the effects on image-based economy, risk assessment, further sentence. That isn't my thought there. Pardon me. What about local property values based on these other two points?

Negative impacts on business in the area.

Perceived risks must be addressed. EIS should consider impacts due to risk perception in these communities that are very close to transportation routes.

There is no transportation system in place.

This idea of allowing everything to just fall through the cracks, not really informing anybody that this is their duty to find out how to avoid danger in their area.

So the big questions are, from our point of view, is how will the, my question again, how will the communities be informed as to what absolutely all the equipment and training that would be necessary to meet these, to meet an accident scenario, including continual training.

Because the workers, it can't be just one time.





It has to be ongoing. Who pays for that? Will this be ongoing training? How will the communities, and how will it be paid for? Who is responsible to protect first responders who may not have or know that they should have equipment. First responders, what happens to them? Are they just thrown away and expendable people?

I think those questions are important to address. It is more than address. You have to figure out how you are going to let the communities know that these problems exist and that they are going to have to pay for it, or what.

Now, when is a cost a factor in EIS analysis? Can you make clear, how will you make clear to everyone involved what the total cost of the repository and the transportation, including the studies, what is that in total cost? How are you going to make clear what that cost is? We need to know that cost.

Is there any chance that the EIS could consider something regarding this, the fairness regarding the cost of the, a fair distribution of the cost for this





whole thing which involves environmental dangers to the people. Okay. A fair distribution of the costs, a breakdown, international waste.

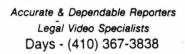
Newspaper articles say it is going to start coming to a North Carolina facility. Obviously, that is the wave of the future. For security reasons, the European radioactive waste will come to our country and then go out to our Indian mountains.

MR. JULIAN: One minute, Ms. Stevens.

MS. STEVENS: Okay How can you address the fairness? Obviously, maybe the taxpayer should pay for international waste. That is a security issue. I understand that.

But all other costs, how can you divide up the other costs that have to do with the rate payer and the power company? And how does that become the taxpayers' duty to pay for the power company and the rate payer? Can you address the fairness of that phenomenon? I feel like the cost needs to be broken down. Okay.

MR. JULIAN: The ten minutes is up. If you could just conclude quickly, please.





1	MS. STEVENS: If they are up, I will give
2	up. I will send in some more comments.
3	MR. JULIAN: Again, written comments may
4	be submitted at any time during the 110-day period which
5	closes on the 5th of December, 1995. If you have
6	written comments that you would like to submit today,
7	you can submit them to the Department of Energy
8	representatives.
9.	MR. FREELAND: We will mark those comments
10	Baltimore Number 3. Thank you very much for your
11	comments.
12	MR. JULIAN: Next registered commenter is
13	Paul Langosch, followed by Fred Millar.
14	MR. LANGOSCH: My name is Paul Langosch.
15	I live at 200 Lexington Drive, Silver Spring, Maryland.
16	The community that I live in is located less than a mile
17	from the Capitol Beltway, Interstate 495, and
18	approximately four miles from Interstate 95.
19	MR. JULIAN: I'm going to extend your time
20	as well as your microphone, Mr. Langosch.
21	MR. LANGOSCH: It is located approximately



four miles from Interstate 95. The shear number of the shipments that are going to be coming through the State of Maryland and using these interstates raises a lot of questions to me as a resident of the community.

The first question is, you know, what is going to happen if accidents occur? It seems like with the numbers that we are talking about, the question isn't really if accidents occur. It is going to be when accidents occur.

Because I don't really think it is fair to assume that with the amount of traffic that is going to (be going through there that nothing is going to happen. Things are going to happen, and we are going to have to deal with the problem.

I'm very concerned that there doesn't seem to be anybody from my Congressman's office here today.

That really bothers me, because this is a problem that is going to affect our community.

And I just want to urge the Department of

Energy to adopt the no-action plan at this time, because

I don't think that the impact has been assessed to our

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community. And that a lot of people are going to be put 1 2 at risk because of this plan for the shipment. 3 That's really all I have to say, just asking to 4 take no action at this time. Thank you. 5 MR. FREELAND: Thank you very much, Mr. Langosch. 6 7 Next is Fred Millar followed MR. JULIAN: by Karl Novak 8 9 DR. MILLAR: I am the D. C. coordinator of the Nuclear Waste Citizens Coalition, 110 Maryland 10 11 Avenue, Northeast, Suite 307, Washington, D. C. 20002. I would like to submit some preliminary comments on the 12 13 scope of the EIS for Yucca Mountain repository. I will 14 be submitting longer written comments later.

We appreciate the opportunity to comment on the scope of the EIS for the Yucca Mountain geological repository program, and we commend DOE for the full manner in which so far it is implementing this EIS process, although we agree with the State of Nevada that some kind of indication to citizens of the routing possibilities in their area would have guaranteed a much



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more full participation from citizens.

The Nuclear Waste Citizens Coalition represents 11 national and regional organizations concerned about the disposition of nuclear waste, and we have participated for our various groups in many 15 hearings nationwide as part of this process.

I will skip the boilerplate. It is good that the forthcoming EIS will analyze the transportation-related impacts of the alternatives. As researched by Doctor Paul Slovic and others as shown, and as our groups can testify, transportation issues are of great concern to many citizens.

We feel, however, that the current national transportation options are not broad enough, the all truck and all rail scenarios. We suggest that there must be some consideration of the barge potentials given the real precedence, for example the Shorham shipments on the East Coast that have already occurred. We endorse the comments by the State of Nevada on this and other transportation-related issues.

In asking for a mile-by-mile consideration of

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the potential routes that DOE must analyze in the EIS, we are extending, by analogy, the regulatory approach that the California Public Utility Commission has employed in its statewide emergency response regulations on hazardous materials shipments by rail.

Those regulations require the railroads to identify milepost by milepost the local emergency response agency that they would call if there were an accident at any given point along their routes.

Just as this regulation ensures that the railroads must keep up to date in dealing with emergency response agencies, DOE must in this EIS pay close attention to and solicit public comment on the various site-specific risk factors and emergency response capabilities along each proposed route.

In considering the emergency response capabilities along the proposed routes, we urge DOE to give close attention to the long neglected NRC document, NUREG/CR-2225. The title is An Unconstrained Overview Of The Critical Elements In A Model State System For Response To Radiological Transportation Incidents.



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Rockwell International was the author in November of 1981.

This document suggests that a medium-size state should have in place an emergency response system consisting of roughly 100 people, with an annual operating budget of 5.6 million dollars, excluding the necessary response vehicle costs. And the document specifies in great detail the equipment, training and state support necessary to make such a system viable.

This document, or rather a more up-to-date version reflecting advances in emergency response technology and radiological accident analysis should also be salient in discussions on the DOE role in funding under the long delayed 180 (c) program the necessary several years of preshipment training called for by Western governors.

The EIS should have various scenarios which reflect various assumptions concerning the adequacy and equipment and planning/organizational capabilities of the local and state jurisdictions and impacted corridors.

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In considering the specific routes to be considered in the EIS, we suggest that DOE take to heart a not-inexplicably neglected conclusion of the classic study of rerouting for risk reduction purposes of hazardous rail shipments. This study is by Doctor Ted Glickman for the Transportation Systems Center in Cambridge, Massachusetts and was published by U. S. DOT, the purported regulator of routing.

Doctor Glickman first concludes, this is the oft quoted part, that it would probably be counter productive to have a blanket national policy of requiring all hazmat railcars to avoid all cities, because of the potential of forcing dangerous shipments onto less adequate tracks.

He then goes on to recommend, however, that there be city-specific analyses in densely populated metropolitan areas, because it is entirely possible in some areas accident risks can be lowered by rerouting hazardous the most hazardous rail cargos to avoid dense populations.

Of course, the same risk reduction principles



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should also be used in consideration of routes by other 1 modes. As I said earlier, we will submit more detailed 2 3 comments at a later date. Thank you very much. MR. FREELAND: MR. JULIAN: Next registered commenter, 5 6 Karl Novak, followed by Eileen J. Supko. 7 My name is Karl J. Novak. MR. NOVAK: 8

live at R. D. 2, Box 132, Clearville, Pennsylvania,
15535. I'm am an active member of the following
organizations; the Pennsylvania Environmental Network,
Environmental Coalition On Nuclear Power, and Citizens
Environmental Organization of Bedford County,
Pennsylvania.

Two score and ten years ago, we started building a nuclear enhanced economy, but as the plans of men have sometimes gone haywire, we failed to invent a foolproof outhouse that could and can isolate the plutonium from mankind forever.

You would think that we would come up with some neat device in these fifty years of enlightened scientific times. It behooves us to look to two basic

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elements in this proposed dump. One, the sewer line. Two, the outhouse.

I'm concerned about the sewer line. Why am I concerned about the sewer line? It just so happens that I live in a county that is more than likely to be one of the host of the sewer lines as Bedford County, my home, has been unfortunately blessed with the excellent highways that are on the direct line to the State of Nevada.

We have four nuclear reactor sites in Pennsylvania and have the unholy geographic position of gathering sewer lines from an additional ten sites in nearby states. The present inventory of these 14 sites require shipments from approximately 6,000 casks through Pennsylvania.

Citizens of Pennsylvania are already at risk by virtue of their faulty design of nuclear reactors. The proposal to move the radioactive trash by truck and train places an infinitely larger part of our commonwealth's population in jeopardy. I view this as a grave physical threat as well as a threat to the mental



well being of everyone.

7.

The recent acts of terrorism in New York City, Oklahoma City and this week's train derailment in Arizona are prime examples of the lunacy of our times. I call upon your imagination to visualize the state of public panic and subsequent antigovernment sentiment generated by one act of successful terrorism on the proposed nuclear sewer line.

We do not want another Three Mile Island debacle courtesy of terrorists somewhere along the 2,000 mile journey to Nevada. We in Pennsylvania have had our moment of terror. Why should anyone of rational mind want to advocate the potential of another similar disaster.

Now, on to Yucca Mountain, a site known to be geologically unstable. How could any government pour millions, actually billions in this case, of dollars into a site that has this major flaw? We must not be a party to what could become the second big nuclear lie.

This nuclear trash is hot stuff. It is so hot that we must ask the question will the amount programmed





for isolation because of its very nature go critical and result in a holocaust that could be another blight on the human race? This outcome is preventable and is unnecessary, as we have the option to implement a safe alternative.

I, for one, prefer the course of action that will keep the unwanted nuclear trash on site at this time, and proceed with the closing of each nuclear power plant as the euphemistic swimming pool reaches its critical limit.

When no additional radioactive waste is being produced by nuclear power plants, we will know then the quantity and character of the waste, then arrangements and regulations will be implemented and safeguards funded to enable the complete isolation and guardianship of the nuclear waste for perpetuity. Thank you.

MR. FREELAND: Thank you, Mr. Novak.

MR. JULIAN: Next speaker, Eileen Supko.

MS. SUPKO: Good morning. I am Eileen
Supko from Energy Resources International in Washington,
D.C., a consulting company. I am speaking today on

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Tops in Turnaround Time Immediate-Daily-Expedited Eves. - (410) 367-3833 behalf of the Nuclear Energy Institute. I'm a nuclear engineer. I have done extensive work following the Department of Energy's program for spent fuel transportation, utility waste storage at reactor sites, and also the disposal program.

The United States operates nuclear reactors which supply 20 percent of our electricity nationwide. Nuclear power plays an important role in our nation's electricity mix. It is going to continue to contribute to that energy mix in the future.

The Department of Energy estimates that,
Department of Energy Information Agency estimates that
we will need another 200,000 megawatts of electricity
capacity by the year 2010. If the U.S. wants to
continue to meet its goals for reducing greenhouse
gases, that would be carbon dioxide, sulfur dioxide and
nitrous oxide, we need to continue to rely on nuclear
power which does not produce any greenhouse gases.

In addition to the continued use of nuclear power, the U.S. must also begin to show progress towards the storage and permanent disposal of spent nuclear fuel



from commercial reactors. Recent progress by DOE in the characterization of the Yucca Mountain site, particularly, the operation of the tunnel boring machine and construction of the exploratory study facilities and initiation of this Environmental Impact Statement process are important, very important milestones toward the permanent disposal of spent nuclear fuel in the United States.

As we heard today, a key element of the waste management system is going to be transportation of spent nuclear fuel from reactor sites around the country to a proposed Federal system at Yucca Mountain.

The transportation of spent nuclear fuel is not something new. Commercial nuclear industry has been making shipments of nuclear wastes for the past thirty years. There have been more than 2,000 shipments of spent nuclear fuel during that time period, in addition to the transportation of many other radioactive materials on our highways and railways.

While there will be, indeed, a greater number of cask shipments in any given year than we have seen



over the past, the system will be based on safe, prudent technology. Transportation casks are very robust systems. They are made out of stainless steel lined with lead. They go through a rigorous design and testing program, and they have to be approved by the Nuclear Regulatory Commission, as we heard earlier, prior to being used.

I would also like to point out that spent nuclear fuel is a solid material. For those of you who are not familiar with what spent nuclear fuel looks like, in the exhibit room, there is an example of a fuel assembly. Since spent nuclear fuel is a solid material, it is not something that can leak.

Transportation risks are admittedly low, as we heard earlier from a representative of the State of Nevada. I think this is an important issue, that people should recognize that we have been transporting spent nuclear fuel. As we do it in the future, it will be done on a safe basis, and those risks are low.

You have heard many people talk about potential accidents in their areas and what would happen with





emergency response. You heard earlier from Wendy Dixon, the Department of Energy does have a program under which they would fund state agencies for training emergency response personnel.

In addition to those state agencies that would be responding, spent nuclear fuel shipments would be tracked, and local utilities, with nuclear power plants, would respond on a voluntary basis to help with the emergency until other emergency response personnel could arrive at the scenario.

We encourage the Department of Energy to continue with progress on the civilian waste management program, including preparation of this Environmental Impact Statement, and to examine all those credible scenarios that contribute to the safety of the waste management system, while ensuring continued progress in the program and minimization of delays.

I support DOE's plans to follow the Environmental Impact Statement road map as laid out in the Nuclear Waste Policy Act as they discussed earlier. It is time that we as a nation look for solutions to



this waste management problem, and that DOE and the 1 nation make a firm decision related to spent fuel transportation and disposal. This Environmental Impact 3 4 Statement process is the first step in that direction. 5 Thank you. 6 MR. FREELAND: Thank you, Ms. Supko. 7 MR. JULIAN: We have no more preregistered 8 commenters this morning. However, are there any

Let the record show that there are no more commenters who have registered to speak or individuals who would like to speak. We will, therefore, adjourn this meeting for thirty minutes, until five minutes after twelve. But we will remain available to receive comments until the end of the scheduled comment period, which is 12:30 this afternoon. We are now in adjournment.

individuals or organizations who would like to present

oral comments to us at this morning's session?

(Thereupon, there was a recess from 11:35 to 12:05 p.m.)

MR. JULIAN: The time is now five minutes



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after 12. I would like to reconvene to allow any other individuals or organizations to present oral comments. Are there any individuals or organizations who wish to submit oral comments at this time?

There being none and none who have registered, we will again adjourn for 25 minutes. We will reconvene at 12:30, at which time, if there are no additional commenters, we will close this morning's meeting. So we are in adjournment until 12:30.

(Thereupon, there was a recess from 12:06 p.m. to 12:30 p.m.)

MR. JULIAN: The time is now 12:30. We will reconvene the morning scoping session for the Baltimore, Maryland repository EIS scoping meetings.

At this time, are there any other individuals or organizations who would like to submit oral or written comments? Let the record reflect that there are no individuals or organizations who wish to make oral comments at this time.

It being 12:30, we will officially close the morning scoping session. To remind you, we will have a



repeat of the presentation, questions and answers, and comment period this evening beginning at 6 p.m. here in-The morning scoping session is now closed. Baltimore.

(Thereupon, the EIS scoping session was concluded at 12:30 p.m.)



LAWYER'S NOTES

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